

Friday, February 05, 2010

Page 1 of 2
REQUEST NUMBER: 10-1624

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: 10-1624

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/5/2010

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

Jeffrey A. ...

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
EPA:300.0		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
SW-846:6010B		1	RE15-10-8361	R	2/3/2010	

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REQUEST NUMBER: 10-1624

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6010B	SW-846:6020	1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
SW-846:6850		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
SW-846:7471A		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
SW-846:9012A		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
SW-846:9045C		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	

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Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1624

LOS ALAMOS

REQUEST NUMBER: 10-1624

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8361	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8361	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8362	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8362	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8359	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8359	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8358	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8358	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8360	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8360	1	POLY	Perchlorate+CN+N03+pH	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: 2507

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

SAMPLE ID: RE15-10-8358

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/03/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		007		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(c)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610849	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	0.8		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	BED		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	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+NO3+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sand, Tuff fragments, few pine needles
FTB: RE15-10-8383

SAMPLE COMMENTS:

NA

LOCATION DESC:

9C-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha = 27 dpm
Beta/Gamma = 2100 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{1.0}$ ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/3/10	(Printed Name) [Signature]	2/3/10
(Signature) [Signature]	1400	(Signature) [Signature]	1400
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

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

SAMPLE ID: RE15-10-8359

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED (MM/DD/YYYY):		02/03/2010		MEDIA:	QBT3		
TIME COLLECTED (HH:MM)		11:12		SUB-MEDIA:	TUFF 1		NA
PRSID:	15-009(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610849			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC:

Brown sand, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-11 drainage

FIELDSCREENING/MEASUREMENT RESULTS:

Alpha \leq 11 dpm
Beta/Gamma \leq 1945 dpm

PID $\frac{\text{Ambient Reading}}{0.3} = \frac{0.0}{0.3}$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/3/10	(Printed Name) [Signature]	2/3/10
(Signature) [Signature]	1400	(Signature) [Signature]	2400
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

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

SAMPLE ID: RE15-10-8360

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/03/2010		MEDIA:	OBT3		SED
TIME COLLECTED (HH:MM)		1123		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-009(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610850			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.4		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	SED		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

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

SAMPLE DESC:

Brown sand, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-12

FIELD SCREENING/MEASUREMENT RESULTS:

HE neg

Alpha \leq 22 dpm
 Beta/Gamma \leq 2390 dpm

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

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) TLMcFarlane (Signature)	Date/Time 2/3/10 1400	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 1400
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

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

SAMPLE ID: RE15-10-8361

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/03/2010		MEDIA: OBT3		SED	
TIME COLLECTED (HH:MM)		1133		SUB-MEDIA: TUFF 1		NA	
PRS ID: 15-009(c)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 15-610850		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		1.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		2.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		SED		EXCAVATED: YES/NO NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO NA			
BOREHOLE: YES/NO NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC:

moist brown silty sand and
clay, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-12

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 33 dpm
Beta/Gamma \leq 2030 dpm

PID Ambient Reading 0.0
0.3 ppm

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarlane	1400	(Printed Name) [Signature]	2:00
(Signature) [Signature]	2/3/10	(Signature) [Signature]	2/3/10
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

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

SAMPLE ID: RE15-10-8362

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1150	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610851	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.7	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		

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

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

SAMPLE DESC:

Brown sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-13

FIELD SCREENING/MEASUREMENT RESULTS:

HF neg

Alpha \leq 33 dpm
Beta/Gamma \leq 2020 dpmPID $\frac{\text{Ambient Reading}}{0.0}$ ppm

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) T. McFarland (Signature) Tracy	Date/Time 2/3/10 1400	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 2/3/10 2:00
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

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

SAMPLE ID: RE15-10-8383

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/03/2010	MEDIA:	FILL	ok
TIME COLLECTED (HH:MM)		1100	SUB-MEDIA:	SOIL	
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-810849	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
BOREHOLE: YES/NO/NA			WATER FLOWING: YES/NO/NA		
BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:	NM	

#	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 RE15-10-8358

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	2/3/10	(Printed Name) Mike Abner	2/3/10
(Signature) Tracy M	1400	(Signature) [Signature]	2/3/10
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Rad Screening Data Release Form

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

RE15-10-8358
8359
8360
8361
8362

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

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

RE15-10-8383

Reason: FTB

.....
Print Last Name McFarland

Signature 

Date 2/3/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1624 VALIDATION DATE: 03/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

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

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


Reviewed by: Susan Ball

Level: I


Date: 3/26/10

VALIDATOR'S SIGNATURE:


DATE: 03/26/10

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 type="checkbox"/>	<input checked="" 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 ±20% of the known value.	UJ, PERC16a	J, PERC16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8361

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443001

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.61	2.44	0.610	ug/kg	U	1	20-FEB-10 19:05	per0220047a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:05	per0220047a
14797-73-0	Perchlorate-101	.61	2.44	0.610	ug/kg	U	1	20-FEB-10 19:05	per0220047a
	Perchlorate-O(18)			5.76	ug/kg		1	20-FEB-10 19:05	per0220047a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8362

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443002

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 75

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.667	2.67	0.667	ug/kg	U	1	20-FEB-10 19:43	per0220051a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:43	per0220051a
14797-73-0	Perchlorate-101	.667	2.67	0.667	ug/kg	U	1	20-FEB-10 19:43	per0220051a
	Perchlorate-O(18)			6.35	ug/kg		1	20-FEB-10 19:43	per0220051a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 952822
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8359
 Date Received: 06-FEB-10
 GEL Job No (SDG): 10-1624
 GEL Sample ID: 246443003
 Date Filtered: 17-FEB-10
 Injection Volume (uL): 20
 %Solids: 93.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	20-FEB-10 19:53	per0220052a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:53	per0220052a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	20-FEB-10 19:53	per0220052a
	Perchlorate-O(18)			5.24	ug/kg		1	20-FEB-10 19:53	per0220052a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 952822
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8358
 Date Received: 06-FEB-10
 GEL Job No (SDG): 10-1624
 GEL Sample ID: 24643004
 Date Filtered: 17-FEB-10
 Injection Volume (uL): 20
 %Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.599	2.39	0.599	ug/kg	U	1	20-FEB-10 20:02	per0220053a
	Perchlorate Isotope Ratio						1	20-FEB-10 20:02	per0220053a
14797-73-0	Perchlorate-101	.599	2.39	0.599	ug/kg	U	1	20-FEB-10 20:02	per0220053a
	Perchlorate-O(18)			6.00	ug/kg		1	20-FEB-10 20:02	per0220053a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8360

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443005

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.689	2.76	0.689	ug/kg	U	1	20-FEB-10 20:12	per0220054a
	Perchlorate Isotope Ratio						1	20-FEB-10 20:12	per0220054a
14797-73-0	Perchlorate-101	.689	2.76	0.689	ug/kg	U	1	20-FEB-10 20:12	per0220054a
	Perchlorate-Q(18)			6.64	ug/kg		1	20-FEB-10 20:12	per0220054a

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

*Concentration =

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

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1624 VALIDATION DATE: 03/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input checked="" type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | <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. Target analytes Tl and K were detected in the MB. The Tl results for samples RE15-10-8361 and -8359 were detects $\leq 5X$ the MB concentration and, thus, were qualified U,I4. The remaining associated Tl results were NDs and, thus, were not qualified. The K result for sample -8360 was a detect $> 5X$ but $\leq 50X$ the MB concentration and, thus, was qualified J,I4a. The remaining associated K results were detects $> 50X$ the MB concentration and, thus, were not qualified based on professional judgment.
2. Target analytes Sb and Tl were detected in the ICB/CCBs. The Tl results for samples -8361 and -8359 were detects $\leq 5X$ the greatest ICB/CCB concentration and, thus, were qualified U,I4b. The remaining associated sample results were NDs and, thus, were not qualified.
3. The MS %Rs were $>$ the laboratory UAL for Ca, Mg, K, Al, Fe, and Mn. The associated Ca, Mg, and K sample results were detects and, thus, were qualified J+,I6b. The Al, Fe, and Mn parent sample concentrations were $> 4X$ the spike concentrations; thus, those sample results were not qualified, based on professional judgment.
4. It should be noted that the matrix QC analyses were performed on a LANL sample from another RN for the CVAA analysis. No sample data were qualified as a result.

Reviewed by: Susan Ball


Level: I


Date: 3/26/10

VALIDATOR'S SIGNATURE:


A handwritten signature in cursive script, appearing to read 'Monica Dymerski'.

DATE: 03/26/10


DATA VALIDATION COVER SHEET	
5118-1 Data Validation Cover Sheet	Records Use only  ----- E51.1842 -----
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 (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
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 type="checkbox"/>	<input checked="" 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 ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443001

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8361

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2880000	ug/Kg		7980	23500	23500	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-36-0	Antimony	1170	ug/Kg	U	387	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-38-2	Arsenic	1.16	mg/kg		0.232	1.16	1.16	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-39-3	Barium	44500	ug/Kg		117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-41-7	Beryllium	0.435	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-43-9	Cadmium	587	ug/Kg	U	117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-70-2	Calcium J+,16b	775000	ug/Kg	N	9390	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-47-3	Chromium	12600	ug/Kg	*	176	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-48-4	Cobalt	1660	ug/Kg		176	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-50-8	Copper	4390	ug/Kg		352	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-89-6	Iron	8630000	ug/Kg		9390	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-92-1	Lead	11300	ug/Kg		293	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-95-4	Magnesium J+,16b	549000	ug/Kg	N	9970	35200	35200	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-96-5	Manganese	246000	ug/Kg		235	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-97-6	Mercury	7.88	ug/kg	J	4.22	12.4	12.4	1	AV	JXL1	02/25/10 11:19	02510S1-8	951611
7440-02-0	Nickel	3.21	mg/kg		0.116	0.463	0.463	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-09-7	Potassium J+,16b	498000	ug/Kg	N	7510	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7782-49-2	Selenium	1.16	mg/kg	U	0.579	1.16	1.16	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-22-4	Silver	587	ug/Kg	U	117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-23-5	Sodium	52700	ug/Kg		8210	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-28-0	Thallium U,14	0.152	mg/kg	J	0.0695	0.232	0.232	2	MS	BAJ	02/25/10 21:18	100225-2	950498
7440-61-1	Uranium	4.08	mg/kg		0.0153	0.0463	0.0463	2	MS	BAJ	02/26/10 16:41	100226-7	950498
7440-62-2	Vanadium	8570	ug/Kg		117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-66-6	Zinc	36100	ug/Kg		387	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.52	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.527	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.59	g	30	mL	02/24/10	TXB3

MLD
03/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443002

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8362

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1600000	ug/Kg		8570	25200	25200	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-36-0	Antimony	1260	ug/Kg	U	416	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-38-2	Arsenic	1.16	mg/kg	J	0.255	1.27	1.27	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-39-3	Barium	22100	ug/Kg		126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-41-7	Beryllium	0.319	mg/kg		0.0255	0.127	0.127	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-43-9	Cadmium	630	ug/Kg	U	126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-70-2	Calcium J+,16b	448000	ug/Kg	N	10100	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-47-3	Chromium	4550	ug/Kg	*	189	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-48-4	Cobalt	1040	ug/Kg		189	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-50-8	Copper	2250	ug/Kg		378	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-89-6	Iron	5230000	ug/Kg		10100	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-92-1	Lead	5770	ug/Kg		315	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-95-4	Magnesium J+,16b	310000	ug/Kg	N	10700	37800	37800	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-96-5	Manganese	177000	ug/Kg		252	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-97-6	Mercury	15.9	ug/kg	U	5.41	15.9	15.9	1	AV	JXL1	02/25/10 11:20	02510S1-8	951611
7440-02-0	Nickel	1.85	mg/kg		0.127	0.509	0.509	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-09-7	Potassium J+,16b	312000	ug/Kg	N	8070	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7782-49-2	Selenium	1.27	mg/kg	U	0.636	1.27	1.27	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-22-4	Silver	630	ug/Kg	U	126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-23-5	Sodium	42300	ug/Kg		8830	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-28-0	Thallium	0.255	mg/kg	U	0.0764	0.255	0.255	2	MS	BAJ	02/25/10 22:01	100225-2	950498
7440-61-1	Uranium	1.6	mg/kg		0.0168	0.0509	0.0509	2	MS	BAJ	02/26/10 16:53	100226-7	950498
7440-62-2	Vanadium	3730	ug/Kg		126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-66-6	Zinc	25300	ug/Kg		416	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.529	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.524	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.503	g	30	mL	02/24/10	TXB3

MLD
03/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443003

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8359

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2750000	ug/Kg		6980	20500	20500	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-36-0	Antimony	1030	ug/Kg	U	339	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-38-2	Arsenic	1.1	mg/kg		0.198	0.992	0.992	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-39-3	Barium	41400	ug/Kg		103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-41-7	Beryllium	0.466	mg/kg		0.0198	0.0992	0.0992	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-43-9	Cadmium	513	ug/Kg	U	103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-70-2	Calcium J+,I6b	824000	ug/Kg	N	8210	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-47-3	Chromium	5310	ug/Kg	*	154	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-48-4	Cobalt	1670	ug/Kg		154	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-50-8	Copper	4220	ug/Kg		308	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-89-6	Iron	6760000	ug/Kg		8210	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-92-1	Lead	10900	ug/Kg		257	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-95-4	Magnesium J+,I6b	604000	ug/Kg	N	8720	30800	30800	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-96-5	Manganesec	211000	ug/Kg		205	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-97-6	Mercury	6.98	ug/kg	J	3.99	11.7	11.7	1	AV	JXL1	02/25/10 11:22	02510S1-8	951611
7440-02-0	Nickel	2.81	mg/kg		0.0992	0.397	0.397	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-09-7	Potassium J+,I6b	489000	ug/Kg	N	6570	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7782-49-2	Selenium	0.992	mg/kg	U	0.496	0.992	0.992	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-22-4	Silver	513	ug/Kg	U	103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-23-5	Sodium	41100	ug/Kg		7180	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-28-0	Thallium U,I4	0.0631	mg/kg	J	0.0595	0.198	0.198	2	MS	BAJ	02/25/10 22:07	100225-2	950498
7440-61-1	Uranium	3.58	mg/kg		0.0131	0.0397	0.0397	2	MS	BAJ	02/26/10 16:54	100226-7	950498
7440-62-2	Vanadium	7120	ug/Kg		103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-66-6	Zinc	27200	ug/Kg		339	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.523	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.541	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.549	g	30	mL	02/24/10	TXB3

MLD
03/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443004

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8358

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2480000	ug/Kg		8030	23600	23600	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-36-0	Antimony	1180	ug/Kg	U	390	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-38-2	Arsenic	1.01	mg/kg	J	0.217	1.09	1.09	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-39-3	Barium	40800	ug/Kg		118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-41-7	Beryllium	0.407	mg/kg		0.0217	0.109	0.109	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-43-9	Cadmium	590	ug/Kg	U	118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-70-2	Calcium J+,16b	645000	ug/Kg	N	9440	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-47-3	Chromium	5750	ug/Kg	*	177	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-48-4	Cobalt	1980	ug/Kg		177	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-50-8	Copper	5770	ug/Kg		354	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-89-6	Iron	5450000	ug/Kg		9440	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-92-1	Lead	6690	ug/Kg		295	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-95-4	Magnesium J+,16b	538000	ug/Kg	N	10000	35400	35400	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-96-5	Manganese	217000	ug/Kg		236	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-97-6	Mercury	6.89	ug/kg	J	4.18	12.3	12.3	1	AV	JXL1	02/25/10 11:24	0251051-8	951611
7440-02-0	Nickel	2.88	mg/kg		0.109	0.434	0.434	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-09-7	Potassium J+,16b	479000	ug/Kg	N	7560	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-22-4	Silver	590	ug/Kg	U	118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-23-5	Sodium	38100	ug/Kg		8260	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-28-0	Thallium	0.217	mg/kg	U	0.0652	0.217	0.217	2	MS	BAJ	02/25/10 22:13	100225-2	950498
7440-61-1	Uranium	2.61	mg/kg		0.0143	0.0434	0.0434	2	MS	BAJ	02/26/10 16:56	100226-7	950498
7440-62-2	Vanadium	6090	ug/Kg		118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-66-6	Zinc	21000	ug/Kg		390	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.507	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.551	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.584	g	30	mL	02/24/10	TXB3

MLD
03/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443005

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8360

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1420000	ug/Kg		8640	25400	25400	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-36-0	Antimony	1270	ug/Kg	U	419	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-38-2	Arsenic	0.810	mg/kg	J	0.256	1.28	1.28	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-39-3	Barium	23100	ug/Kg		127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-41-7	Beryllium	0.324	mg/kg		0.0256	0.128	0.128	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-43-9	Cadmium	635	ug/Kg	U	127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-70-2	Calcium J+,I6b	461000	ug/Kg	N	10200	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-47-3	Chromium	21900	ug/Kg	*	191	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-48-4	Cobalt	1200	ug/Kg		191	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-50-8	Copper	2720	ug/Kg		381	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-89-6	Iron	6590000	ug/Kg		10200	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-92-1	Lead	5180	ug/Kg		318	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-95-4	Magnesium J+,I6b	309000	ug/Kg	N	10800	38100	38100	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-96-5	Manganese	197000	ug/Kg		254	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-97-6	Mercury	14.2	ug/kg	U	4.83	14.2	14.2	1	AV	JXL1	02/25/10 11:25	0251051-8	951611
7440-02-0	Nickel	3.69	mg/kg		0.128	0.511	0.511	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-09-7	Potassium J,I4a	272000	ug/Kg	N	8130	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7782-49-2	Selenium	1.28	mg/kg	U	0.639	1.28	1.28	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-22-4	Silver	635	ug/Kg	U	127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-23-5	Sodium	44600	ug/Kg		8900	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-28-0	Thallium	0.256	mg/kg	U	0.0767	0.256	0.256	2	MS	BAJ	02/25/10 22:19	100225-2	950498
7440-61-1	Uranium	3.99	mg/kg		0.0169	0.0511	0.0511	2	MS	BAJ	02/26/10 16:58	100226-7	950498
7440-62-2	Vanadium	5630	ug/Kg		127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-66-6	Zinc	31100	ug/Kg		419	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.542	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.539	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.582	g	30	mL	02/24/10	TXB3

MLD
03/26/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1624 VALIDATION DATE: 03/26/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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


Section II. Completeness Check

- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |


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

1. It should be noted that the matrix QC analyses were performed on LANL samples from other RNs for pH and the total cyanide batch associated with all samples except RE15-10-8360. No sample data were qualified as a result.


Reviewed by: Susan BallLevel: IDate: 3/26/10VALIDATOR'S SIGNATURE: *Monica Dymerski*DATE: 03/26/10

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

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

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

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

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 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 Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8361
Sample ID: 246443001
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 18%

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 21.4C	H	6.53	0.010	0.100	SU	1	EXF1	02/08/10	1146	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.8	268	ug/kg	1	AXC2	02/16/10	1335	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.366	1.22	mg/kg	1	MAR10	02/27/10	0604	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

MLD
03/26/10

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8362
Sample ID: 246443002
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 25%

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 21.0C	H	6.08	0.010	0.100	SU	1	EXF1	02/08/10	1203	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	88.9	327	ug/kg	1	AXC2	02/16/10	1336	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.400	1.33	mg/kg	1	MAR1	02/27/10	0800	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8359
Sample ID: 246443003
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 6.85%

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 21.1C	H	6.68	0.010	0.100	SU	1	EXF1	02/08/10	1204	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.4	244	ug/kg	1	AXC2	02/16/10	1337	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.322	1.07	mg/kg	1	MAR1	02/27/10	0829	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8358
Sample ID: 246443004
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 16.5%

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 21.1C	H	6.48	0.010	0.100	SU	1	EXF1	02/08/10	1206	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	81.4	299	ug/kg	1	AXC2	02/16/10	1337	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.359	1.20	mg/kg	1	MAR102	02/27/10	0858	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8360
Sample ID: 246443005
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 27.4%

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 21.3C	H	7.07	0.010	0.100	SU	1	EXF1	02/08/10	1208	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	93.7	344	ug/kg	1	AXC2	02/17/10	1039	950203	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.413	1.38	mg/kg	1	MAR1	02/27/10	0927	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/16/10	1522	950201

The following Analytical Methods were performed

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

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1624

LOS ALAMOS

REQUEST NUMBER: 10-1624

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2464437

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8361	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8361	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8362	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8362	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8359	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8359	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8358	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8358	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8360	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8360	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

2/5/10 1400

Printed Name

Signature

Greg Tyler

2-6-10 0915

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Friday, February 05, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/5/2010

TURNAROUND/REPORT DUE: 3/7/2010

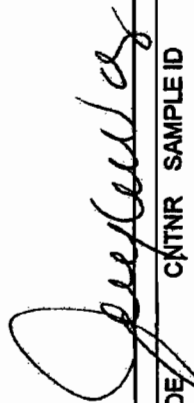
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 2

REQUEST NUMBER: 10-1624

These Samples are on:

LANL Request Number: 10-1624
Per Agreement Number: 126310011
Project Cost Code: MIR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-300.0	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
		1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
	SW-846-6010B	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	

Friday, February 05, 2010

REQUEST NUMBER: 10-1624

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8362	R	2/3/2010	
	SW-846:6020	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:6850	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:7471A	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:9012A	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:9045C	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	

Final Page of REQUEST NUMBER 10-1624



February 12, 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 Order: 246443
SDG: 10-1624

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 06, 2010, and analyzed for General Chemistry, Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Sincerely,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1624
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 246443
SDG: 10-1624

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 246443
SDG # : 10-1624**

February 12, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 06, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

<u>Laboratory ID</u>	<u>Client ID</u>
246443001	RE15-10-8361
246443002	RE15-10-8362
246443003	RE15-10-8359
246443004	RE15-10-8358
246443005	RE15-10-8360

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 12 February 2010

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

Chain of Custody and Supporting Documentation

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1624

LOS ALAMOS

REQUEST NUMBER: 10-1624

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2464437.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8361	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8361	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8362	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8362	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8359	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8359	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8358	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8358	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8360	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8360	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

2/5/10 1400

Printed Name

Signature

Greg Tyler

2-6-10 0915

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Friday, February 05, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/5/2010

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANLER SMO CONTACT:

Signature:



These Samples are on:

LANL Request Number: 10-1624

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:6010B	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	

Friday, February 05, 2010

Page 2 of 2

REQUEST NUMBER: 10-1624

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8362	R	2/3/2010	
	SW-846:6020	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:6850	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:7471A	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:9012A	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	
	SW-846:9045C	1	RE15-10-8358	R	2/3/2010	
		1	RE15-10-8359	R	2/3/2010	
		1	RE15-10-8360	R	2/3/2010	
		1	RE15-10-8361	R	2/3/2010	
		1	RE15-10-8362	R	2/3/2010	

Final Page of REQUEST NUMBER 10-1624

SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-1624		
Received By: Greg Tyler			Date Received: 2/06/10		
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.		
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 80cpm		
Classified Radioactive II by RSO?		X			
COC/Samples marked containing PCBs?		X			
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:		
Samples identified as Foreign Soil?		X			

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

Comments:

Fed Ex Tracking Numbers:

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

PM (or PMA) review: Initials

VSO

Date 2/8/10

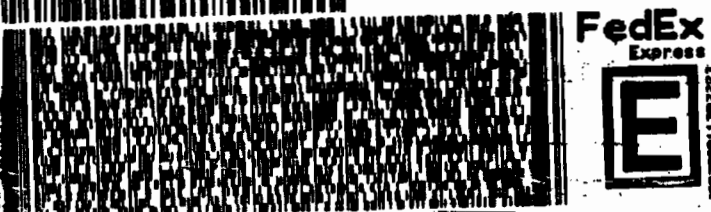
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

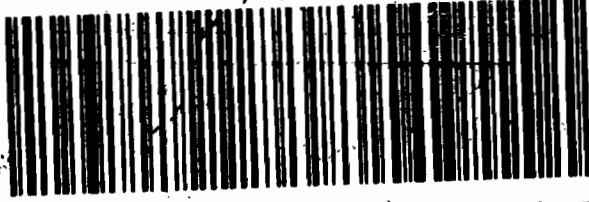
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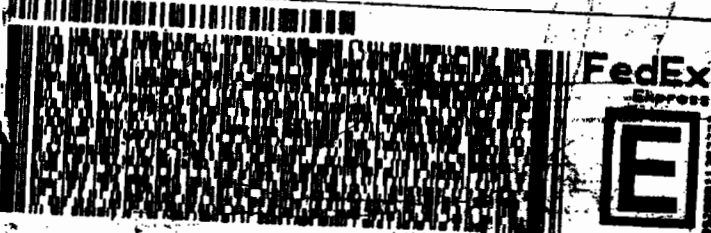
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TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
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ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2449
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VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407

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REF: 6B010AMR3A05529E00

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2 of 3
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PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: BPA (505) 665-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 10/06/80
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05529E00

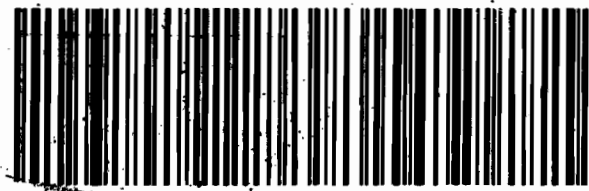
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SC-US
CHS

X0 CHSA



ORIGIN ID: BPA (505) 665-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 10/06/80
ACTWGT: 53.0 LB
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGNK0

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TRK# 7209 7849 9341
SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

IGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
100 BLDG 1237 DPU 83

SHIP DATE: 05FEB10
ACTWT: 64.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

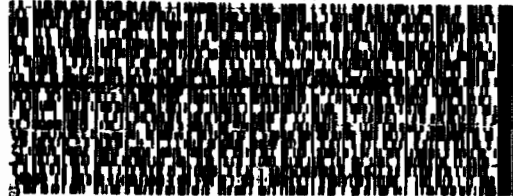
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VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407

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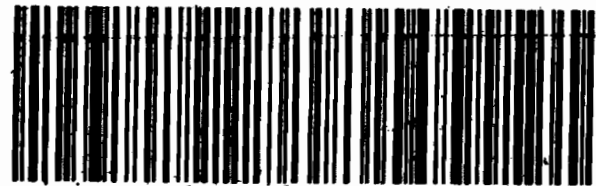
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LOS ALAMOS, NM 87545
UNITED STATES US

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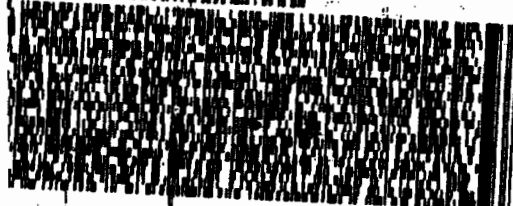
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PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
100 BLDG 1237 DPU 83

SHIP DATE: 05FEB10
ACTWT: 53.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

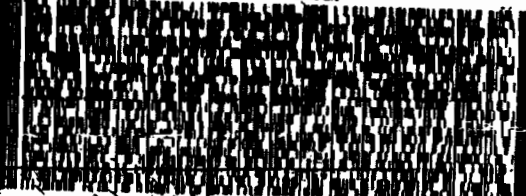
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2040 SAVAGE RD

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(843) 566-8171
REF: 68010AMR3A0532VA00

100 BLDG 1237 DPU 83



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2 of 3
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SATURDAY ### A1
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JOYLENE VALDEZ (505) 665-9968
LOS ALAMOS NATL LAB
100 BLDG 1237 DPU 83

SHIP DATE: 05FEB10
ACTWT: 53.0 LB MAN
CAD: 0014176/CAFE2449

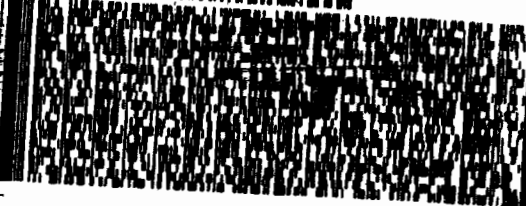
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 566-8171
REF: 68010AMR3A0532VA00

100 BLDG 1237 DPU 83



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1 of 3
7209 7849 9205
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PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 63

SHIP DATE: 05FEB10
ACTMGT: 52.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A0532VA00

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3 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

MPSH 7209 7849 9190

MatrN 7209 7849 9179 0201

X0 CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 63

ACTMGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR3A05329E00

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1 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

TRKH 7209 7849 9238

MatrN 7209 7849 9179 0201

X0 CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 63

SHIP DATE: 05FEB10
ACTMGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AAREW0140T500

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3 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

MPSH 7209 7849 9157

MatrN 7209 7849 9135 0201

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9969
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 63

SHIP DATE: 05FEB10
ACTMGT: 50.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AAREW0140T500

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2 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

MPSH 7209 7849 9146

MatrN 7209 7849 9135 0201

X0 CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 668-9988

JOYLINE VALERIE
LOS ALAMOS NATL LAB
1740 BLDG 1237 CPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 05FEB10
ACTING: 48.0 LB FMN
CAD: 98141767 CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 666-9171
REF: 68010AMR308532VA00

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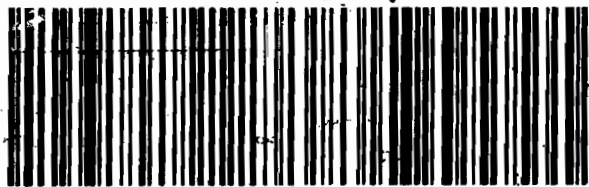


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SATURDAY ### A1
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SC-US
CHS



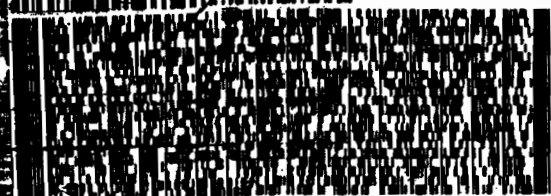
LOS ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 666-9171
REF: 68010AMR308532VA00

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3 of 3
TRACK 7209 7849 9227
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SATURDAY ### A1
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X0 CHSA

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CHS



Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL

A The TIC is a suspected aldol-condensation product

B Target analyte was detected in the associated blank

B Metals-Either presence of analyte detected in the associated blank, or
MDL/IDL < sample value < PQL

BD Results are either below the MDC or tracer recovery is low

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

d 5-day BOD-The 2:1 depletion requirement was not met for this sample

E Organics-Concentration of the target analyte exceeds the instrument calibration range

E Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria

H Analytical holding time was exceeded

h Preparation or preservation holding time was exceeded

J Value is estimated

N Metals-The Matrix spike sample recovery is not within specified control limits

N Organics-Presumptive evidence based on mass spectral library search to make a tentative
identification of the analyte (TIC). Quantitation is based on nearest internal standard
response factor

N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration
by 4X or more

ND Analyte concentration is not detected above the reporting limit

UI Gamma Spectroscopy-Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1624**

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: 952823

Prep Batch Number: 952822

Sample Analysis

Sample ID	Client ID
246443001	RE15-10-8361
246443002	RE15-10-8362
246443003	RE15-10-8359
246443004	RE15-10-8358
246443005	RE15-10-8360
1202042235	Interference Check Sample (ICS)
1202042230	Method Blank (MB)
1202042231	Laboratory Control Sample (LCS)
1202042232	246452001(RE16-10-3007) Matrix Spike (MS)
1202042233	246452001(RE16-10-3007) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

10-1624-PERLCMS

Page 1 of 4

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 246452001 (RE16-10-3007) from SDG 10-1629-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

10-1624-PERLCMS

Page 2 of 4

Retention Time

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

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

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 952822
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No. RE15-10-8361
Date Received: 06-FEB-10
GEL Job No (SDG): 10-1624
GEL Sample ID: 246443001
Date Filtered: 17-FEB-10
Injection Volume (uL): 20
%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.61	2.44	0.610	ug/kg	U	1	20-FEB-10 19:05	per0220047a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:05	per0220047a
14797-73-0	Perchlorate-101	.61	2.44	0.610	ug/kg	U	1	20-FEB-10 19:05	per0220047a
	Perchlorate-O(18)			5.76	ug/kg		1	20-FEB-10 19:05	per0220047a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8362

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443002

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.667	2.67	0.667	ug/kg	U	1	20-FEB-10 19:43	per0220051a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:43	per0220051a
14797-73-0	Perchlorate-101	.667	2.67	0.667	ug/kg	U	1	20-FEB-10 19:43	per0220051a
	Perchlorate-O(18)			6.35	ug/kg		1	20-FEB-10 19:43	per0220051a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8359

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443003

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 93.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	20-FEB-10 19:53	per0220052a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:53	per0220052a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	20-FEB-10 19:53	per0220052a
	Perchlorate-Q(18)			5.24	ug/kg		1	20-FEB-10 19:53	per0220052a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8358

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443004

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.599	2.39	0.599	ug/kg	U	1	20-FEB-10 20:02	per0220053a
	Perchlorate Isotope Ratio						1	20-FEB-10 20:02	per0220053a
14797-73-0	Perchlorate-101	.599	2.39	0.599	ug/kg	U	1	20-FEB-10 20:02	per0220053a
	Perchlorate-O(18)			6.00	ug/kg		1	20-FEB-10 20:02	per0220053a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8360

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443005

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.689	2.76	0.689	ug/kg	U	1	20-FEB-10 20:12	per0220054a
	Perchlorate Isotope Ratio						1	20-FEB-10 20:12	per0220054a
14797-73-0	Perchlorate-101	.689	2.76	0.689	ug/kg	U	1	20-FEB-10 20:12	per0220054a
	Perchlorate-O(18)			6.64	ug/kg		1	20-FEB-10 20:12	per0220054a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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): 10-1624

Extract Batch Code: 952822

Date Filtered: 17-FEB-10

Matrix: SOIL

Sample ID: 1202042231

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.26	ug/kg	113		70 - 130
Perchlorate Isotope Ratio		3.22				-
Perchlorate-101	2.00	2.23	ug/kg	111		70 - 130
Perchlorate-O(18)		4.8	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1624

Extract Batch Code: 952822

Date Filtered: 17-FEB-10

Matrix: SOIL

Sample ID: 1202042235

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.07	ug/kg	103		70 - 130
Perchlorate Isotope Ratio		3.22				
Perchlorate-101	2.00	2.04	ug/kg	102		70 - 130
Perchlorate-O(18)		4.82	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\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220046a

Date: 20-Feb-2010

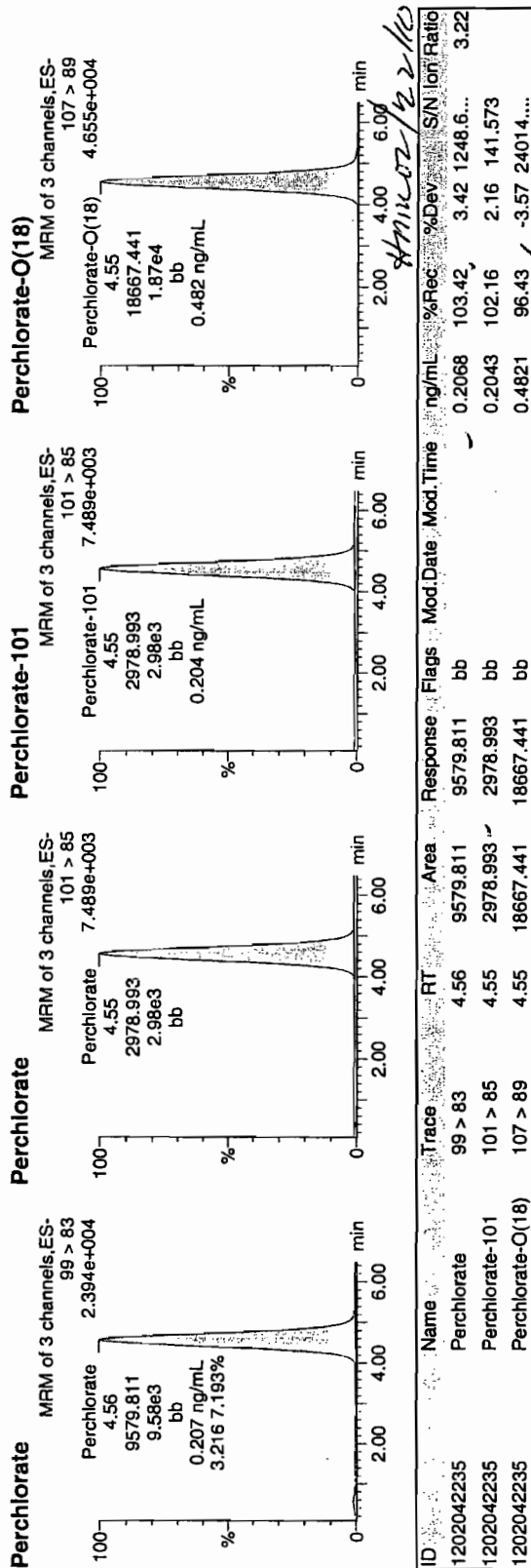
Time: 18:55:28

ID: 1202042235

Vial: 2:1,C

0221-10

LANU | 952823 | 9020 | JUS | 11



Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 952822

GEL MS/PS ID: 1202042232

GEL MSD/PSD ID: 1202042233

GEL Job No (SDG): 10-1624

Date Extracted: 17-FEB-10

Client ID: RE16-10-3007

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.42	0.113	ug/kg	2.58	102		2.7	107		4.53		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.2			3.19			0			-
Perchlorate-101	2.42	0.0981	ug/kg	2.56	102		2.68	107		4.81		30	75 - 125
Perchlorate-O(18)	0	6.05	ug/kg	6.04			6.14			1.6			-

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

Comments:

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1624

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	20-FEB-10	per0220001a	IPB001
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220001a	IPB001
Perchlorate	0.00	0	NA	20-FEB-10	per0220002a	IPB001
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time

Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022010a.mdb 21 Feb 2010 10:20:41
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022010a.cdb 21 Feb 2010 10:20:58

Name: per0220001a

Date: 20-Feb-2010

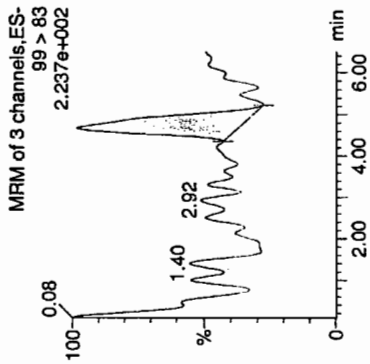
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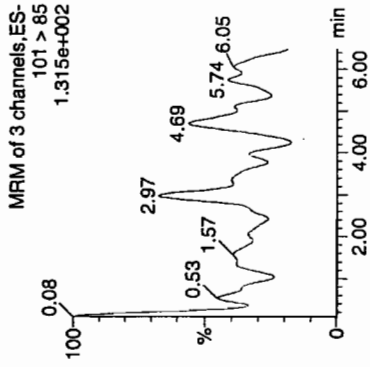
Vial: 1:1,A

02-21-10

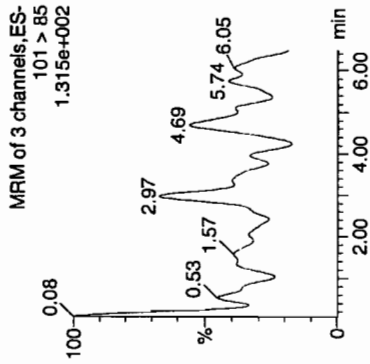
Perchlorate



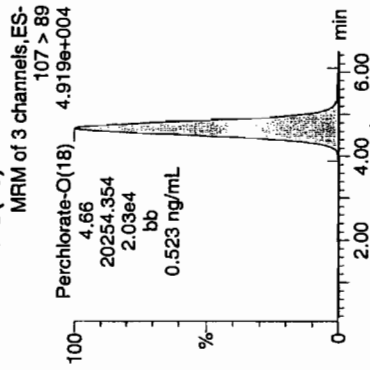
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	4.66	61.000	61.000	bb			0.0013			9.339	0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.66	20254.354	20254.354	bb			0.5231	104.63	4.63	6035.7...	

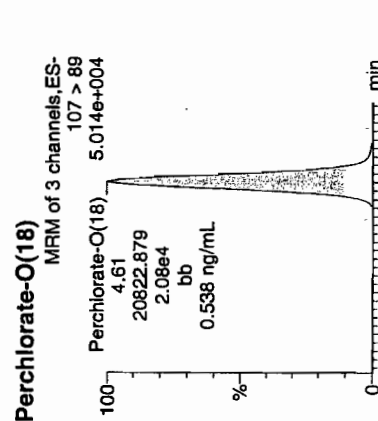
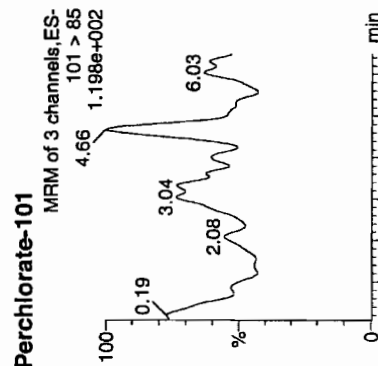
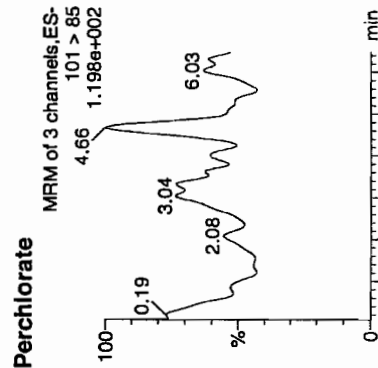
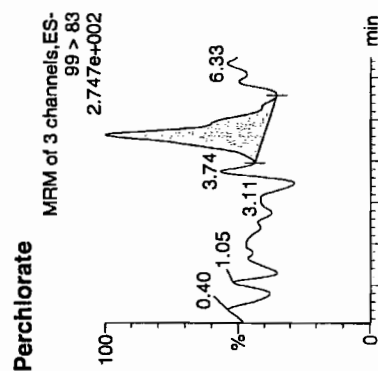
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220002a
Date: 20-Feb-2010
Time: 11:55:26
ID: IPB001
Vial: 1:1,A

und
20.21.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	4.61	83.510	83.510	bb			0.0018			10.778	0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.61	20822.879	20822.879	bb			0.5378	107.56	7.56	9300.6...	

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1624

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	20-FEB-10	per0220008a	IPB002
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220008a	IPB002
Perchlorate	0.00	0	NA	20-FEB-10	per0220010a	IPB003
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220010a	IPB003
Perchlorate	0.00	0	NA	20-FEB-10	per0220015a	IPB004
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220015a	IPB004
Perchlorate	0.00	0	NA	20-FEB-10	per0220023a	IPB005
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220023a	IPB005
Perchlorate	0.00	0	NA	20-FEB-10	per0220036a	IPB006
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220036a	IPB006
Perchlorate	0.00	0	NA	20-FEB-10	per0220043a	IPB007
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220043a	IPB007
Perchlorate	0.00	0	NA	20-FEB-10	per0220049a	IPB008

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1624

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	20-FEB-10	per0220049a	IPB008
Perchlorate	0.00	0	NA	20-FEB-10	per0220062a	IPB009
Perchlorate-101	0.00	0	NA	20-FEB-10	per0220062a	IPB009

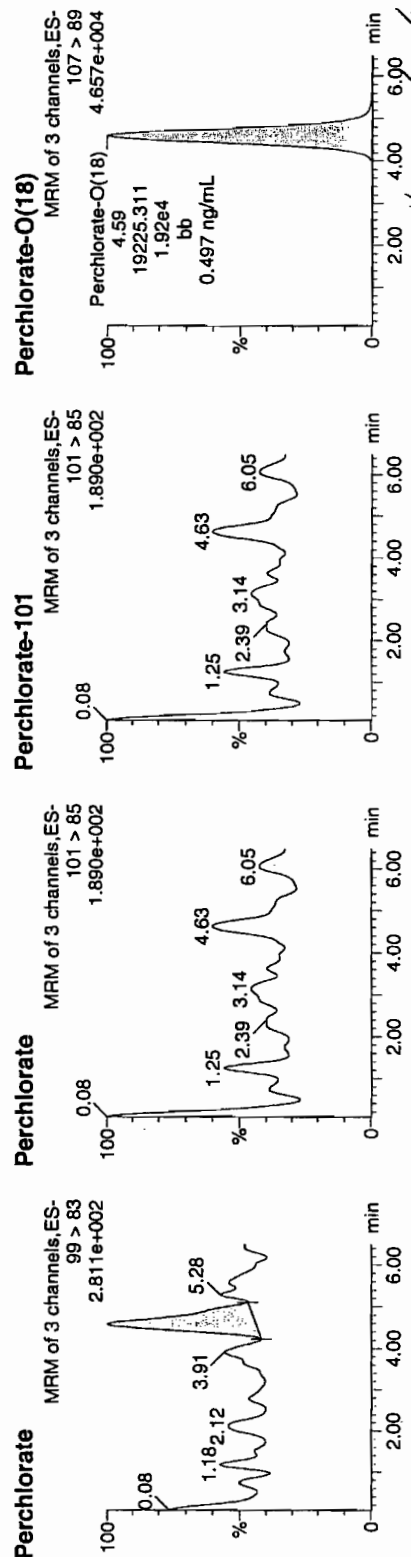
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220008a
Date: 20-Feb-2010
Time: 12:52:34
ID: IPB002
Vial: 1:1,A

02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83	4.58	63.464	63.464	bb			0.0014			18.597	0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	4.59	19225.311	19225.311	bb			0.4966	99.31	-0.69	9318.4...	

Quantify Sample Report

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time

Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

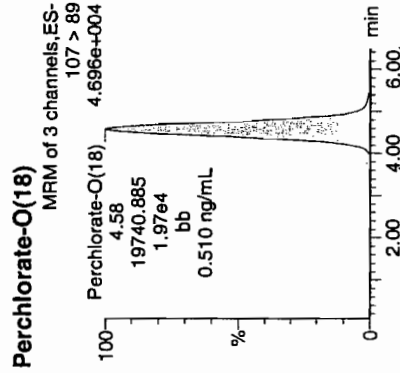
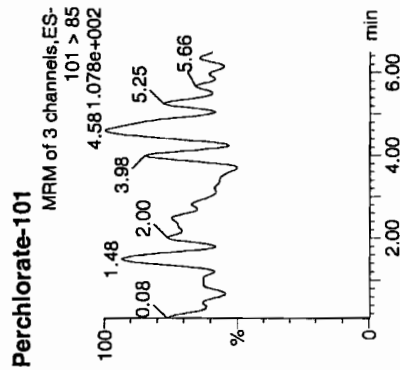
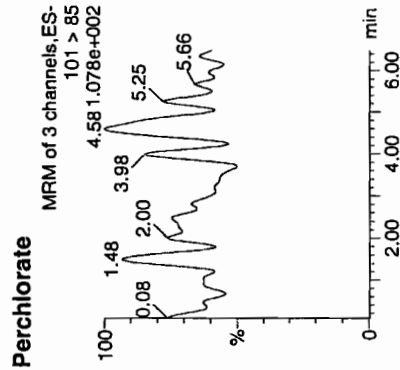
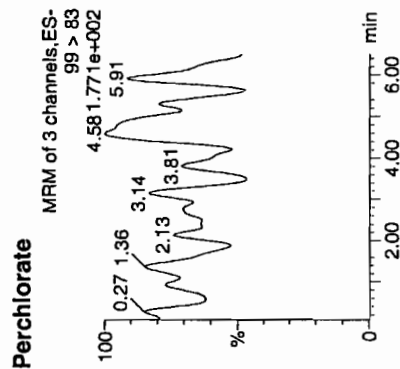
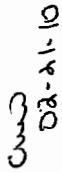
Name: per0220010a

Date: 20-Feb-2010

Time: 13:11:39

ID: IPB003

Vial: 1:1,A



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83											
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-Q(18)	107 > 89	4.58	19740.885	19740.885	bb			0.5099	101.97	✓	1.97	4824.8...

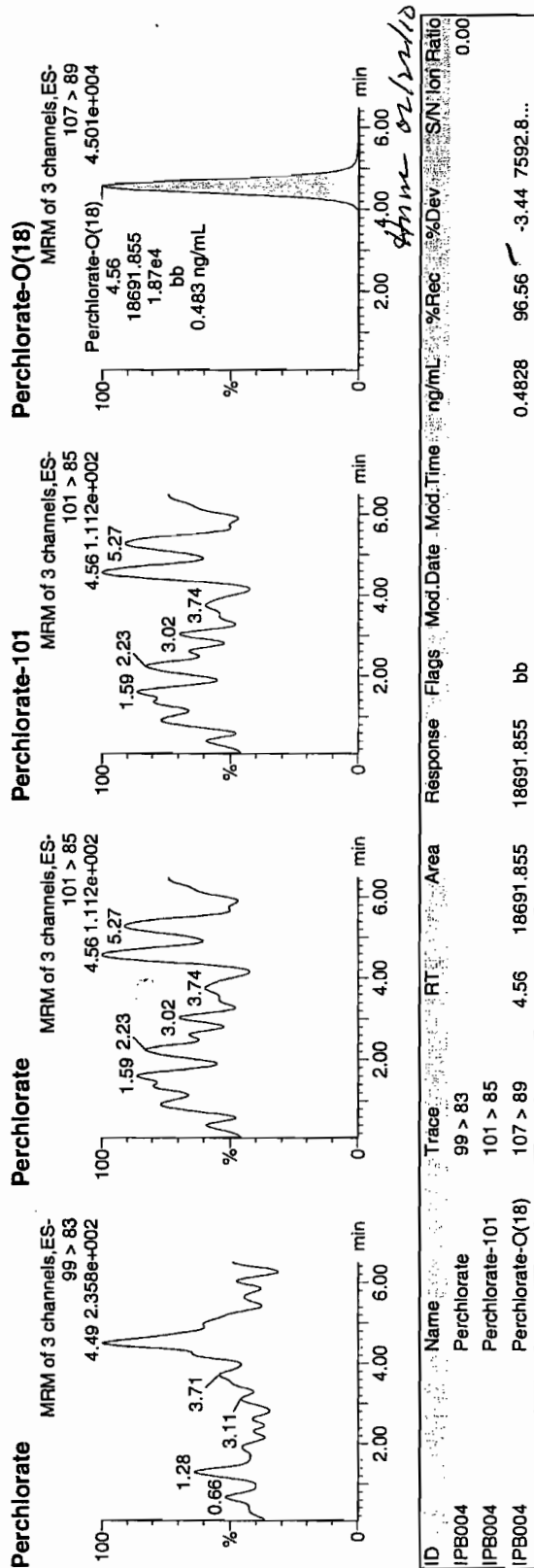
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220015a
Date: 20-Feb-2010
Time: 13:59:24
ID: IPB004
Vial: 1:1,A

022010

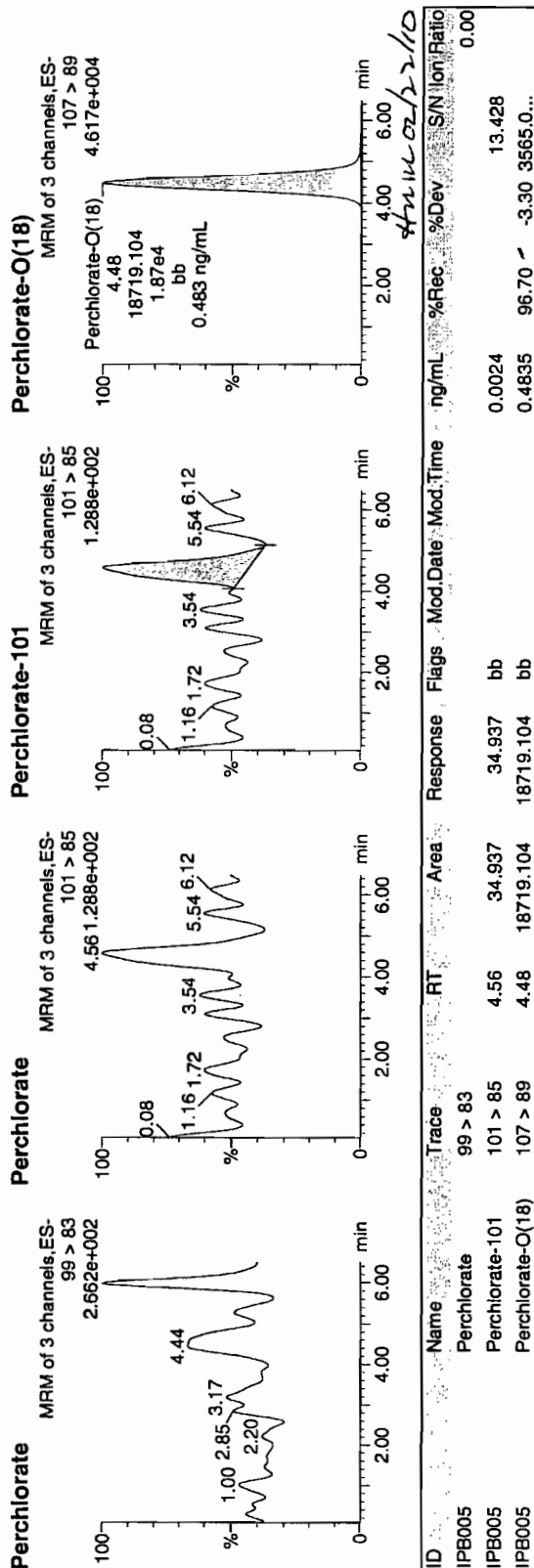


Quantify Sample Report MassLynx 4.0 SP4
 The GEL Group, LLC Analyst: Charliers W. Wilson
 Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
 Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220023a
 Date: 20-Feb-2010
 Time: 15:15:43
 ID: IPB005
 Vial: 1:1,A

02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	4.56	34.937	34.937	bb			0.0024	96.70	-3.30	3565.0...	0.00
IPB005	Perchlorate-101	101 > 85	4.48	18719.104	18719.104	bb			0.4835				
IPB005	Perchlorate-O(18)	107 > 89	4.48	18719.104	18719.104	bb			0.4835				

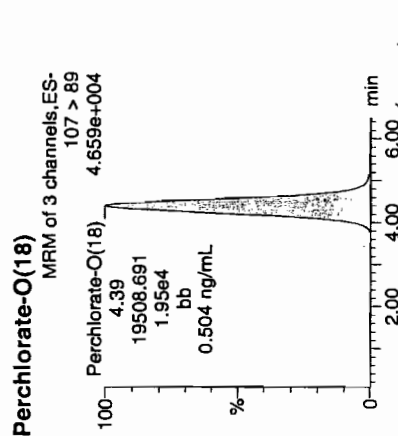
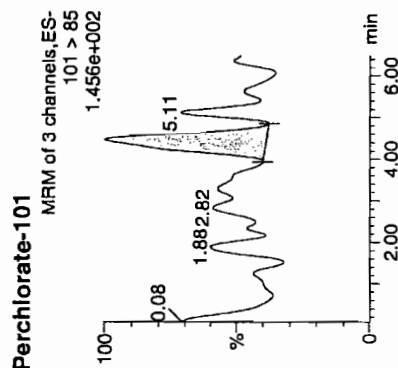
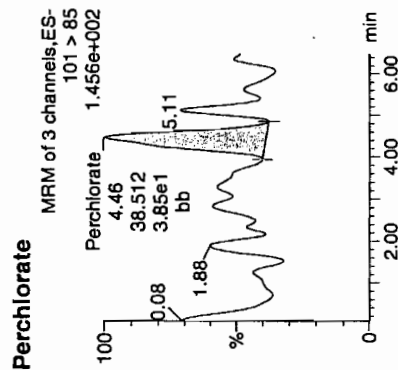
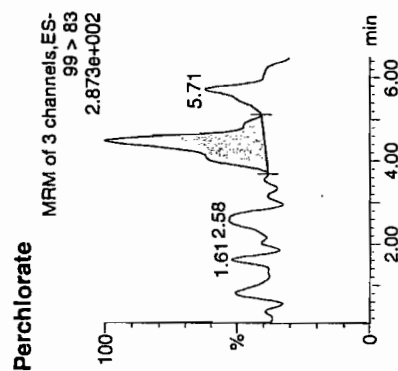
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220043a
Date: 20-Feb-2010
Time: 18:26:42
ID: IPB007
Vial: 1:1,A

02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83	4.48	89.974	89.974	bb			0.0019			15.691	2.34
IPB007	Perchlorate-101	101 > 85	4.45	38.512	38.512	bb			0.0026			5.432	
IPB007	Perchlorate-O(18)	107 > 89	4.39	19508.691	19508.691	bb			0.5039	100.78	~	0.78	7058.6...

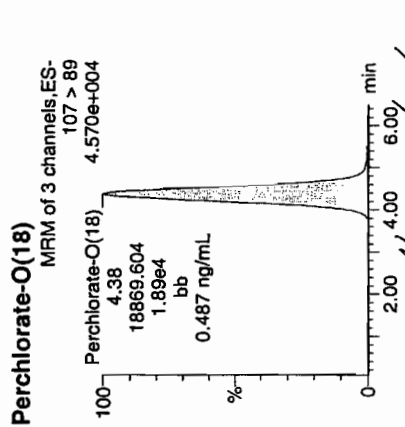
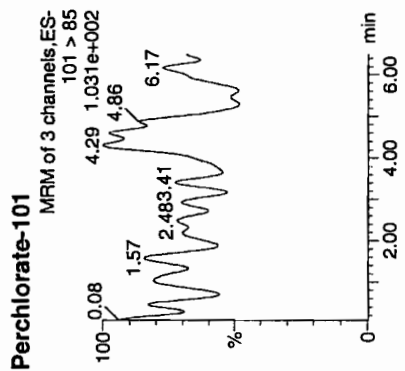
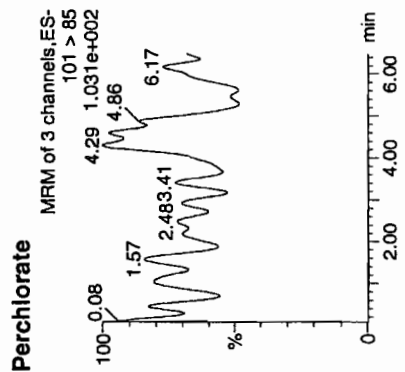
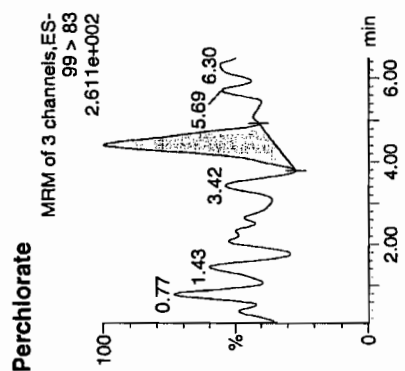
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220049a
Date: 20-Feb-2010
Time: 19:24:17
ID: IPB008
Vial: 1:1,A

02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83	4.40	84.592	84.592	bb			0.0018			10.288	0.00
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	4.38	18869.604	18869.604	bb			0.4874	97.47	-2.53	1484.5...	

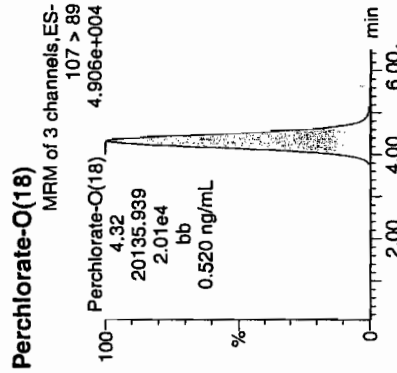
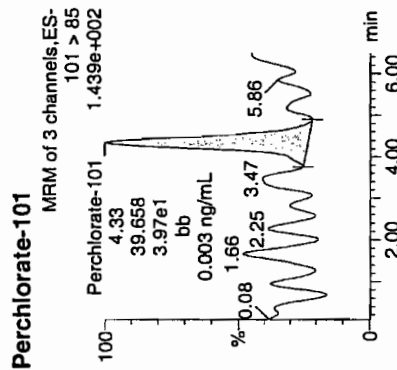
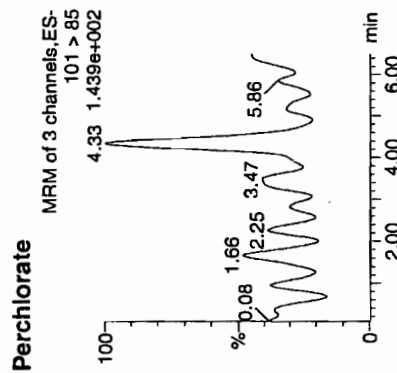
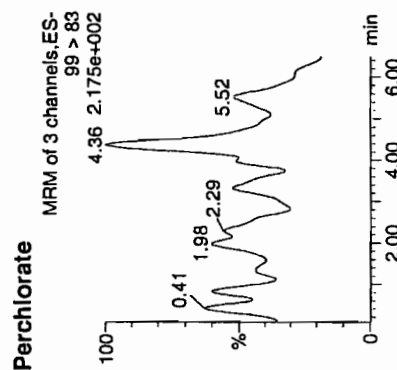
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220062a
Date: 20-Feb-2010
Time: 21:28:38
ID: IPB009
Vial: 1:1,A

02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83											
IPB009	Perchlorate-101	101 > 85	4.33	39.658	39.658	bb			0.0027			13.481	
IPB009	Perchlorate-O(18)	107 > 89	4.32	20135.939	20135.939	bb			0.5201	104.02	4.02	4395.0...	

Nairb.ref

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

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

QUATRO ULTIMA: nairb 01-08-08.cal

Calibration Report - MS1 Static

Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

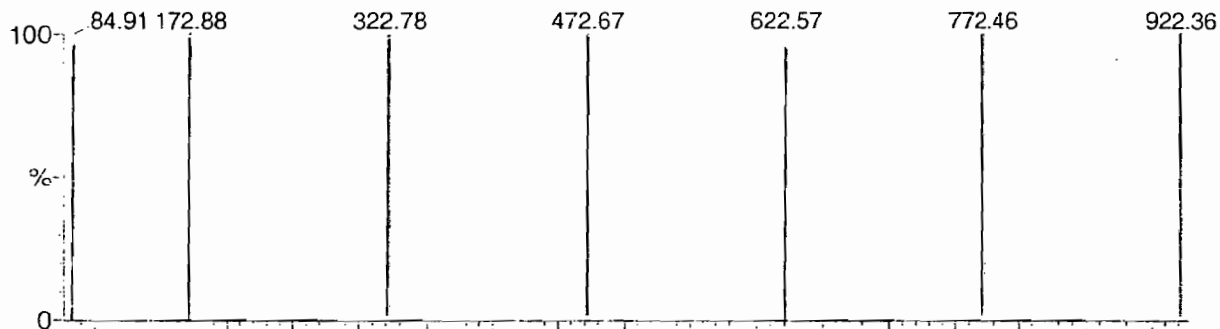
PARTS HIGHLIGHTED BY CURVED 01-07-08

Data file: STATMS1 - Uncalibrated

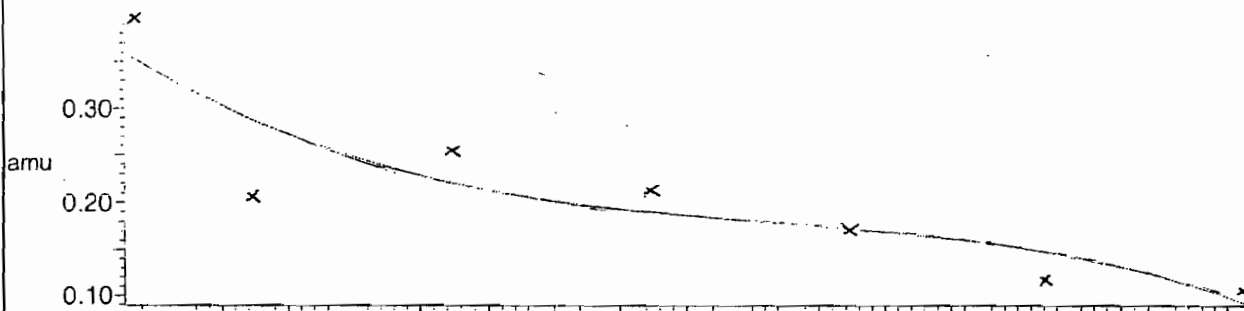
7 matches of 7 tested references



Reference file: Nairb

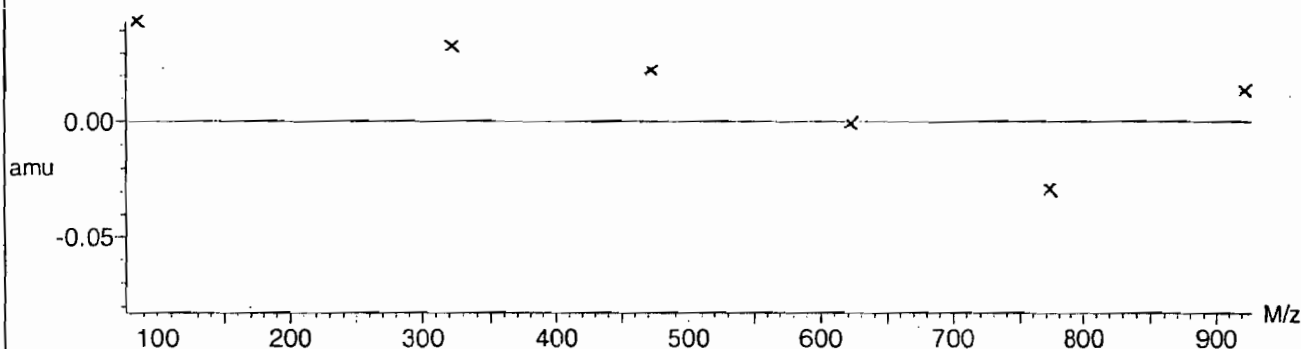


Mass difference (Raw - Ref mass)



Residuals

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



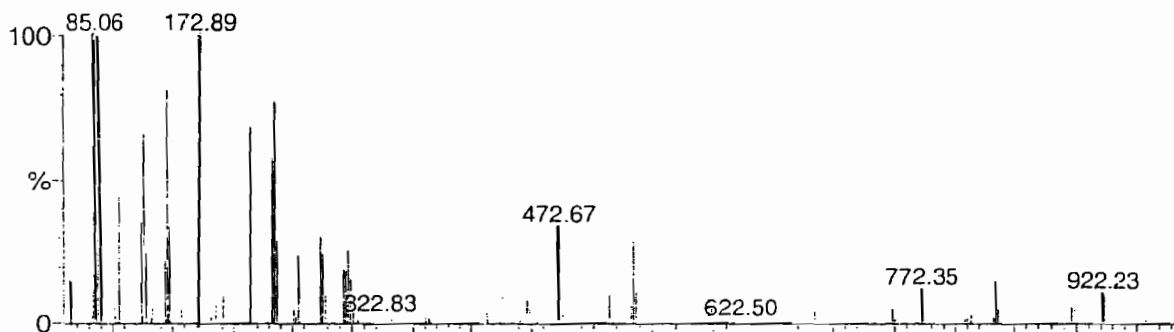
Calibration Report - MS1 Scanning

Page 1 of 1

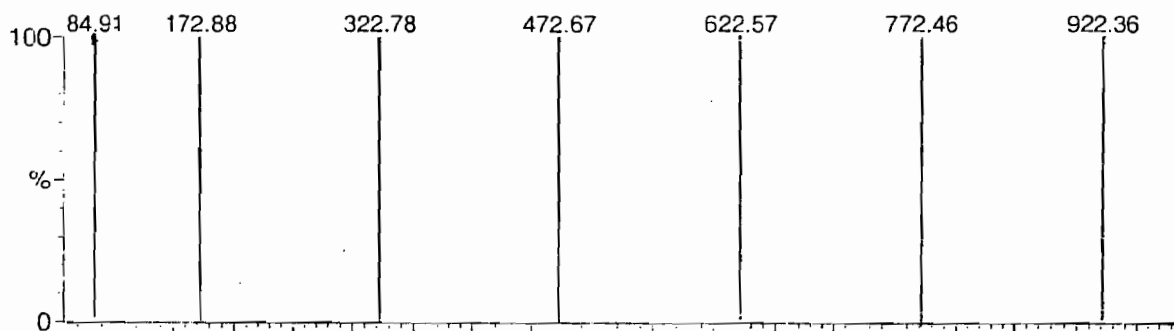
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

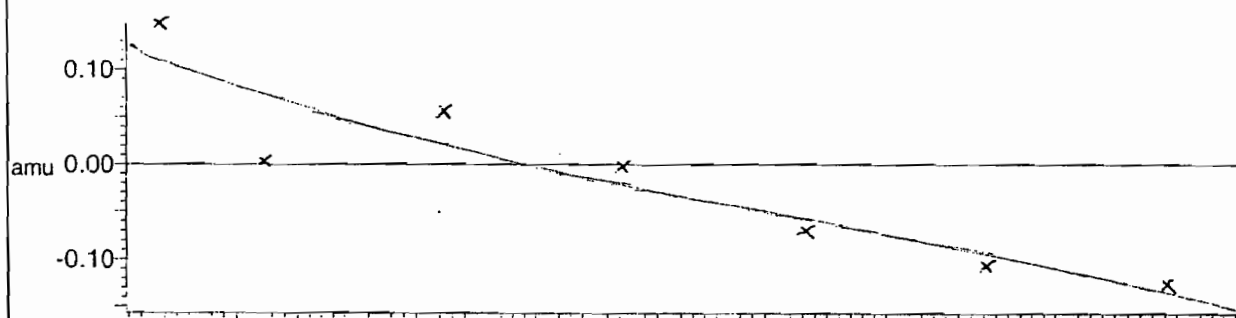
7 matches of 7 tested references



Reference file: Nairb

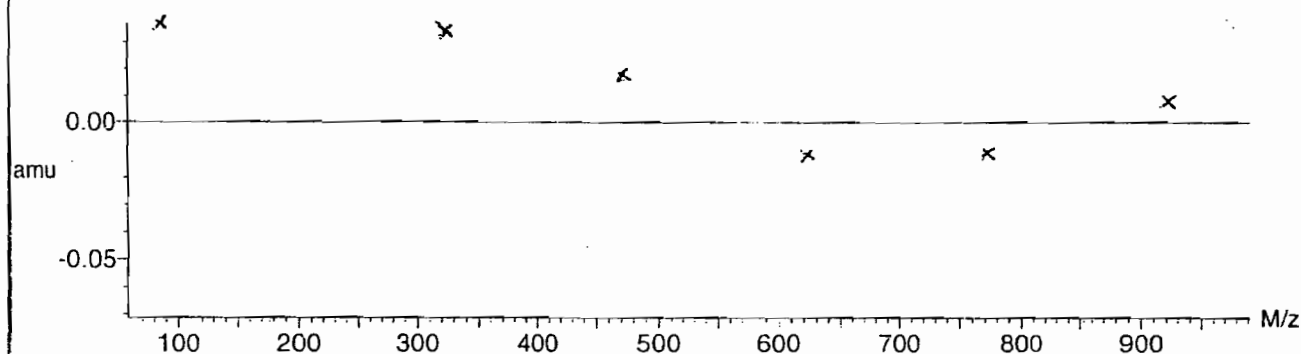


Mass difference (Raw - Ref mass)



Residuals

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



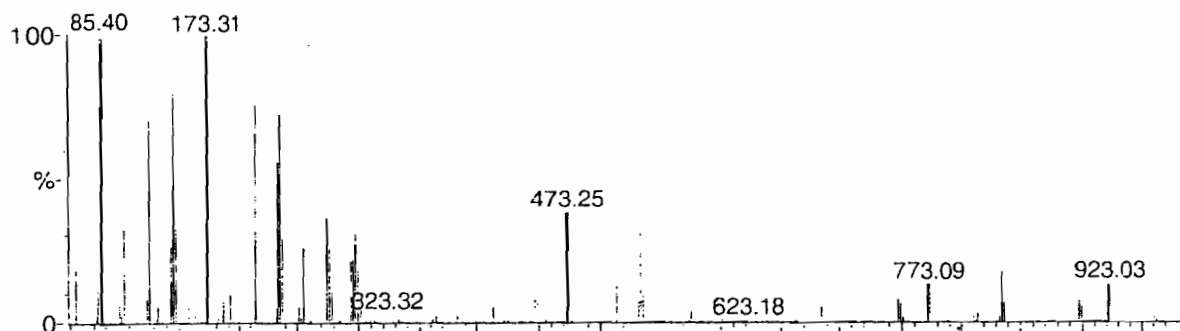
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

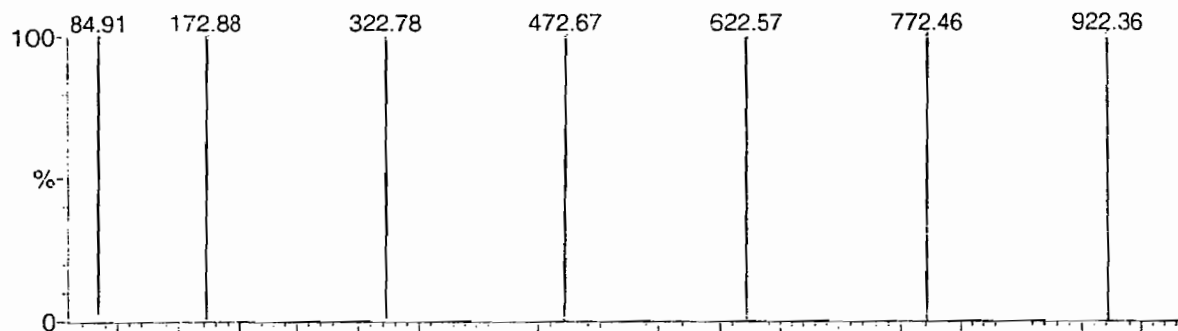
Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

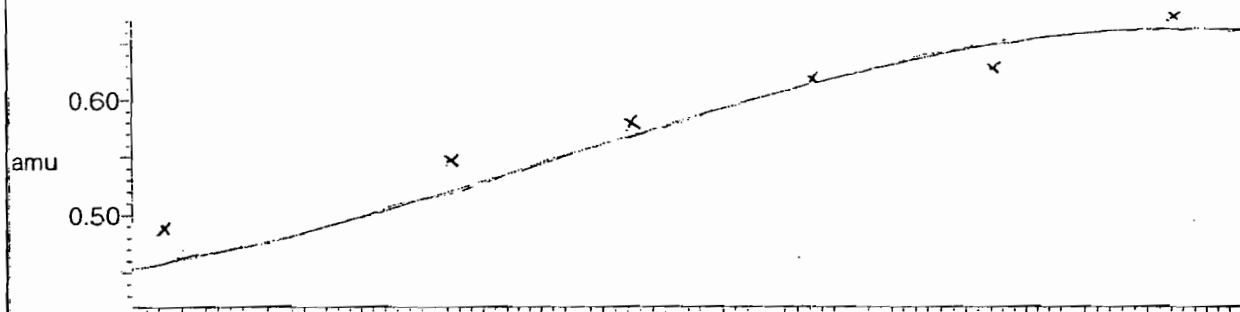
7 matches of 7 tested references



Reference file: Nairb

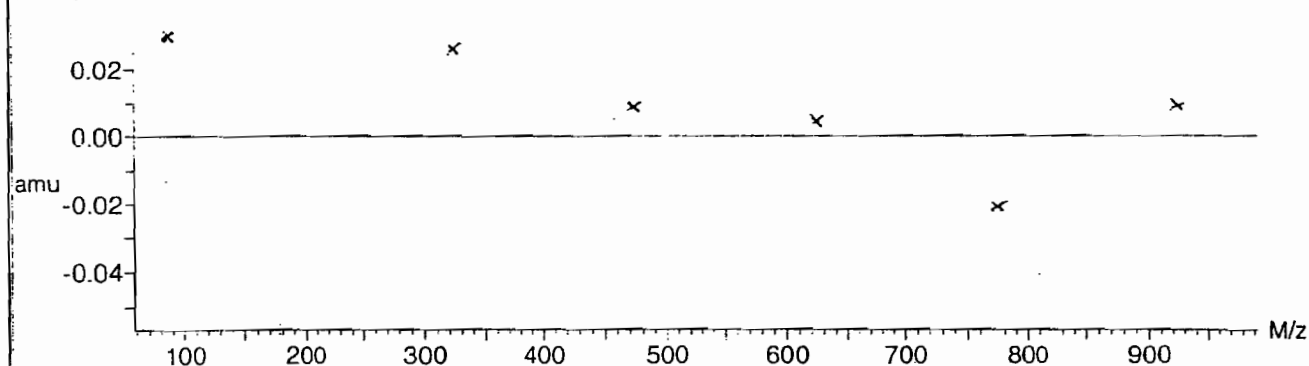


Mass difference (Raw - Ref mass)



Residuals

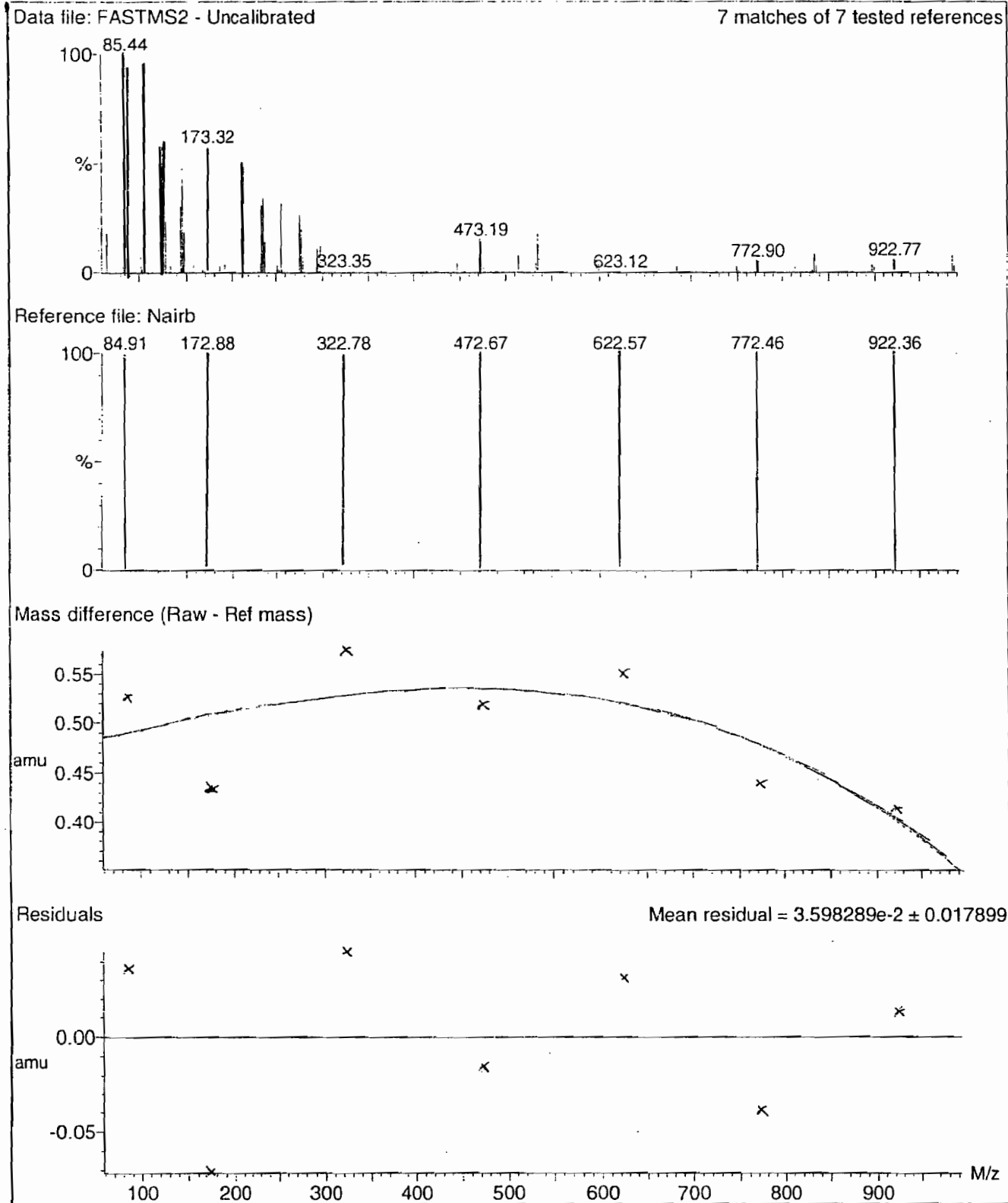
Mean residual = $2.224580 \times 10^{-2} \pm 0.016544$



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

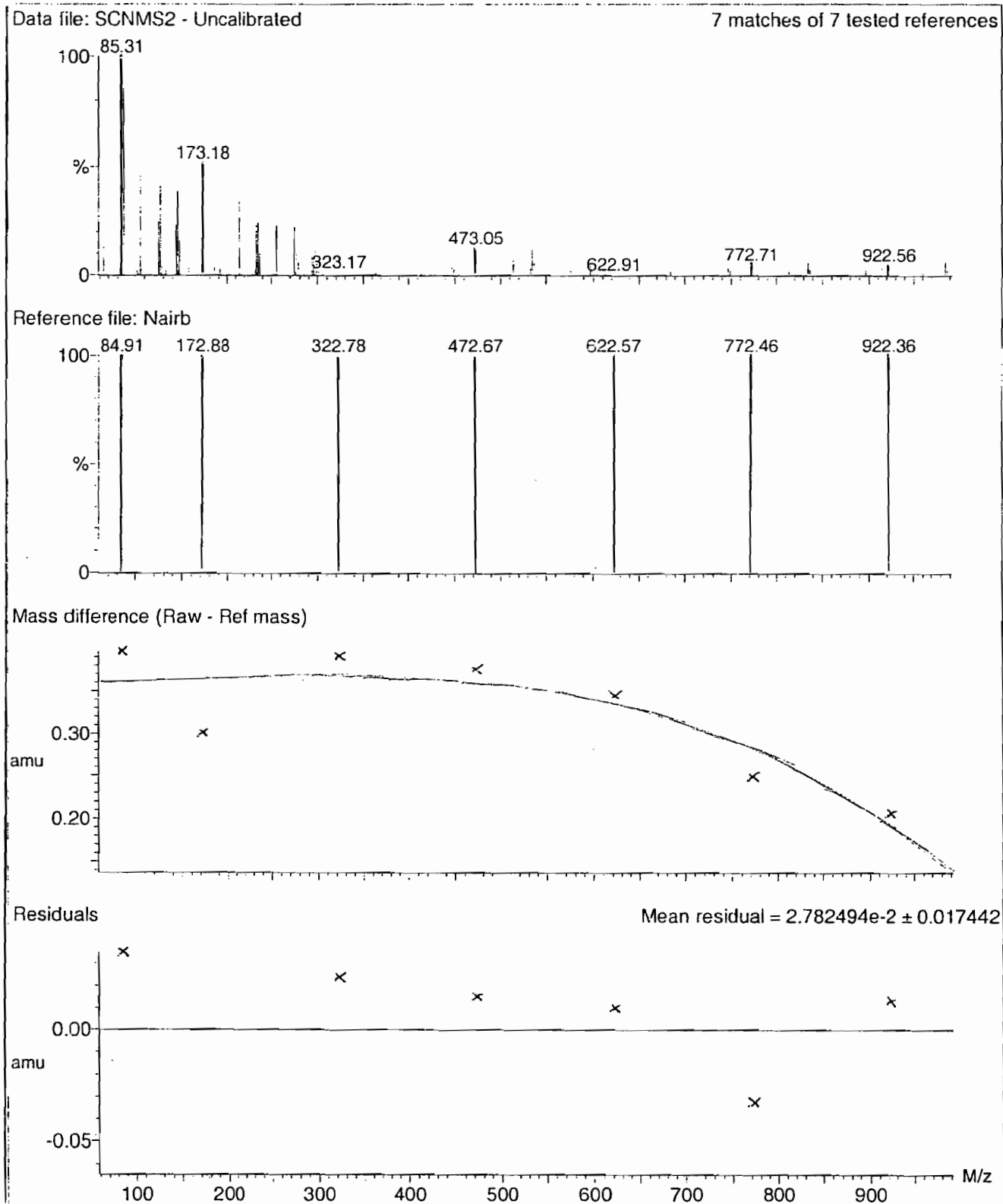
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



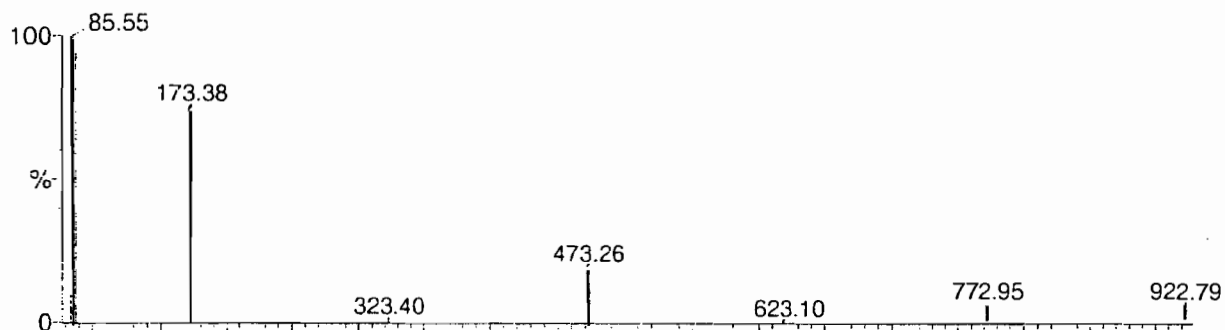
Calibration Report - MS2 Static

Page 1 of 1

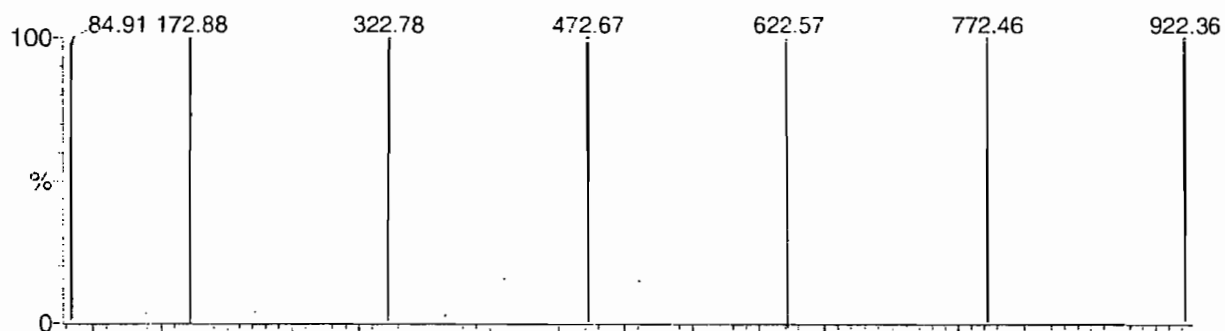
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

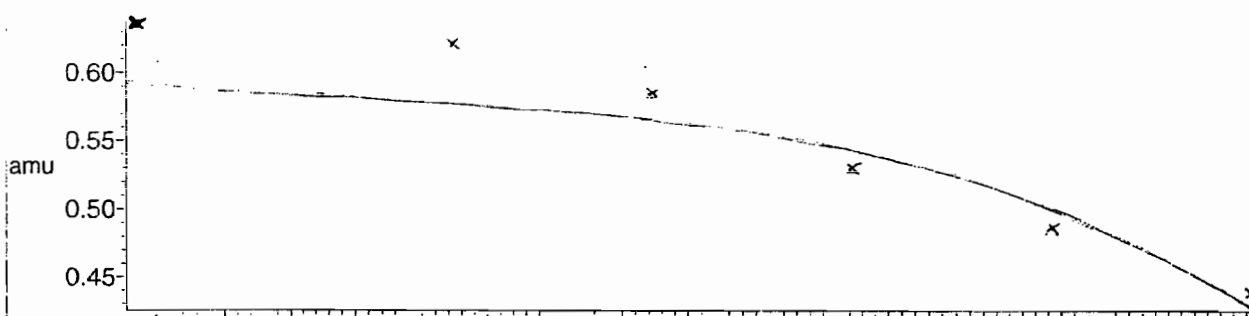
7 matches of 7 tested references



Reference file: Nairb

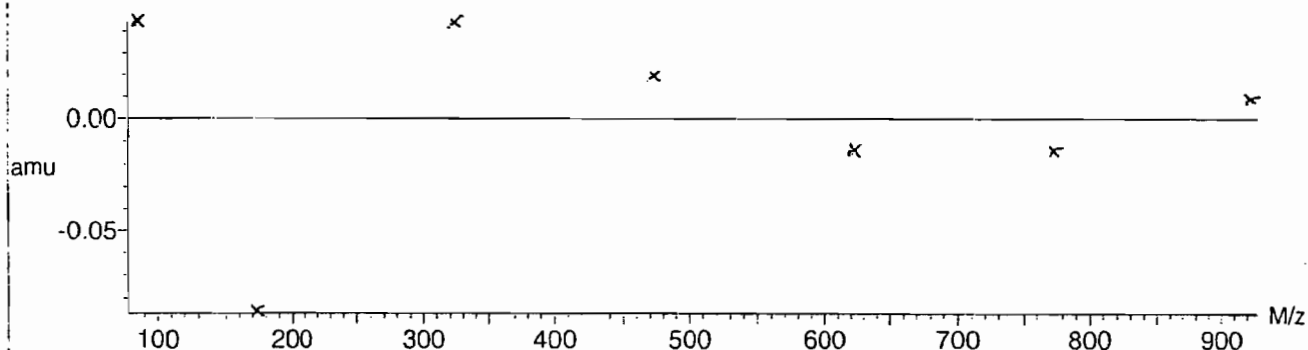


Mass difference (Raw - Ref mass)



Residuals

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



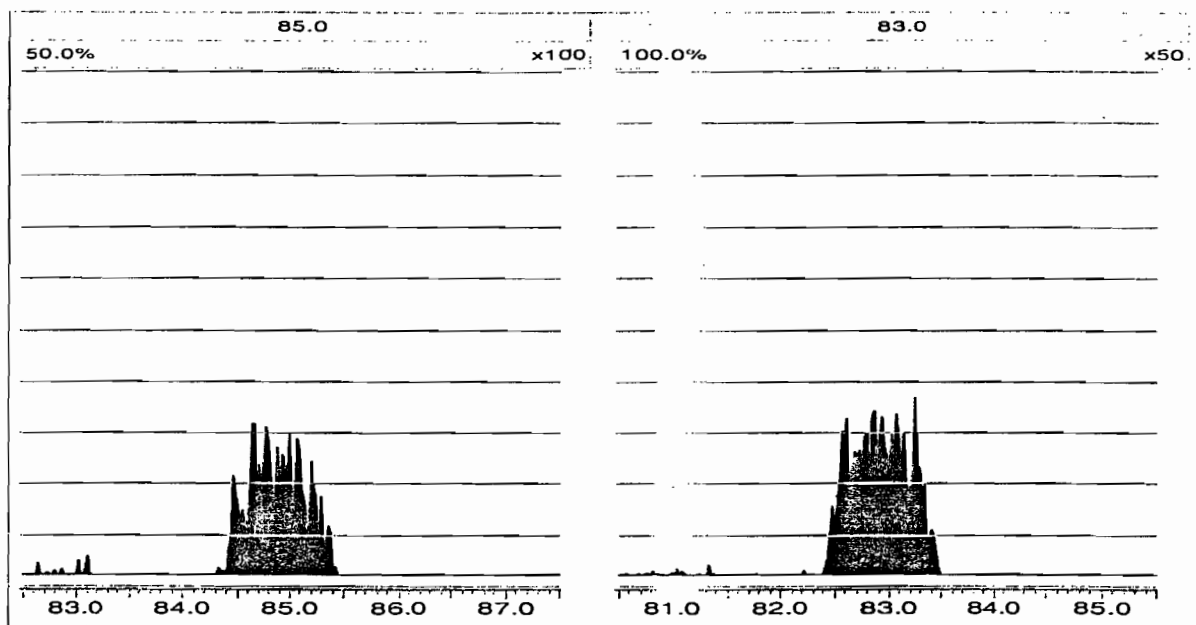
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Saturday, February 20, 2010 10:23:15 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

GEL Job No.(SDG): 10-1624

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q
MidLevel Standard Area	per0220006a	20-FEB-10	18317.2				0.98-1.02
Lower Area Limit			9158.6				
Upper Area Limit			36634.4				
1202042230	per0220044a	20-FEB-10 18:36	17168.4	4.39			
1202042231	per0220045a	20-FEB-10 18:45	18596.4	4.4	4.41442	1.003	
1202042235	per0220046a	20-FEB-10 18:55	18667.4	4.55	4.56348	1.003	
246443001	per0220047a	20-FEB-10 19:05	18265.2	4.38	4.40212	1.005	
246443002	per0220051a	20-FEB-10 19:43	18438.3	4.36	4.37715	1.004	
246443003	per0220052a	20-FEB-10 19:53	18900.5	4.36	4.3896	1.007	
246443004	per0220053a	20-FEB-10 20:02	19422	4.35	4.38962	1.009	
246443005	per0220054a	20-FEB-10 20:12	18660.7	4.34	4.3648	1.006	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8361

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443001

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.61	2.44	0.610	ug/kg	U	1	20-FEB-10 19:05	per0220047a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:05	per0220047a
14797-73-0	Perchlorate-101	.61	2.44	0.610	ug/kg	U	1	20-FEB-10 19:05	per0220047a
	Perchlorate-O(18)			5.76	ug/kg		1	20-FEB-10 19:05	per0220047a

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

*Concentration =

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220047a

Date: 20-Feb-2010

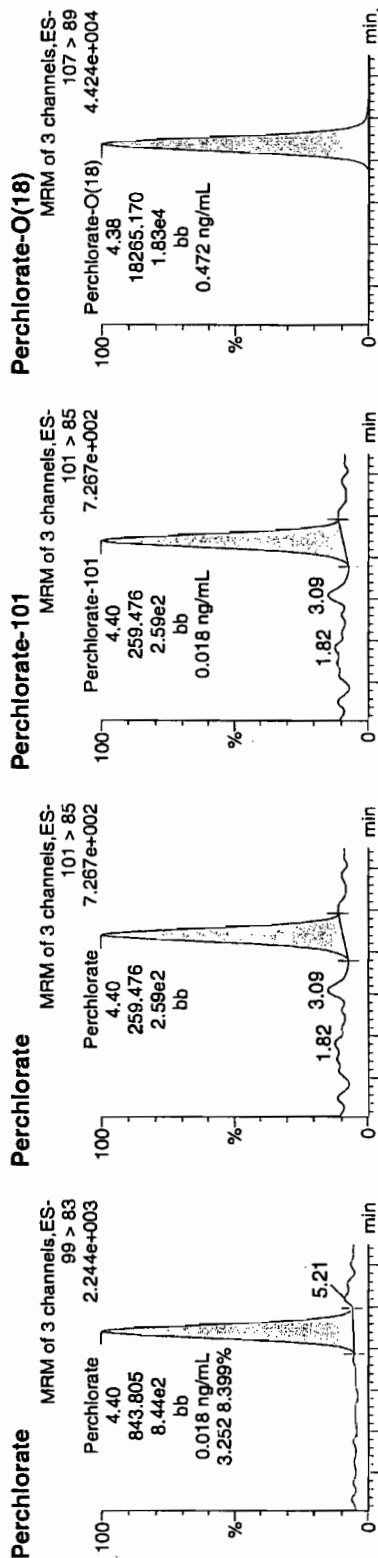
Time: 19:05:00

ID: 246443001

Vial: 2:1,D

WWD
02-21-10

17222 | 952823 | 8020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246443001	Perchlorate	99 > 83	4.40	843.805	843.805	bb			0.0182			318.428	3.25
246443001	Perchlorate-101	101 > 85	4.40	259.476	259.476	bb			0.0178			106.346	
246443001	Perchlorate-O(18)	107 > 89	4.38	18265.170	18265.170	bb			0.4718	94.35'	-5.65	1488.0...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8362

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443002

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.667	2.67	0.667	ug/kg	U	1	20-FEB-10 19:43	per0220051a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:43	per0220051a
14797-73-0	Perchlorate-101	.667	2.67	0.667	ug/kg	U	1	20-FEB-10 19:43	per0220051a
	Perchlorate-O(18)			6.35	ug/kg		1	20-FEB-10 19:43	per0220051a

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

*Concentration =

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

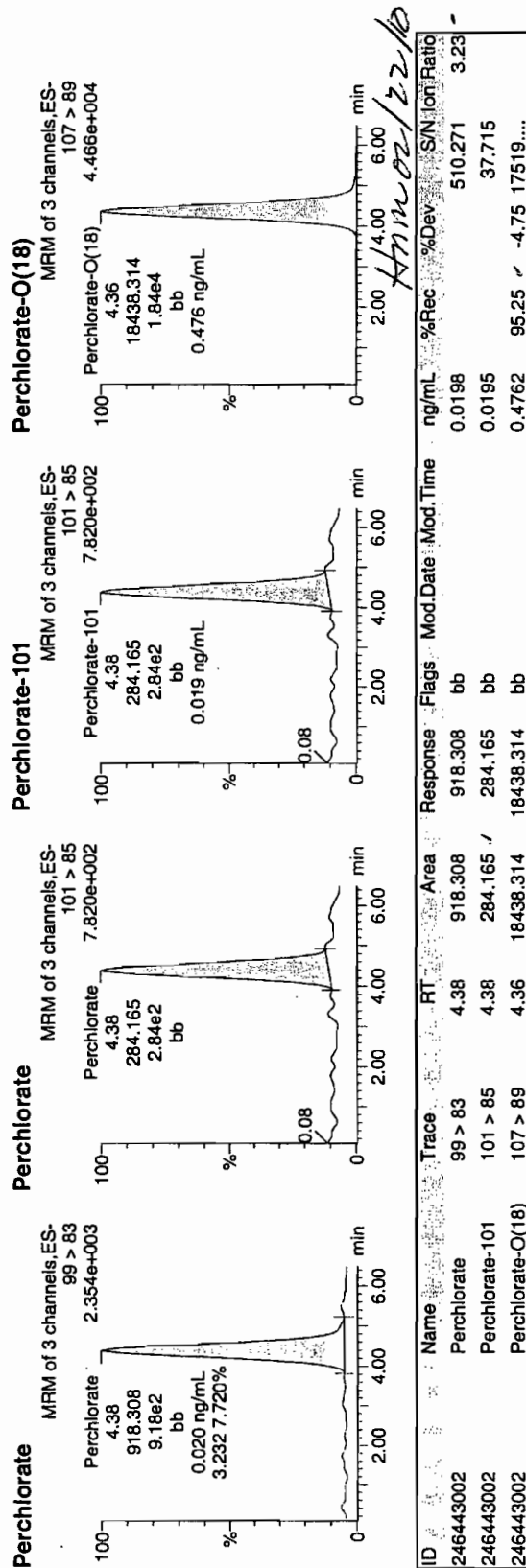
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\P perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220051a
Date: 20-Feb-2010
Time: 19:43:24
ID: 246443002
Vial: 2:1,E

172201752823 | 5000 | 11
02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246443002	Perchlorate	99 > 83	4.38	918.308	918.308	bb			0.0198			510.271	3.23
246443002	Perchlorate-101	101 > 85	4.38	284.165	284.165	bb			0.0195			37.715	
246443002	Perchlorate-O(18)	107 > 89	4.36	18438.314	18438.314	bb			0.4762	95.25	-4.75	17519...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8359

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443003

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 93.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.537	2.15	0.537	ug/kg	U	1	20-FEB-10 19:53	per0220052a
	Perchlorate Isotope Ratio						1	20-FEB-10 19:53	per0220052a
14797-73-0	Perchlorate-101	.537	2.15	0.537	ug/kg	U	1	20-FEB-10 19:53	per0220052a
	Perchlorate-O(18)			5.24	ug/kg		1	20-FEB-10 19:53	per0220052a

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

*Concentration =

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

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Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220052a

Date: 20-Feb-2010

Time: 19:53:06

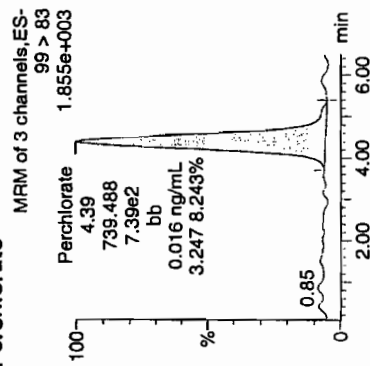
ID: 246443003

Vial: 2:1,F

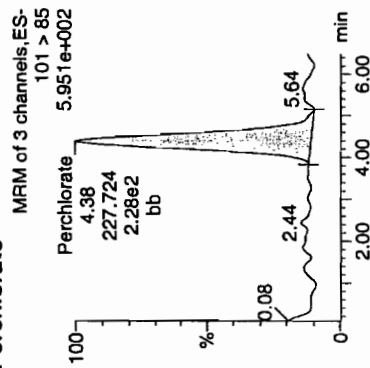
62-21-10

1422 | 952273 | 5020 | 1 |

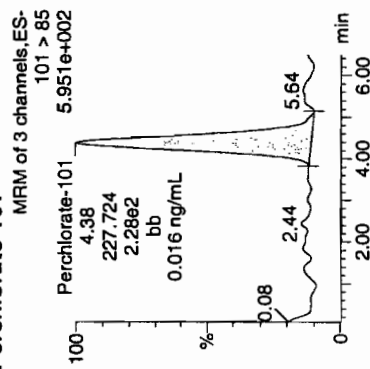
Perchlorate



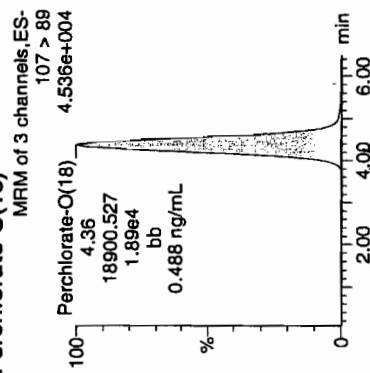
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246443003	Perchlorate	99 > 83	4.39	739.488	739.488	bb			0.0160			146.512	3.25
246443003	Perchlorate-101	101 > 85	4.38	227.724	227.724	bb			0.0156			151.587	
246443003	Perchlorate-O(18)	107 > 89	4.36	18900.527	18900.527	bb			0.4882	97.63	-2.37	4205.7...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8358

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443004

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.599	2.39	0.599	ug/kg	U	1	20-FEB-10 20:02	per0220053a
	Perchlorate Isotope Ratio						1	20-FEB-10 20:02	per0220053a
14797-73-0	Perchlorate-101	.599	2.39	0.599	ug/kg	U	1	20-FEB-10 20:02	per0220053a
	Perchlorate-O(18)			6.00	ug/kg		1	20-FEB-10 20:02	per0220053a

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

*Concentration =

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

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

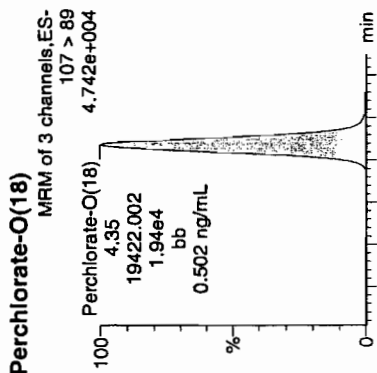
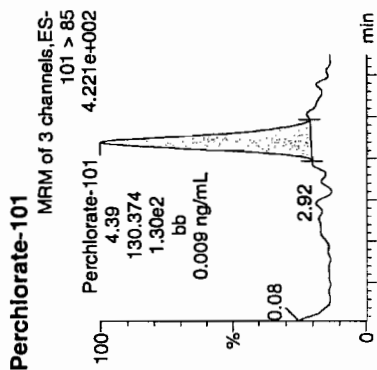
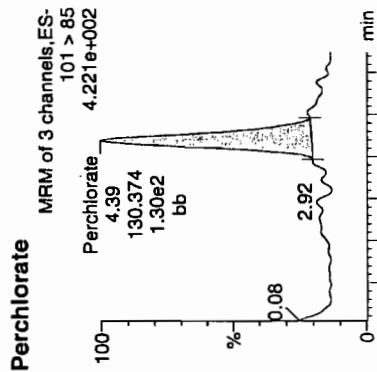
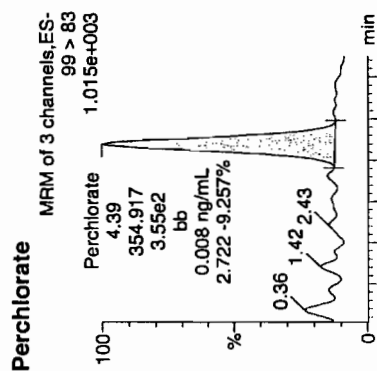
Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220053a
Date: 20-Feb-2010
Time: 20:02:36
ID: 246443004
Vial: 2:2,A

02-21-10

152823 | 3070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
246443004	Perchlorate	99 > 83	4.39	354.917	354.917	bb			0.0077			85.552	2.72
246443004	Perchlorate-101	101 > 85	4.39	130.374	130.374	bb			0.0089			21.609	
246443004	Perchlorate-O(18)	107 > 89	4.35	19422.002	19422.002	bb			0.5016	100.33	0.33	4696.5...	

Handwritten signature

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8360

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 246443005

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.689	2.76	0.689	ug/kg	U	1	20-FEB-10 20:12	per0220054a
	Perchlorate Isotope Ratio						1	20-FEB-10 20:12	per0220054a
14797-73-0	Perchlorate-101	.689	2.76	0.689	ug/kg	U	1	20-FEB-10 20:12	per0220054a
	Perchlorate-O(18)			6.64	ug/kg		1	20-FEB-10 20:12	per0220054a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

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Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220054a

Date: 20-Feb-2010

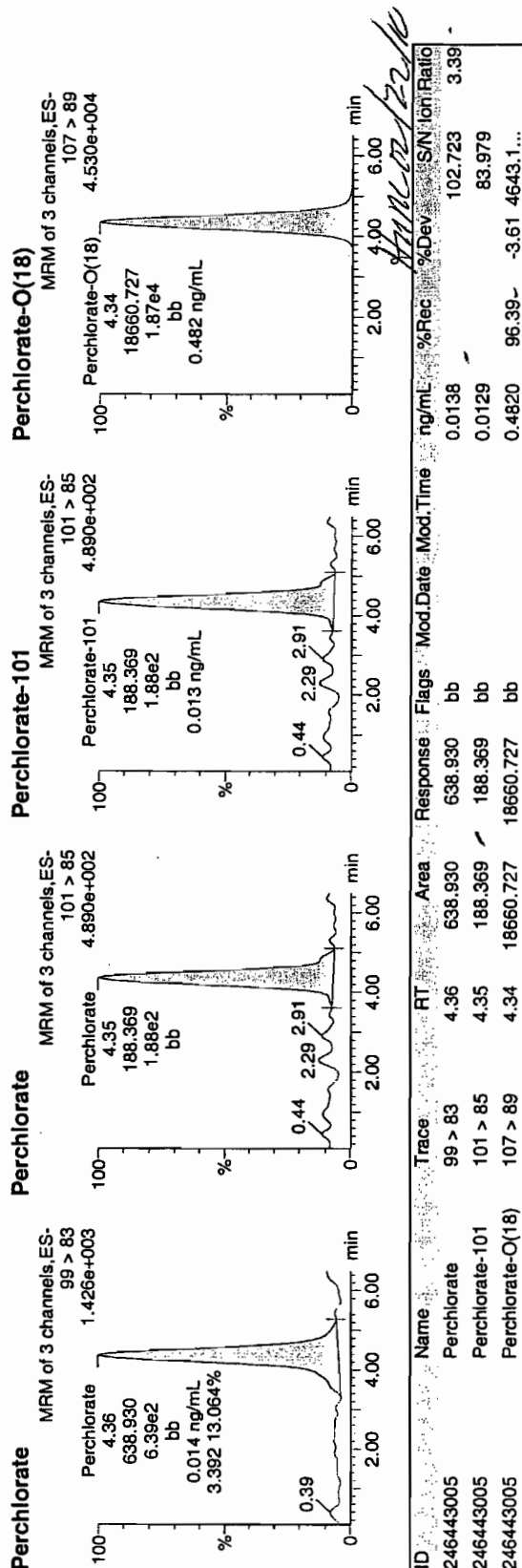
Time: 20:12:08

ID: 246443005

Vial: 2:2,B

20-21-10

1622-1952823 | 3020 | 11



STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1624

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 20-FEB-10

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

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 46315.98

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1624

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 20-FEB-10

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

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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14579.96

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time

Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022010a.mdb 21 Feb 2010 10:20:41
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022010a.cdb 21 Feb 2010 10:20:58

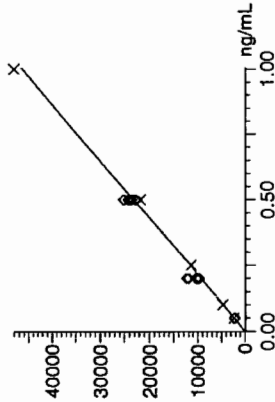
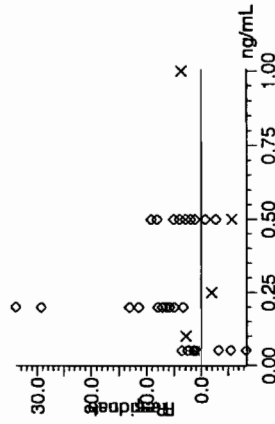
Compound name: Perchlorate

Response Factor: 46316

RRF SD: 1794.44, % Relative SD: 3.87435

Response type: External Std, Area

Curve type: RF



02-21-10

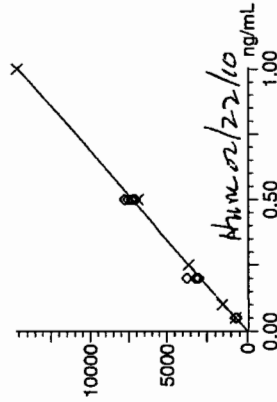
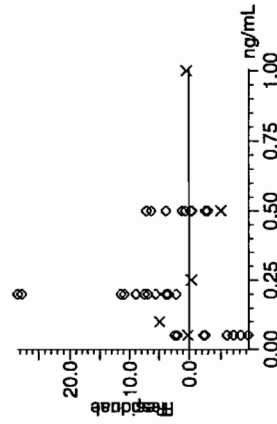
Compound name: Perchlorate-101

Response Factor: 14580

RRF SD: 514.022, % Relative SD: 3.52554

Response type: External Std, Area

Curve type: RF



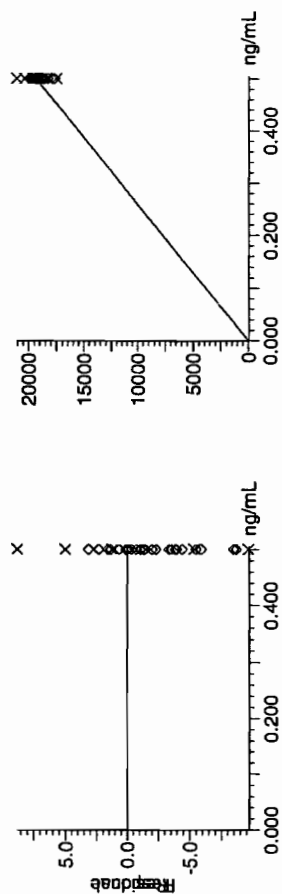
02-22-10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 38717.3
RRF SD: 2911.99, % Relative SD: 7.52116
Response type: External Std, Area
Curve type: Rf



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1624

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.55	109.17	20-FEB-10 13:02	per0220009a
Perchlorate Isotope Ratio		3.23		20-FEB-10 13:02	per0220009a
Perchlorate-101	.5	.54	107.23	20-FEB-10 13:02	per0220009a

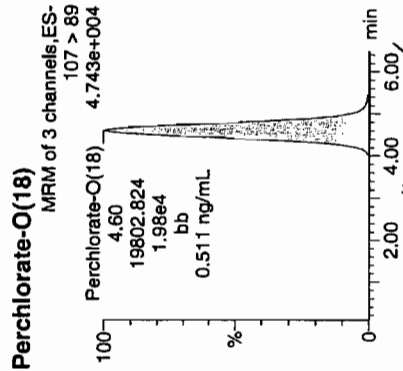
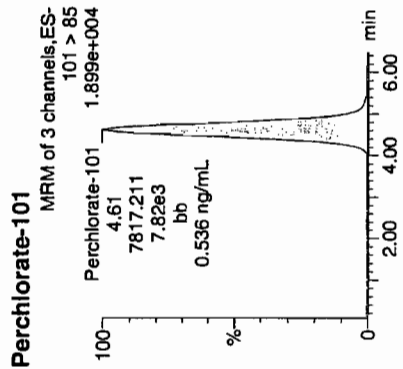
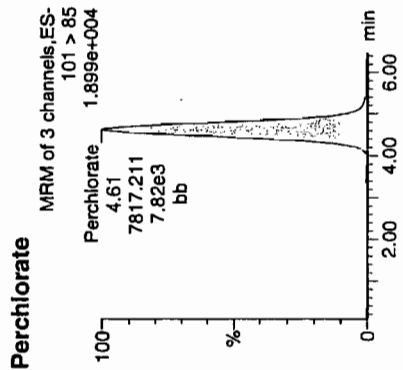
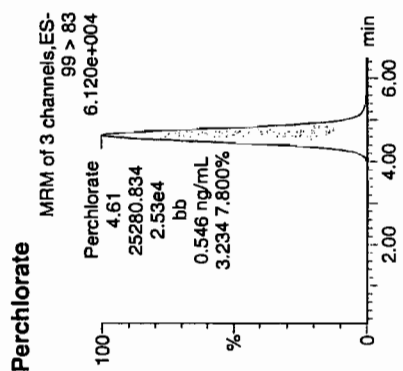
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

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Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220009a
Date: 20-Feb-2010
Time: 13:02:07
ID: WCL100219-06ICV
Vial: 1:2,A

Per
02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06ICV	Perchlorate	99 > 83	4.61	25280.834	25280.834	bb			0.5458	109.17	9.17	5804.4...	3.23
WCL100219-06ICV	Perchlorate-101	101 > 85	4.61	7817.211	7817.211	bb			0.5362	107.23	7.23	786.420	
WCL100219-06ICV	Perchlorate-O(18)	107 > 89	4.60	19802.824	19802.824	bb			0.5115	102.29	2.29	24890....	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1624

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	102.91	20-FEB-10 15:06	per0220022a
Perchlorate Isotope Ratio		3.35		20-FEB-10 15:06	per0220022a
Perchlorate-101	.5	.49	97.45	20-FEB-10 15:06	per0220022a
Perchlorate	.5	.51	101.18	20-FEB-10 17:10	per0220035a
Perchlorate Isotope Ratio		3.22		20-FEB-10 17:10	per0220035a
Perchlorate-101	.5	.5	99.77	20-FEB-10 17:10	per0220035a
Perchlorate	.5	.52	103.99	20-FEB-10 19:14	per0220048a
Perchlorate Isotope Ratio		3.32		20-FEB-10 19:14	per0220048a
Perchlorate-101	.5	.5	99.54	20-FEB-10 19:14	per0220048a
Perchlorate	.5	.54	108.13	20-FEB-10 21:18	per0220061a
Perchlorate Isotope Ratio		3.23		20-FEB-10 21:18	per0220061a
Perchlorate-101	.5	.53	106.41	20-FEB-10 21:18	per0220061a

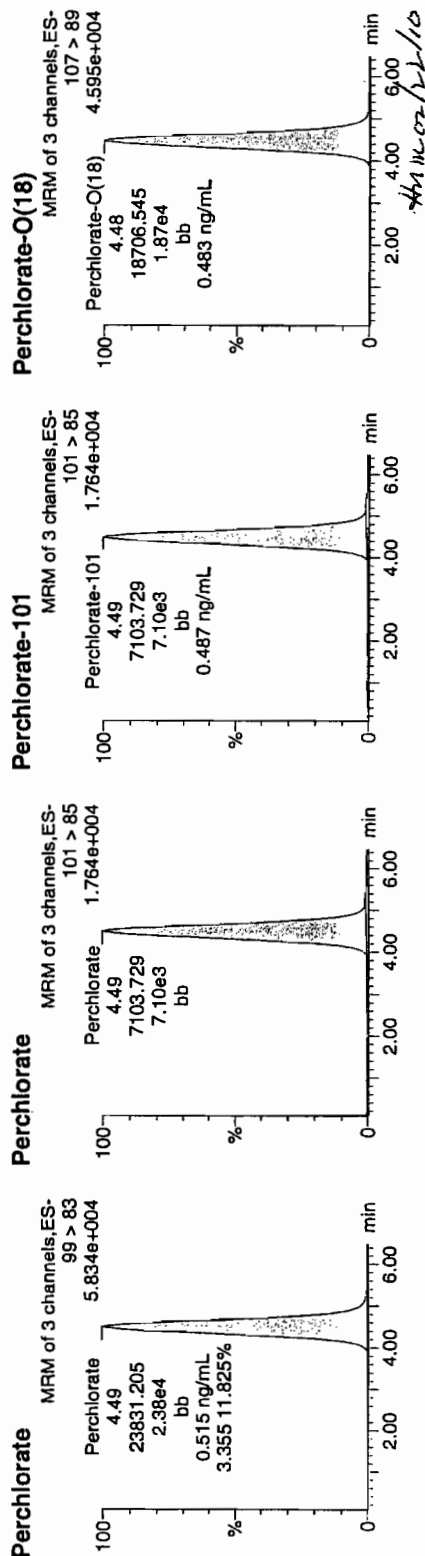
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220022a
Date: 20-Feb-2010
Time: 15:06:10
ID: WCL100219-06CCV
Vial: 1:2,A

Pure
and
02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	4.49	23831.205	23831.205	bb			0.5145	102.91	2.91	7443.4...	3.35
WCL100219-06CCV	Perchlorate-101	101 > 85	4.49	7103.729	7103.729	bb			0.4872	97.45	-2.55	2137.2...	
WCL100219-06CCV	Perchlorate-O(18)	107 > 89	4.48	18706.545	18706.545	bb			0.4832	96.63	-3.37	1260.4...	

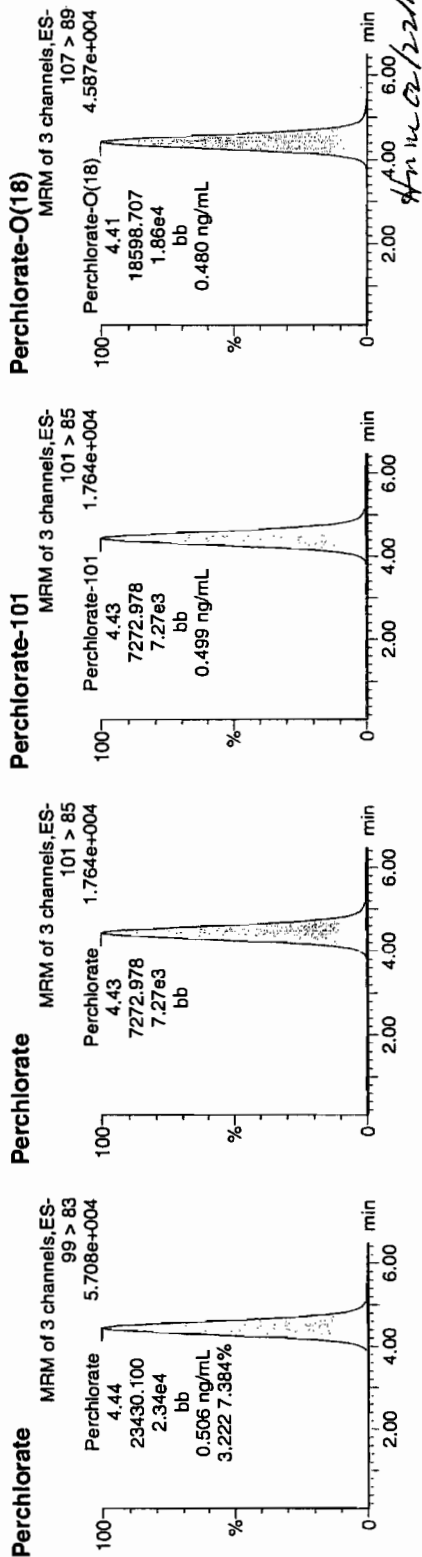
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

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Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220035a
Date: 20-Feb-2010
Time: 17:10:20
ID: WCL100219-06CCV
Vial: 1:2,A

Run
CWS
02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	4.44	23430.100	23430.100	bb			0.5059	101.18	1.18	3471.1...	3.22
WCL100219-06CCV	Perchlorate-101	101 > 85	4.43	7272.978	7272.978	bb			0.4988	99.77	-0.23	2914.3...	
WCL100219-06CCV	Perchlorate-O(18)	107 > 89	4.41	18598.707	18598.707	bb			0.4804	96.07	-3.93	4014.5...	

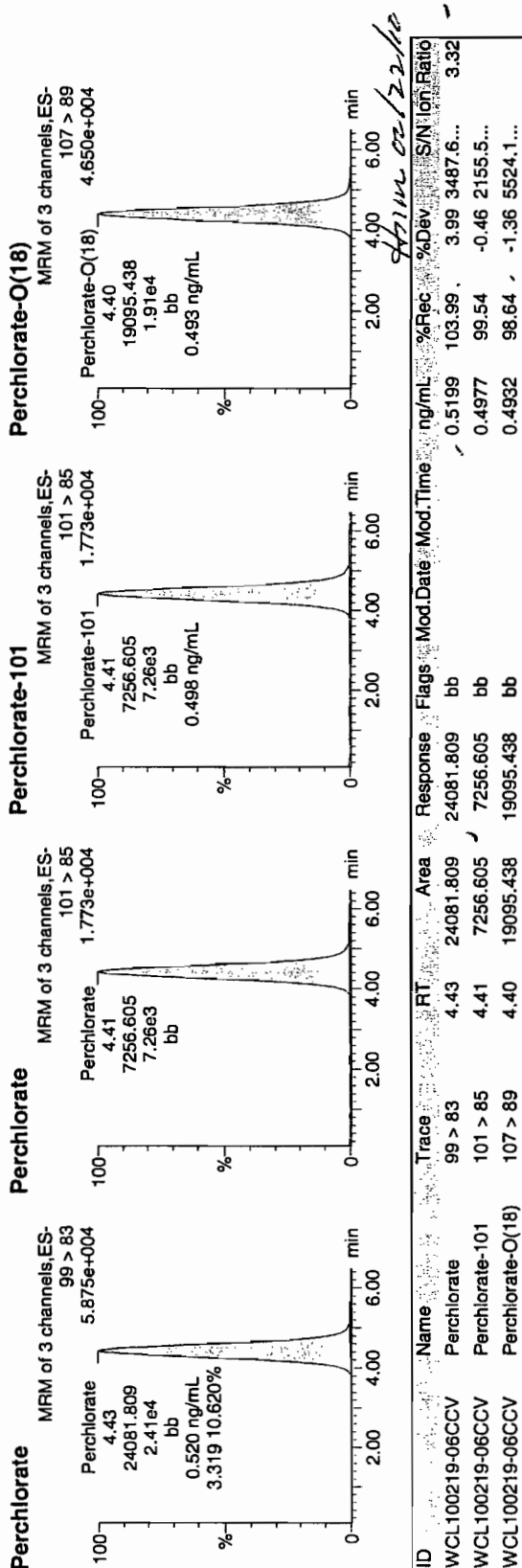
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

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Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220048a
Date: 20-Feb-2010
Time: 19:14:31
ID: WCL100219-06CCV
Vial: 1:2,A

Per
and
02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	4.43	24081.809	24081.809	bb			0.5199	103.99	3.99	3487.6...	3.32
WCL100219-06CCV	Perchlorate-101	101 > 85	4.41	7256.605	7256.605	bb			0.4977	99.54	-0.46	2155.5...	
WCL100219-06CCV	Perchlorate-Q(18)	107 > 89	4.40	19095.438	19095.438	bb			0.4932	98.64	-1.36	5524.1...	

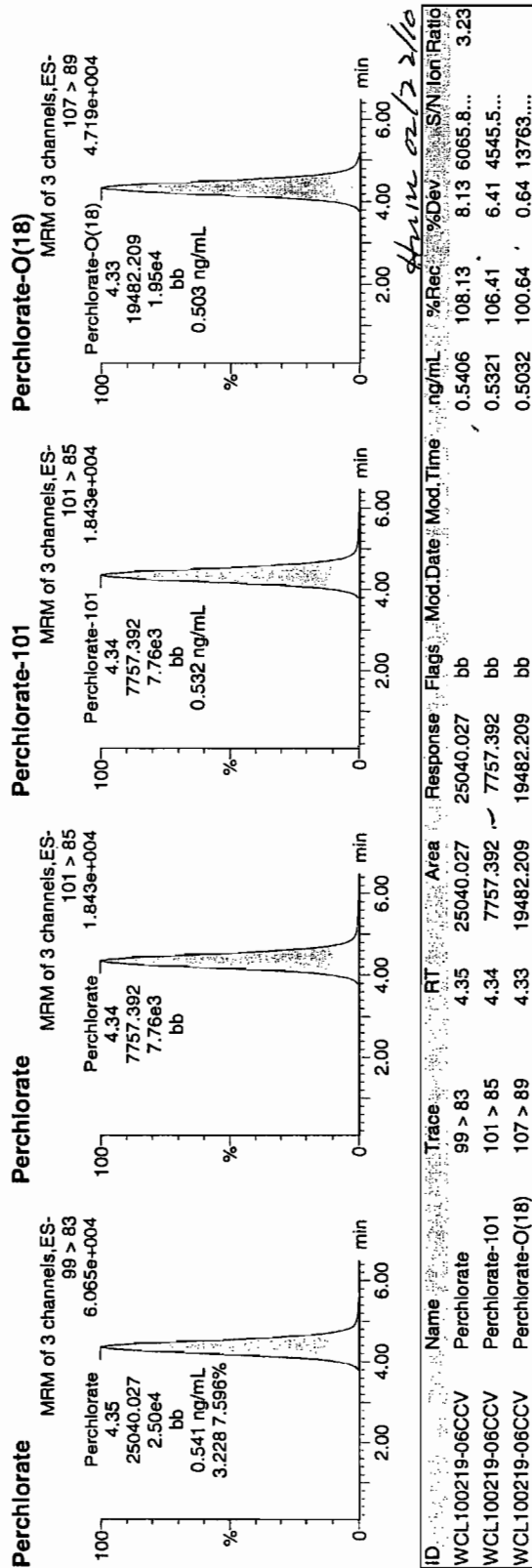
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

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Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220061a
Date: 20-Feb-2010
Time: 21:18:50
ID: WCL100219-06CCV
Vial: 1:2,A

Per
02-21-10



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1624

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	101.29	20-FEB-10 13:21	per0220011a
Perchlorate Isotope Ratio		3.3		20-FEB-10 13:21	per0220011a
Perchlorate-101	.05	.05	97.42	20-FEB-10 13:21	per0220011a
Perchlorate	.05	.05	103.64	20-FEB-10 15:25	per0220024a
Perchlorate Isotope Ratio		3.23		20-FEB-10 15:25	per0220024a
Perchlorate-101	.05	.05	101.96	20-FEB-10 15:25	per0220024a
Perchlorate	.05	.05	102.62	20-FEB-10 17:29	per0220037a
Perchlorate Isotope Ratio		3.18		20-FEB-10 17:29	per0220037a
Perchlorate-101	.05	.05	102.38	20-FEB-10 17:29	per0220037a
Perchlorate	.05	.05	101.55	20-FEB-10 19:33	per0220050a
Perchlorate Isotope Ratio		3.51		20-FEB-10 19:33	per0220050a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1624

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	91.81	20-FEB-10 19:33	per0220050a
Perchlorate	.05	.05	102.48	20-FEB-10 21:38	per0220063a
Perchlorate Isotope Ratio		3.34		20-FEB-10 21:38	per0220063a
Perchlorate-101	.05	.05	97.47	20-FEB-10 21:38	per0220063a

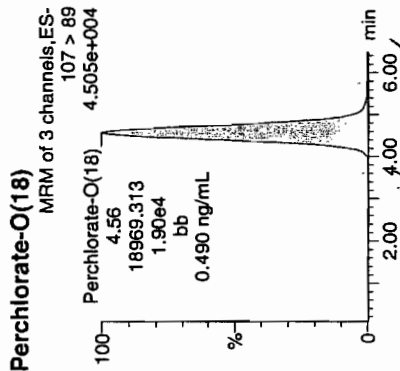
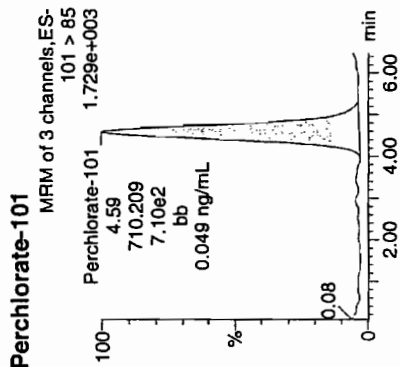
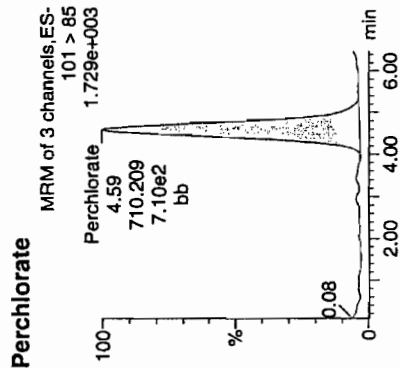
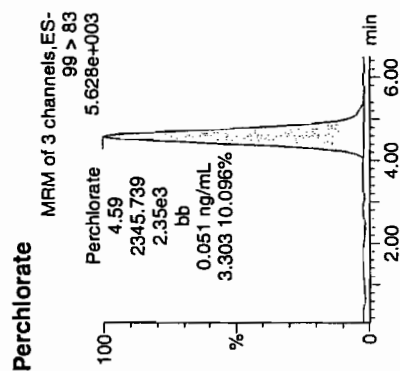
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

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Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220011a
Date: 20-Feb-2010
Time: 13:21:12
ID: WCL100219-07CRI
Vial: 1:2,B

*Pers
and
02-21-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	4.59	2345.739	2345.739	bb			0.0506	101.29	1.29	436.505	3.30
WCL100219-07CRI	Perchlorate-101	101 > 85	4.59	710.209	710.209	bb			0.0487	97.42	-2.58	369.094	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	4.56	18969.313	18969.313	bb			0.4899	97.99	-2.01	631.545	

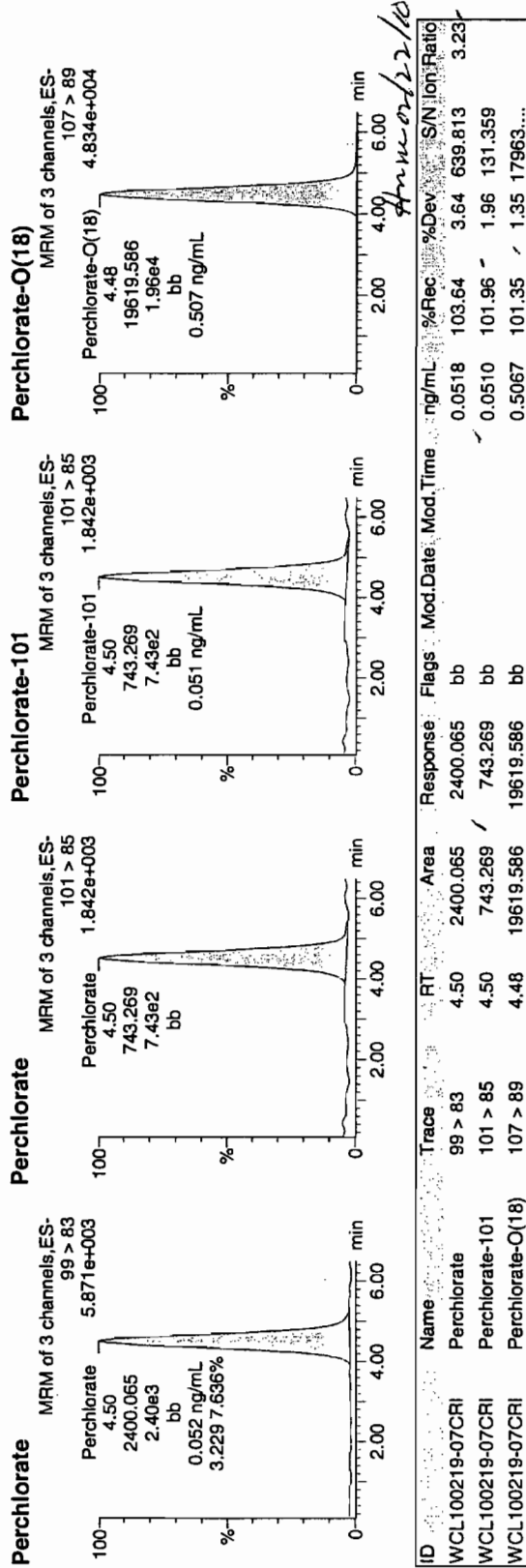
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220024a
Date: 20-Feb-2010
Time: 15:25:16
ID: WCL100219-07CRI
Vial: 1:2,B

Pure
02-21-10



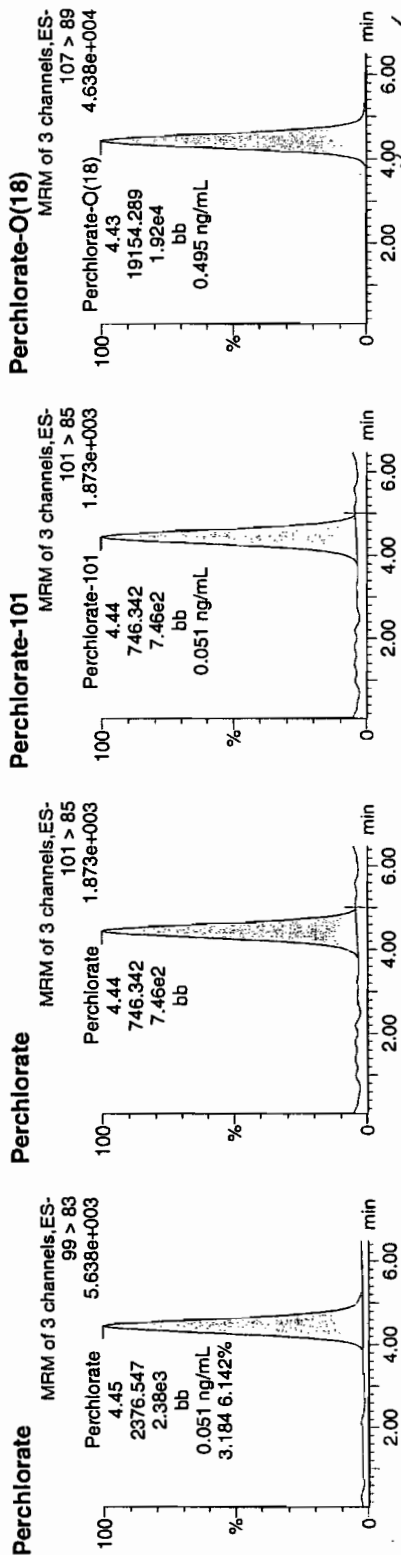
Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220037a
Date: 20-Feb-2010
Time: 17:29:25
ID: WCL100219-07CRI
Vial: 1:2,B



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	4.45	2376.547	2376.547	bb			0.0513	102.62	2.62	558.392	3.18
WCL100219-07CRI	Perchlorate-101	101 > 85	4.44	746.342	746.342	bb			0.0512	102.38	2.38	389.491	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	4.43	19154.289	19154.289	bb			0.4947	98.94	-1.06	5635.0...	

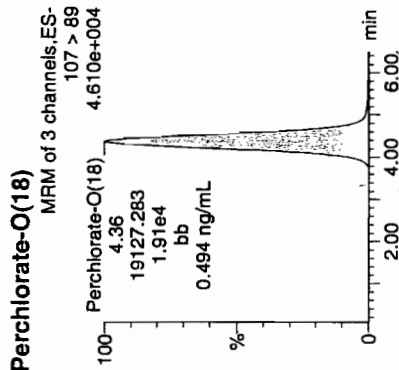
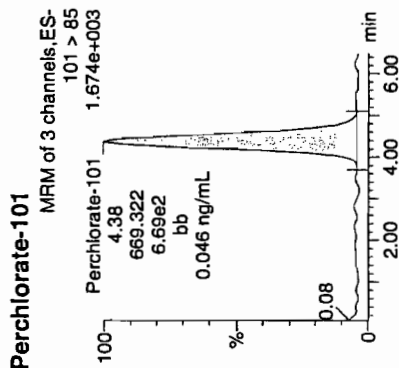
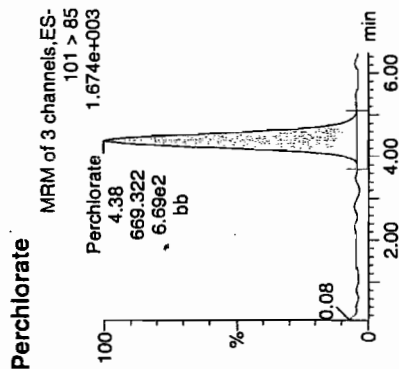
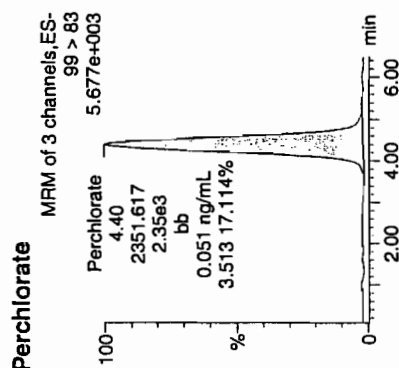
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220050a
Date: 20-Feb-2010
Time: 19:33:50
ID: WCL100219-07CRI
Vial: 1:2,B

Pure and 02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	4.40	2351.617	2351.617	bb			0.0508	101.55	1.55	327.436	3.51
WCL100219-07CRI	Perchlorate-101	101 > 85	4.38	669.322	669.322	bb			0.0459	91.81	-8.19	223.769	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	4.36	19127.283	19127.283	bb			0.4940	98.80	-1.20	7461.1...	

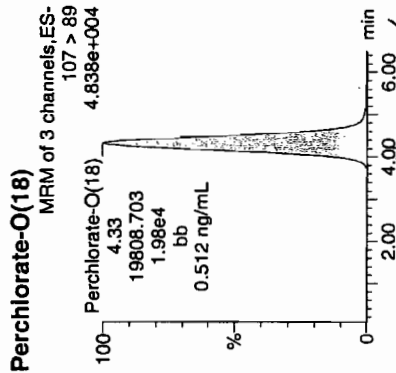
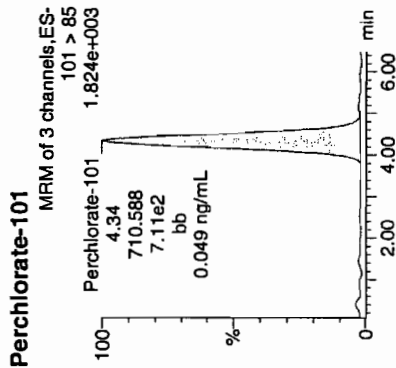
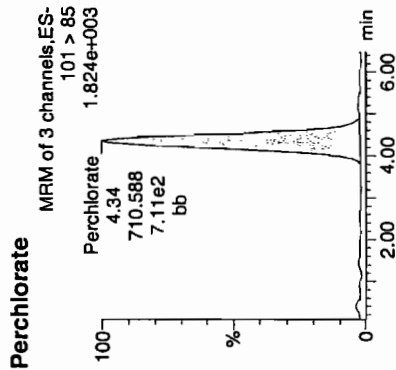
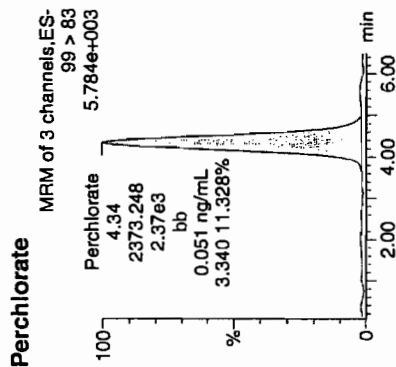
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220063a
Date: 20-Feb-2010
Time: 21:38:10
ID: WCL100219-07CRI
Vial: 1:2,B

*Perchlorate
02-21-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	4.34	2373.248	2373.248	bb			0.0512	102.48	2.48	465.448	3.34
WCL100219-07CRI	Perchlorate-101	101 > 85	4.34	710.588	710.588	bb			0.0487	97.47	-2.53	256.453	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	4.33	19808.703	19808.703	bb			0.5116	102.32	2.32	4838.7...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952822

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 17-FEB-10

GEL Job No (SDG): 10-1624

GEL Sample ID: 1202042230

Date Filtered: 17-FEB-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	20-FEB-10 18:36	per0220044a
	Perchlorate Isotope Ratio						1	20-FEB-10 18:36	per0220044a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	20-FEB-10 18:36	per0220044a
	Perchlorate-O(18)			4.43	ug/kg		1	20-FEB-10 18:36	per0220044a

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

*Concentration =

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

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

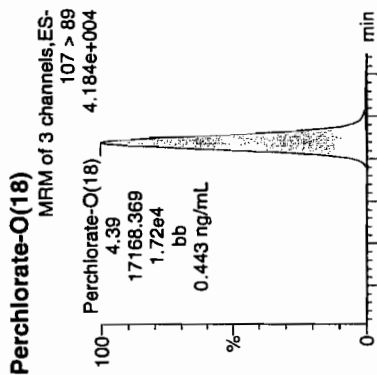
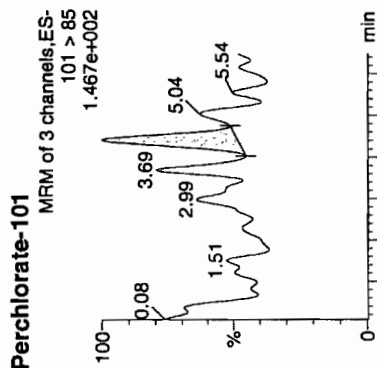
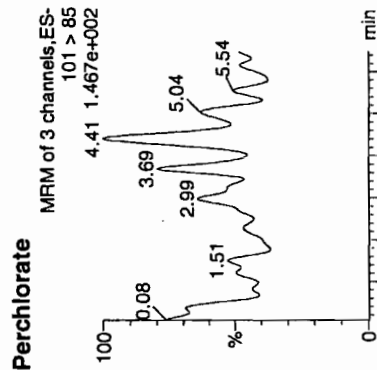
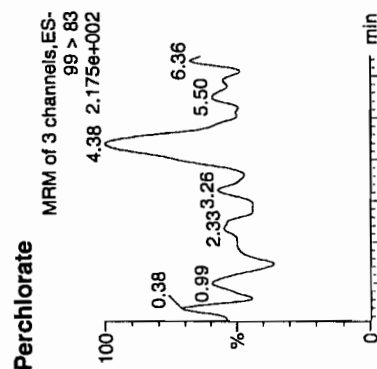
Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220044a
Date: 20-Feb-2010
Time: 18:36:15
ID: 1202042230
Vial: 2:1,A

02-21-10

1522823 | 5020 | 10/11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042230	Perchlorate	99 > 83											0.00
1202042230	Perchlorate-101	101 > 85	4.41	23.839	23.839	bb			0.0016			7.777	
1202042230	Perchlorate-O(18)	107 > 89	4.39	17168.369	17168.369	bb			0.4434	88.69	-11.31	12956...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 952822
 Extraction Type: Solid Prep
 Client Sample No. LCS
 Date Received: 17-FEB-10
 GEL Job No (SDG): 10-1624
 GEL Sample ID: 1202042231
 Date Filtered: 17-FEB-10
 Injection Volume (uL): 20
 %Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.26	ug/kg		1	20-FEB-10 18:45	per0220045a
	Perchlorate Isotope Ratio			3.22			1	20-FEB-10 18:45	per0220045a
14797-73-0	Perchlorate-101	.5	2	2.23	ug/kg		1	20-FEB-10 18:45	per0220045a
	Perchlorate-O(18)			4.80	ug/kg		1	20-FEB-10 18:45	per0220045a

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

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220045a

Date: 20-Feb-2010

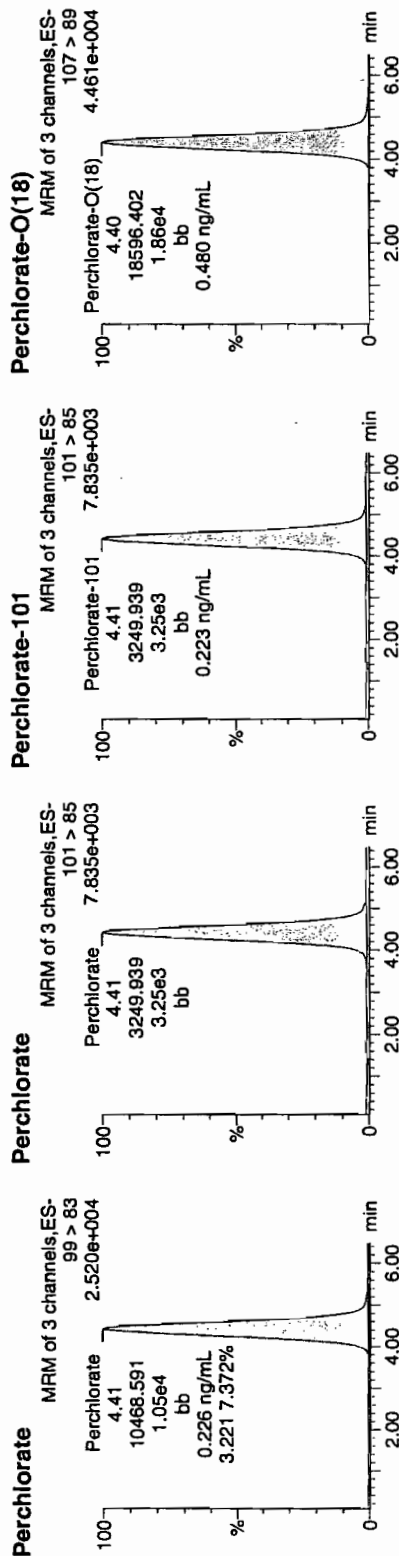
Time: 18:45:57

ID: 1202042231

Vial: 2:1,B

WJ
02-21-10

152823 | 5070 | 45 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042231	Perchlorate	99 > 83	4.41	10468.591	10468.591	bb			0.2260	113.01	13.01	1188.6...	3.22
1202042231	Perchlorate-101	101 > 85	4.41	3249.939	3249.939	bb			0.2229	111.45	11.45	502.052	
1202042231	Perchlorate-O(18)	107 > 89	4.40	18596.402	18596.402	bb			0.4803	96.06	-3.94	4269.5...	

10468.591
46316
= 0.2260
4/11/10

MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 952822 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Charles Wilson Instrument: MicroMass Quattro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202042230 MB	17-FEB-2010 16:45:00	2	20	10
1202042231 LCS	17-FEB-2010 16:45:00	2	20	10
246443001	17-FEB-2010 16:45:00	2	20	10
246443002	17-FEB-2010 16:45:00	2	20	10
246443003	17-FEB-2010 16:45:00	2	20	10
246443004	17-FEB-2010 16:45:00	2	20	10
246443005	17-FEB-2010 16:45:00	2	20	10
246447001	17-FEB-2010 16:45:00	2	20	10
246447002	17-FEB-2010 16:45:00	2	20	10
246447003	17-FEB-2010 16:45:00	2	20	10
246452001	17-FEB-2010 16:45:00	2	20	10
1202042232 MS (246452001)	17-FEB-2010 16:45:00	2	20	10
1202042233 MSD (246452001)	17-FEB-2010 16:45:00	2	20	10
246452002	17-FEB-2010 16:45:00	2	20	10
246452003	17-FEB-2010 16:45:00	2	20	10
246452004	17-FEB-2010 16:45:00	2	20	10
246452005	17-FEB-2010 16:45:00	2	20	10
246452006	17-FEB-2010 16:45:00	2	20	10
246452007	17-FEB-2010 16:45:00	2	20	10
246452008	17-FEB-2010 16:45:00	2	20	10
246452009	17-FEB-2010 16:45:00	2	20	10
1202042235 LCS	17-FEB-2010 16:45:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202042235	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL	Desalting cartridges used: 091120-1-Ba & 100112-1-H
LCS	1202042231	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL	
MS	1202042232	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL	
MSD	1202042233	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/20/10
 Extr. Injection Volume: 20uL
 Sequence Number: per022010a
 Initial Calibration Date: 02/20/10

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

Reviewed BY: *thm*
 Date: *2/22/10*
 SOP: GL-OA-E-067 Rev.6
 Alt Check Std. ID: WCL100211-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0220001a	IPB001	CWW	2/20/2010 11:45			1		USE	B
per0220002a	IPB001	CWW	2/20/2010 11:55			1		USE	B
per0220003a	WCLICAL-01	CWW	2/20/2010 12:04			1		USE	I
per0220004a	WCLICAL-02	CWW	2/20/2010 12:14			1		USE	I
per0220005a	WCLICAL-03	CWW	2/20/2010 12:24			1		USE	I
per0220006a	WCLICAL-04	CWW	2/20/2010 12:33			1		USE	I
per0220007a	WCLICAL-05	CWW	2/20/2010 12:43			1		USE	I
per0220008a	IPB002	CWW	2/20/2010 12:52			1		USE	B
per0220009a	WCLICV	CWW	2/20/2010 13:02			1		USE	C
per0220010a	IPB003	CWW	2/20/2010 13:11			1		USE	B
per0220011a	WCLCRI	CWW	2/20/2010 13:21			1		USE	C
per0220012a	246331001	CWW	2/20/2010 13:30	952441	10-1577	20	LANL	USE	S
per0220013a	246331002	CWW	2/20/2010 13:40	952441	10-1577	20	LANL	USE	S
per0220014a	246338001	CWW	2/20/2010 13:49	952441	10-1605	1	LANL	USE	S
per0220015a	IPB004	CWW	2/20/2010 13:59			1		USE	B
per0220016a	1202041320	CWW	2/20/2010 14:08	952433	VARIOUS	1	LANL	USE	S
per0220017a	1202041321	CWW	2/20/2010 14:18	952433	VARIOUS	1	LANL	USE	S
per0220018a	1202041327	CWW	2/20/2010 14:28	952433	VARIOUS	1	LANL	USE	S
per0220019a	246344001	CWW	2/20/2010 14:37	952433	10-1570	1	LANL	USE	S
per0220020a	246344002	CWW	2/20/2010 14:47	952433	10-1570	1	LANL	USE	S
per0220021a	246344003	CWW	2/20/2010 14:56	952433	10-1570	1	LANL	USE	S
per0220022a	WCLCCV	CWW	2/20/2010 15:06			1		USE	C
per0220023a	IPB005	CWW	2/20/2010 15:15			1		USE	B
per0220024a	WCLCRI	CWW	2/20/2010 15:25			1		USE	C
per0220025a	246344004	CWW	2/20/2010 15:34	952433	10-1570	1	LANL	USE	S
per0220026a	246344005	CWW	2/20/2010 15:44	952433	10-1570	1	LANL	USE	S
per0220027a	246354001	CWW	2/20/2010 15:53	952433	10-1572	1	LANL	USE	S
per0220028a	1202041322	CWW	2/20/2010 16:03	952433	10-1572	1	LANL	USE	S
per0220029a	1202041323	CWW	2/20/2010 16:13	952433	10-1572	1	LANL	USE	S

per0220030a	246354002	CWW	2/20/2010 16:22	952433	10-1572	1	LANL	USE	S
per0220031a	246354003	CWW	2/20/2010 16:32	952433	10-1572	1	LANL	USE	S
per0220032a	246354004	CWW	2/20/2010 16:41	952433	10-1572	1	LANL	USE	S
per0220033a	246354005	CWW	2/20/2010 16:51	952433	10-1572	1	LANL	USE	S
per0220034a	246354006	CWW	2/20/2010 17:00	952433	10-1572	1	LANL	USE	S
per0220035a	WCLCCV	CWW	2/20/2010 17:10			1		USE	C
per0220036a	IPB006	CWW	2/20/2010 17:19			1		USE	B
per0220037a	WCLCRI	CWW	2/20/2010 17:29			1		USE	C
per0220038a	246354007	CWW	2/20/2010 17:38	952433	10-1572	1	LANL	USE	S
per0220039a	246354008	CWW	2/20/2010 17:48	952433	10-1572	1	LANL	USE	S
per0220040a	246354009	CWW	2/20/2010 17:58	952433	10-1572	1	LANL	USE	S
per0220041a	246354010	CWW	2/20/2010 18:07	952433	10-1572	1	LANL	USE	S
per0220042a	246354011	CWW	2/20/2010 18:17	952433	10-1572	1	LANL	USE	S
per0220043a	IPB007	CWW	2/20/2010 18:26			1		USE	B
per0220044a	1202042230	CWW	2/20/2010 18:36	952823	VARIOUS	1	LANL	USE	S
per0220045a	1202042231	CWW	2/20/2010 18:45	952823	VARIOUS	1	LANL	USE	S
per0220046a	1202042235	CWW	2/20/2010 18:55	952823	VARIOUS	1	LANL	USE	S
per0220047a	246443001	CWW	2/20/2010 19:05	952823	10-1624	1	LANL	USE	S
per0220048a	WCLCCV	CWW	2/20/2010 19:14			1		USE	C
per0220049a	IPB008	CWW	2/20/2010 19:24			1		USE	B
per0220050a	WCLCRI	CWW	2/20/2010 19:33			1		USE	C
per0220051a	246443002	CWW	2/20/2010 19:43	952823	10-1624	1	LANL	USE	S
per0220052a	246443003	CWW	2/20/2010 19:53	952823	10-1624	1	LANL	USE	S
per0220053a	246443004	CWW	2/20/2010 20:02	952823	10-1624	1	LANL	USE	S
per0220054a	246443005	CWW	2/20/2010 20:12	952823	10-1624	1	LANL	USE	S
per0220055a	246447001	CWW	2/20/2010 20:21	952823	10-1627	1	LANL	USE	S
per0220056a	246447002	CWW	2/20/2010 20:31	952823	10-1627	1	LANL	USE	S
per0220057a	246447003	CWW	2/20/2010 20:40	952823	10-1627	1	LANL	USE	S
per0220058a	246452001	CWW	2/20/2010 20:50	952823	10-1629-1	1	LANL	USE	S
per0220059a	1202042232	CWW	2/20/2010 20:59	952823	10-1629-1	1	LANL	USE	S
per0220060a	1202042233	CWW	2/20/2010 21:09	952823	10-1629-1	1	LANL	USE	S
per0220061a	WCLCCV	CWW	2/20/2010 21:18			1		USE	C
per0220062a	IPB009	CWW	2/20/2010 21:28			1		USE	B
per0220063a	WCLCRI	CWW	2/20/2010 21:38			1		USE	C
per0220064a	246452002	CWW	2/20/2010 21:47	952823	10-1629-1	1	LANL	USE	S
per0220065a	246452003	CWW	2/20/2010 21:57	952823	10-1629-1	1	LANL	USE	S
per0220066a	246452004	CWW	2/20/2010 22:06	952823	10-1629-1	1	LANL	USE	S

per0220067a	246452005	CWW	2/20/2010 22:16	952823	10-1629-1	1	LANL	USE	S
per0220068a	246452006	CWW	2/20/2010 22:26	952823	10-1629-1	1	LANL	USE	S
per0220069a	246452007	CWW	2/20/2010 22:35	952823	10-1629-1	1	LANL	USE	S
per0220070a	246452008	CWW	2/20/2010 22:45	952823	10-1629-1	1	LANL	USE	S
per0220071a	246452009	CWW	2/20/2010 22:54	952823	10-1629-1	1	LANL	USE	S
per0220072a	WCLCCV	CWW	2/20/2010 23:04			1		USE	C
per0220073a	IPB010	CWW	2/20/2010 23:13			1		USE	B
per0220074a	WCLCRI	CWW	2/20/2010 23:23			1		USE	C
per0220075a	1202035631	CWW	2/20/2010 23:33	950054	VARIOUS	1	LANL	USE	S
per0220076a	1202035632	CWW	2/20/2010 23:42	950054	VARIOUS	1	LANL	USE	S
per0220077a	1202035635	CWW	2/20/2010 23:52	950054	VARIOUS	1	LANL	USE	S
per0220078a	245938001	CWW	2/21/2010 0:01	950054	10-1506	1	LANL	USE	S
per0220079a	245938002	CWW	2/21/2010 0:11	950054	10-1506	1	LANL	USE	S
per0220080a	1202035633	CWW	2/21/2010 0:20	950054	10-1506	1	LANL	USE	S
per0220081a	1202035634	CWW	2/21/2010 0:30	950054	10-1506	1	LANL	USE	S
per0220082a	245938003	CWW	2/21/2010 0:40	950054	10-1506	1	LANL	USE	S
per0220083a	WCLCCV	CWW	2/21/2010 0:49			1		USE	C
per0220084a	IPB011	CWW	2/21/2010 0:59			1		USE	B
per0220085a	WCLCRI	CWW	2/21/2010 1:08			1		USE	C
per0220086a	245938004	CWW	2/21/2010 1:18	950054	10-1506	1	LANL	USE	S
per0220087a	245938005	CWW	2/21/2010 1:28	950054	10-1506	1	LANL	USE	S
per0220088a	245938006	CWW	2/21/2010 1:37	950054	10-1506	1	LANL	USE	S
per0220089a	245938007	CWW	2/21/2010 1:47	950054	10-1506	1	LANL	USE	S
per0220090a	245938008	CWW	2/21/2010 1:56	950054	10-1506	1	LANL	USE	S
per0220091a	245960001	CWW	2/21/2010 2:06	950054	10-1511	1	LANL	USE	S
per0220092a	245960002	CWW	2/21/2010 2:16	950054	10-1511	1	LANL	USE	S
per0220093a	245960003	CWW	2/21/2010 2:25	950054	10-1511	1	LANL	USE	S
per0220094a	WCLCCV	CWW	2/21/2010 2:35			1		USE	C
per0220095a	IPB012	CWW	2/21/2010 2:44			1		USE	B
per0220096a	WCLCRI	CWW	2/21/2010 2:54			1		USE	C
per0220097a	245960004	CWW	2/21/2010 3:03	950054	10-1511	1	LANL	USE	S
per0220098a	245960005	CWW	2/21/2010 3:13	950054	10-1511	1	LANL	USE	S
per0220099a	245960006	CWW	2/21/2010 3:23	950054	10-1511	1	LANL	USE	S
per0220100a	245960007	CWW	2/21/2010 3:32	950054	10-1511	1	LANL	USE	S
per0220101a	245960008	CWW	2/21/2010 3:42	950054	10-1511	1	LANL	USE	S
per0220102a	245960009	CWW	2/21/2010 3:51	950054	10-1511	1	LANL	USE	S
per0220103a	245960010	CWW	2/21/2010 4:01	950054	10-1511	1	LANL	USE	S

per0220104a	245960011	CWW	2/21/2010 4:11	950054	10-1511	1	LANL	USE	S
per0220105a	WCLCCV	CWW	2/21/2010 4:20			1		USE	C
per0220106a	IPB013	CWW	2/21/2010 4:30			1		USE	B
per0220107a	WCLCRI	CWW	2/21/2010 4:39			1		USE	C

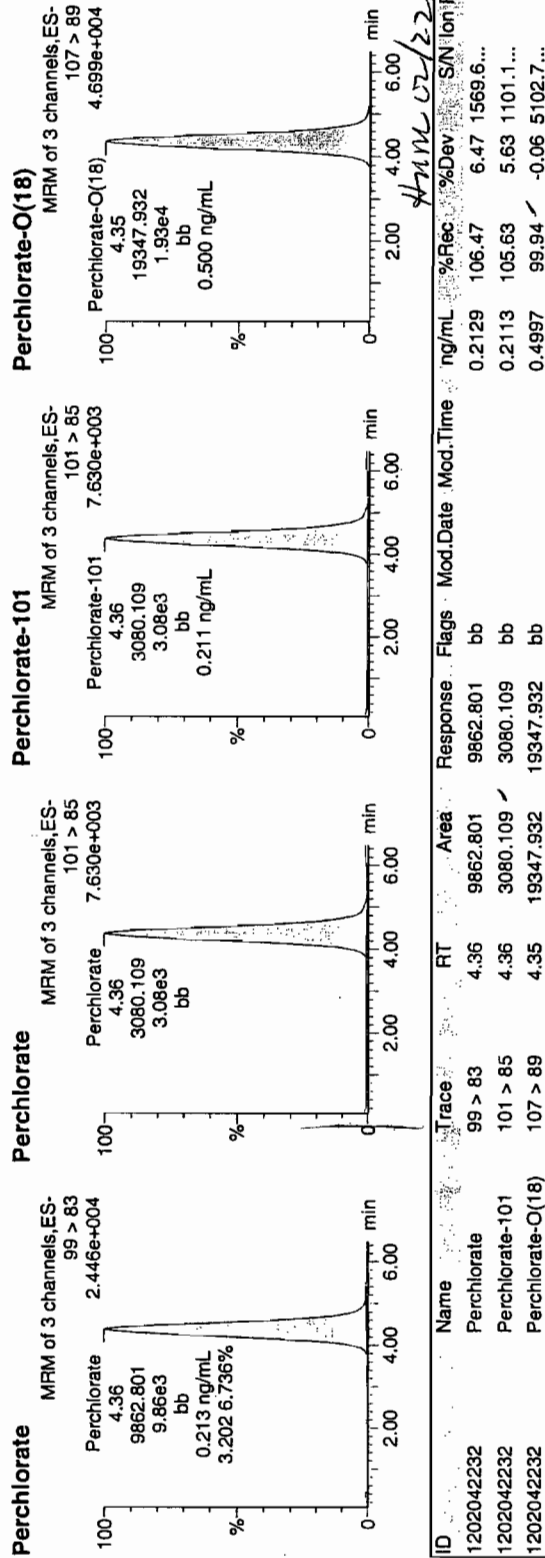
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220059a
Date: 20-Feb-2010
Time: 20:59:45
ID: 1202042232
Vial: 2:3,A

622
02-21-10
122223 | 3080 MS | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042232	Perchlorate	99 > 83	4.36	9862.801	9862.801	bb			0.2129	106.47	6.47	1569.6...	3.20
1202042232	Perchlorate-101	101 > 85	4.36	3080.109	3080.109	bb			0.2113	105.63	5.63	1101.1...	
1202042232	Perchlorate-O(18)	107 > 89	4.35	19347.932	19347.932	bb			0.4997	99.94	-0.06	5102.7...	

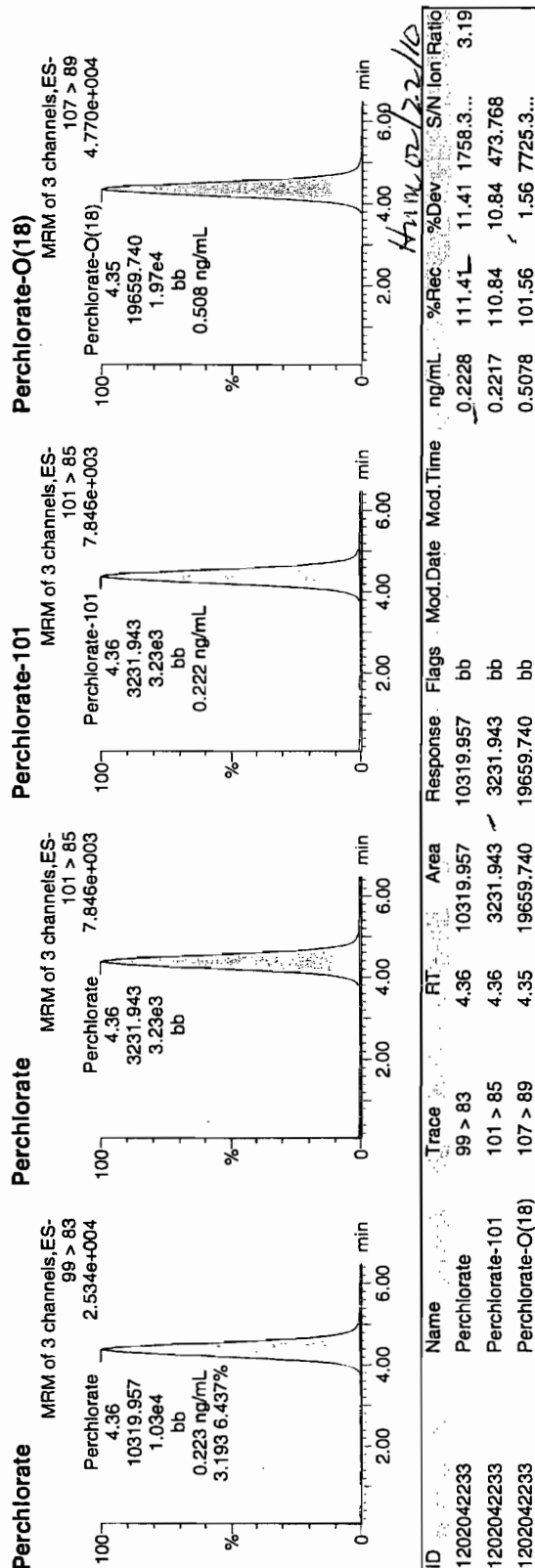
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022010a.qld

Last Altered: Sunday, February 21, 2010 10:20:59 AM Eastern Standard Time
Printed: Sunday, February 21, 2010 10:33:30 AM Eastern Standard Time

Name: per0220060a
Date: 20-Feb-2010
Time: 21:09:18
ID: 1202042233
Vial: 2:3,B

02-21-10
LAW | 952823 | 50720 | MS | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042233	Perchlorate	99 > 83	4.36	10319.957	10319.957	bb			0.2228	111.41	11.41	1758.3...	3.19
1202042233	Perchlorate-101	101 > 85	4.36	3231.943	3231.943	bb			0.2217	110.84	10.84	473.768	
1202042233	Perchlorate-O(18)	107 > 89	4.35	19659.740	19659.740	bb			0.5078	101.56	1.56	7725.3...	

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1624**

Sample Analysis

Sample ID	Client ID
246443001	RE15-10-8361
246443002	RE15-10-8362
246443003	RE15-10-8359
246443004	RE15-10-8358
246443005	RE15-10-8360
1202036894	Method Blank (MB) ICP
1202036899	Laboratory Control Sample (LCS)
1202036896	246443001(RE15-10-8361L) Serial Dilution (SD)
1202036895	246443001(RE15-10-8361D) Sample Duplicate (DUP)
1202036897	246443001(RE15-10-8361S) Matrix Spike (MS)
1202036898	246443001(RE15-10-8361SD) Matrix Spike Duplicate (MSD)
1202036903	Method Blank (MB) ICP-MS
1202036908	Laboratory Control Sample (LCS)
1202036905	246443001(RE15-10-8361L) Serial Dilution (SD)
1202036904	246443001(RE15-10-8361D) Sample Duplicate (DUP)
1202036906	246443001(RE15-10-8361S) Matrix Spike (MS)
1202036907	246443001(RE15-10-8361SD) Matrix Spike Duplicate (MSD)
1202039410	Method Blank (MB) CVAA
1202039411	Laboratory Control Sample (LCS)
1202039414	246432001(RE46-10-11883L) Serial Dilution (SD)

1202039412	246432001(RE46-10-11883D) Sample Duplicate (DUP)
1202039413	246432001(RE46-10-11883S) Matrix Spike (MS)
1202039415	246432001(RE46-10-11883SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	950496, 950498 and 951611
Prep Batch :	950494, 950497 and 951608
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 with the exception of magnesium, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement

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

Continuing Calibration Blank (CCB) Requirements

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

Continuing Calibration Verification (CCV) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement

The following samples were selected as the quality control (QC) samples for this SDG: 246443001 (RE15-10-8361) and 246432001 (RE46-10-11883).

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 calcium, magnesium and potassium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of magnesium and potassium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

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

Duplicate Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of chromium, 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 DER was generated for this SDG: 799704. A copy is included in the Miscellaneous Data section of this package.

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Kristen Benson Date: 3/5/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443001

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8361

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2880000	ug/Kg		7980	23500	23500	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-36-0	Antimony	1170	ug/Kg	U	387	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-38-2	Arsenic	1.16	mg/kg		0.232	1.16	1.16	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-39-3	Barium	44500	ug/Kg		117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-41-7	Beryllium	0.435	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-43-9	Cadmium	587	ug/Kg	U	117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-70-2	Calcium	775000	ug/Kg	N	9390	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-47-3	Chromium	12600	ug/Kg	*	176	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-48-4	Cobalt	1660	ug/Kg		176	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-50-8	Copper	4390	ug/Kg		352	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-89-6	Iron	8630000	ug/Kg		9390	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-92-1	Lead	11300	ug/Kg		293	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-95-4	Magnesium	549000	ug/Kg	N	9970	35200	35200	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-96-5	Manganese	246000	ug/Kg		235	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496
7439-97-6	Mercury	7.88	ug/kg	J	4.22	12.4	12.4	1	AV	JXL1	02/25/10 11:19	02510S1-8	951611
7440-02-0	Nickel	3.21	mg/kg		0.116	0.463	0.463	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-09-7	Potassium	498000	ug/Kg	N	7510	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7782-49-2	Selenium	1.16	mg/kg	U	0.579	1.16	1.16	2	MS	BAJ	02/26/10 11:56	100226-3	950498
7440-22-4	Silver	587	ug/Kg	U	117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-23-5	Sodium	52700	ug/Kg		8210	29300	29300	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-28-0	Thallium	0.152	mg/kg	J	0.0695	0.232	0.232	2	MS	BAJ	02/25/10 21:18	100225-2	950498
7440-61-1	Uranium	4.08	mg/kg		0.0153	0.0463	0.0463	2	MS	BAJ	02/26/10 16:41	100226-7	950498
7440-62-2	Vanadium	8570	ug/Kg		117	587	587	1	P	HSC	02/22/10 22:40	022210-1	950496
7440-66-6	Zinc	36100	ug/Kg		387	1170	1170	1	P	HSC	02/22/10 22:40	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.52	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.527	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.59	g	30	mL	02/24/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443002

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8362

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1600000	ug/Kg		8570	25200	25200	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-36-0	Antimony	1260	ug/Kg	U	416	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-38-2	Arsenic	1.16	mg/kg	J	0.255	1.27	1.27	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-39-3	Barium	22100	ug/Kg		126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-41-7	Beryllium	0.319	mg/kg		0.0255	0.127	0.127	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-43-9	Cadmium	630	ug/Kg	U	126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-70-2	Calcium	448000	ug/Kg	N	10100	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-47-3	Chromium	4550	ug/Kg	*	189	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-48-4	Cobalt	1040	ug/Kg		189	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-50-8	Copper	2250	ug/Kg		378	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-89-6	Iron	5230000	ug/Kg		10100	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-92-1	Lead	5770	ug/Kg		315	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-95-4	Magnesium	310000	ug/Kg	N	10700	37800	37800	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-96-5	Manganese	177000	ug/Kg		252	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496
7439-97-6	Mercury	15.9	ug/kg	U	5.41	15.9	15.9	1	AV	JXL1	02/25/10 11:20	02510S1-8	951611
7440-02-0	Nickel	1.85	mg/kg		0.127	0.509	0.509	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-09-7	Potassium	312000	ug/Kg	N	8070	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7782-49-2	Selenium	1.27	mg/kg	U	0.636	1.27	1.27	2	MS	BAJ	02/26/10 12:14	100226-3	950498
7440-22-4	Silver	630	ug/Kg	U	126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-23-5	Sodium	42300	ug/Kg		8830	31500	31500	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-28-0	Thallium	0.255	mg/kg	U	0.0764	0.255	0.255	2	MS	BAJ	02/25/10 22:01	100225-2	950498
7440-61-1	Uranium	1.6	mg/kg		0.0168	0.0509	0.0509	2	MS	BAJ	02/26/10 16:53	100226-7	950498
7440-62-2	Vanadium	3730	ug/Kg		126	630	630	1	P	HSC	02/22/10 23:29	022210-1	950496
7440-66-6	Zinc	25300	ug/Kg		416	1260	1260	1	P	HSC	02/22/10 23:29	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.529	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.524	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.503	g	30	mL	02/24/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443003

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8359

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 93.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2750000	ug/Kg		6980	20500	20500	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-36-0	Antimony	1030	ug/Kg	U	339	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-38-2	Arsenic	1.1	mg/kg		0.198	0.992	0.992	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-39-3	Barium	41400	ug/Kg		103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-41-7	Beryllium	0.466	mg/kg		0.0198	0.0992	0.0992	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-43-9	Cadmium	513	ug/Kg	U	103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-70-2	Calcium	824000	ug/Kg	N	8210	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-47-3	Chromium	5310	ug/Kg	*	154	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-48-4	Cobalt	1670	ug/Kg		154	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-50-8	Copper	4220	ug/Kg		308	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-89-6	Iron	6760000	ug/Kg		8210	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-92-1	Lead	10900	ug/Kg		257	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-95-4	Magnesium	604000	ug/Kg	N	8720	30800	30800	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-96-5	Manganese	211000	ug/Kg		205	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496
7439-97-6	Mercury	6.98	ug/kg	J	3.99	11.7	11.7	1	AV	JXLI	02/25/10 11:22	02510S1-8	951611
7440-02-0	Nickel	2.81	mg/kg		0.0992	0.397	0.397	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-09-7	Potassium	489000	ug/Kg	N	6570	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7782-49-2	Selenium	0.992	mg/kg	U	0.496	0.992	0.992	2	MS	BAJ	02/26/10 12:16	100226-3	950498
7440-22-4	Silver	513	ug/Kg	U	103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-23-5	Sodium	41100	ug/Kg		7180	25700	25700	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-28-0	Thallium	0.0631	mg/kg	J	0.0595	0.198	0.198	2	MS	BAJ	02/25/10 22:07	100225-2	950498
7440-61-1	Uranium	3.58	mg/kg		0.0131	0.0397	0.0397	2	MS	BAJ	02/26/10 16:54	100226-7	950498
7440-62-2	Vanadium	7120	ug/Kg		103	513	513	1	P	HSC	02/22/10 23:36	022210-1	950496
7440-66-6	Zinc	27200	ug/Kg		339	1030	1030	1	P	HSC	02/22/10 23:36	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.523	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.541	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.549	g	30	mL	02/24/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443004

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8358

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2480000	ug/Kg		8030	23600	23600	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-36-0	Antimony	1180	ug/Kg	U	390	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-38-2	Arsenic	1.01	mg/kg	J	0.217	1.09	1.09	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-39-3	Barium	40800	ug/Kg		118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-41-7	Beryllium	0.407	mg/kg		0.0217	0.109	0.109	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-43-9	Cadmium	590	ug/Kg	U	118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-70-2	Calcium	645000	ug/Kg	N	9440	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-47-3	Chromium	5750	ug/Kg	*	177	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-48-4	Cobalt	1980	ug/Kg		177	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-50-8	Copper	5770	ug/Kg		354	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-89-6	Iron	5450000	ug/Kg		9440	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-92-1	Lead	6690	ug/Kg		295	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-95-4	Magnesium	538000	ug/Kg	N	10000	35400	35400	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-96-5	Manganese	217000	ug/Kg		236	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496
7439-97-6	Mercury	6.89	ug/kg	J	4.18	12.3	12.3	1	AV	JXL1	02/25/10 11:24	02510S1-8	951611
7440-02-0	Nickel	2.88	mg/kg		0.109	0.434	0.434	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-09-7	Potassium	479000	ug/Kg	N	7560	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	BAJ	02/26/10 12:19	100226-3	950498
7440-22-4	Silver	590	ug/Kg	U	118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-23-5	Sodium	38100	ug/Kg		8260	29500	29500	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-28-0	Thallium	0.217	mg/kg	U	0.0652	0.217	0.217	2	MS	BAJ	02/25/10 22:13	100225-2	950498
7440-61-1	Uranium	2.61	mg/kg		0.0143	0.0434	0.0434	2	MS	BAJ	02/26/10 16:56	100226-7	950498
7440-62-2	Vanadium	6090	ug/Kg		118	590	590	1	P	HSC	02/22/10 23:43	022210-1	950496
7440-66-6	Zinc	21000	ug/Kg		390	1180	1180	1	P	HSC	02/22/10 23:43	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.507	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.551	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.584	g	30	mL	02/24/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1624

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246443005

BASIS: Dry Weight

DATE COLLECTED 03-FEB-10

CLIENT ID: RE15-10-8360

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1420000	ug/Kg		8640	25400	25400	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-36-0	Antimony	1270	ug/Kg	U	419	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-38-2	Arsenic	0.810	mg/kg	J	0.256	1.28	1.28	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-39-3	Barium	23100	ug/Kg		127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-41-7	Beryllium	0.324	mg/kg		0.0256	0.128	0.128	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-43-9	Cadmium	635	ug/Kg	U	127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-70-2	Calcium	461000	ug/Kg	N	10200	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-47-3	Chromium	21900	ug/Kg	*	191	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-48-4	Cobalt	1200	ug/Kg		191	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-50-8	Copper	2720	ug/Kg		381	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-89-6	Iron	6590000	ug/Kg		10200	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-92-1	Lead	5180	ug/Kg		318	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-95-4	Magnesium	309000	ug/Kg	N	10800	38100	38100	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-96-5	Manganese	197000	ug/Kg		254	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496
7439-97-6	Mercury	14.2	ug/kg	U	4.83	14.2	14.2	1	AV	JXL1	02/25/10 11:25	02510S1-8	951611
7440-02-0	Nickel	3.69	mg/kg		0.128	0.511	0.511	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-09-7	Potassium	272000	ug/Kg	N	8130	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7782-49-2	Selenium	1.28	mg/kg	U	0.639	1.28	1.28	2	MS	BAJ	02/26/10 12:22	100226-3	950498
7440-22-4	Silver	635	ug/Kg	U	127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-23-5	Sodium	44600	ug/Kg		8900	31800	31800	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-28-0	Thallium	0.256	mg/kg	U	0.0767	0.256	0.256	2	MS	BAJ	02/25/10 22:19	100225-2	950498
7440-61-1	Uranium	3.99	mg/kg		0.0169	0.0511	0.0511	2	MS	BAJ	02/26/10 16:58	100226-7	950498
7440-62-2	Vanadium	5630	ug/Kg		127	635	635	1	P	HSC	02/22/10 23:50	022210-1	950496
7440-66-6	Zinc	31100	ug/Kg		419	1270	1270	1	P	HSC	02/22/10 23:50	022210-1	950496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950496	950494	SW846 3050B	0.542	g	50	mL	02/20/10	BCD1
950498	950497	SW846 3050B	0.539	g	50	mL	02/20/10	BCD1
951611	951608	SW846 7471A Prep	0.582	g	30	mL	02/24/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Aluminum	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Antimony	526	ug/L	500	ug/L	105.3	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Barium	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Cadmium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Cobalt	522	ug/L	500	ug/L	104.3	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Copper	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Lead	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Magnesium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Manganese	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Potassium	2500	ug/L	2500	ug/L	99.9	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Silver	263	ug/L	250	ug/L	105.2	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Sodium	2470	ug/L	2500	ug/L	98.9	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Vanadium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Zinc	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	22-FEB-10 11:57	022210-1
	Mercury	5.14	ug/L	5	ug/L	102.7	90.0 – 110.0	AV	25-FEB-10 09:26	02510S1-8
	Thallium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	25-FEB-10 20:04	100225-2
	Arsenic	48.9	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	26-FEB-10 11:33	100226-3
	Beryllium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	26-FEB-10 11:33	100226-3
	Nickel	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	26-FEB-10 11:33	100226-3
	Selenium	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	26-FEB-10 11:33	100226-3
	Uranium	48	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	26-FEB-10 16:26	100226-7
CCV01										
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	22-FEB-10 12:45	022210-1
	Antimony	542	ug/L	500	ug/L	108.3	90.0 – 110.0	P	22-FEB-10 12:45	022210-1
	Barium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	22-FEB-10 12:45	022210-1
	Cadmium	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	22-FEB-10 12:45	022210-1
	Calcium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	22-FEB-10 12:45	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Cobalt	522	ug/L	500	ug/L	104.3	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Copper	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Lead	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Magnesium	5580	ug/L	5000	ug/L	111.6	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Manganese	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Potassium	5660	ug/L	5000	ug/L	113.1	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Silver	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Zinc	505	ug/L	500	ug/L	101	90.0 - 110.0	P	22-FEB-10 12:45	022210-1
	Mercury	5.07	ug/L	5	ug/L	101.4	80.0 - 120.0	AV	25-FEB-10 09:32	02510S1-8
	Thallium	50.7	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	25-FEB-10 20:35	100225-2
	Arsenic	48.4	ug/L	50	ug/L	96.9	90.0 - 110.0	MS	26-FEB-10 11:46	100226-3
	Beryllium	51.6	ug/L	50	ug/L	103.2	90.0 - 110.0	MS	26-FEB-10 11:46	100226-3
	Nickel	51.2	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	26-FEB-10 11:46	100226-3
	Selenium	50.1	ug/L	50	ug/L	100.2	90.0 - 110.0	MS	26-FEB-10 11:46	100226-3
	Uranium	48.5	ug/L	50	ug/L	97	90.0 - 110.0	MS	26-FEB-10 16:34	100226-7
CCV02	Aluminum	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Antimony	541	ug/L	500	ug/L	108.1	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Barium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Cadmium	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Calcium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Chromium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Cobalt	528	ug/L	500	ug/L	105.6	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Copper	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Iron	5310	ug/L	5000	ug/L	106.1	90.0 - 110.0	P	22-FEB-10 13:02	022210-1
	Lead	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	22-FEB-10 13:02	022210-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1624

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>
	Magnesium	5380	ug/L	5000	ug/L	107.5	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Manganese	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Potassium	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Silver	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Vanadium	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Zinc	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 13:02	022210-1
	Mercury	5.3	ug/L	5	ug/L	105.9	80.0 – 120.0	AV	25-FEB-10 09:52	02510S1-8
	Thallium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	25-FEB-10 20:53	100225-2
	Arsenic	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	26-FEB-10 12:09	100226-3
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	26-FEB-10 12:09	100226-3
	Nickel	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	26-FEB-10 12:09	100226-3
	Selenium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	26-FEB-10 12:09	100226-3
	Uranium	48.5	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	26-FEB-10 16:49	100226-7
CCV03	Aluminum	4810	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Antimony	539	ug/L	500	ug/L	107.8	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Barium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Cadmium	520	ug/L	500	ug/L	103.9	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Calcium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Cobalt	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Iron	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Lead	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Manganese	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Potassium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Silver	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	22-FEB-10 13:40	022210-1
	Sodium	9610	ug/L	10000	ug/L	96.2	90.0 – 110.0	P	22-FEB-10 13:40	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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>
	Vanadium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	22-FEB-10 13:40	022210-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	22-FEB-10 13:40	022210-1
	Mercury	5.15	ug/L	5	ug/L	102.9	80.0 - 120.0	AV	25-FEB-10 10:12	02510S1-8
	Thallium	52.1	ug/L	50	ug/L	104.1	90.0 - 110.0	MS	25-FEB-10 21:49	100225-2
	Arsenic	48.6	ug/L	50	ug/L	97.1	90.0 - 110.0	MS	26-FEB-10 12:27	100226-3
	Beryllium	52.4	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	26-FEB-10 12:27	100226-3
	Nickel	52.1	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	26-FEB-10 12:27	100226-3
	Selenium	49.7	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	26-FEB-10 12:27	100226-3
	Uranium	48.5	ug/L	50	ug/L	97.1	90.0 - 110.0	MS	26-FEB-10 17:01	100226-7
CCV04										
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Antimony	536	ug/L	500	ug/L	107.2	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Barium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Cadmium	525	ug/L	500	ug/L	105.1	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Calcium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Chromium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Cobalt	530	ug/L	500	ug/L	106	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Copper	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Lead	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Magnesium	5330	ug/L	5000	ug/L	106.7	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Manganese	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Potassium	5120	ug/L	5000	ug/L	102.4	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Silver	500	ug/L	500	ug/L	100	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Sodium	9650	ug/L	10000	ug/L	96.5	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Zinc	510	ug/L	500	ug/L	102	90.0 - 110.0	P	22-FEB-10 14:07	022210-1
	Mercury	5.3	ug/L	5	ug/L	106	80.0 - 120.0	AV	25-FEB-10 10:32	02510S1-8
	Thallium	52.7	ug/L	50	ug/L	105.3	90.0 - 110.0	MS	25-FEB-10 22:31	100225-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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>
CCV05										
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Antimony	533	ug/L	500	ug/L	106.5	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Barium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Cadmium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Chromium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Cobalt	531	ug/L	500	ug/L	106.3	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Iron	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Lead	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Magnesium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Manganese	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Potassium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Silver	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Sodium	10100	ug/L	10000	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Vanadium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	22-FEB-10 14:43	022210-1
	Mercury	5.16	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	25-FEB-10 10:52	02510S1-8
CCV06										
	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Antimony	535	ug/L	500	ug/L	107.1	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Barium	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Cadmium	529	ug/L	500	ug/L	105.8	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Chromium	515	ug/L	500	ug/L	103	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Cobalt	534	ug/L	500	ug/L	106.8	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Copper	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Iron	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Lead	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	22-FEB-10 16:00	022210-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 – 110.0	P	22-FEB-10 16:00	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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	515	ug/L	500	ug/L	102.9	90.0 - 110.0	P	22-FEB-10 16:00	022210-1
	Potassium	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	22-FEB-10 16:00	022210-1
	Silver	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	22-FEB-10 16:00	022210-1
	Sodium	10800	ug/L	10000	ug/L	108.4	90.0 - 110.0	P	22-FEB-10 16:00	022210-1
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	22-FEB-10 16:00	022210-1
	Zinc	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	22-FEB-10 16:00	022210-1
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 - 120.0	AV	25-FEB-10 11:12	02510S1-8
CCV07										
	Aluminum	4860	ug/L	5000	ug/L	97.3	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Antimony	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Barium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Cadmium	520	ug/L	500	ug/L	104	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Calcium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Chromium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Cobalt	524	ug/L	500	ug/L	104.7	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Copper	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Lead	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Manganese	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Potassium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Silver	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Sodium	10300	ug/L	10000	ug/L	102.7	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Zinc	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	22-FEB-10 16:28	022210-1
	Mercury	5.07	ug/L	5	ug/L	101.5	80.0 - 120.0	AV	25-FEB-10 11:32	02510S1-8
CCV08										
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	22-FEB-10 17:12	022210-1
	Antimony	524	ug/L	500	ug/L	104.9	90.0 - 110.0	P	22-FEB-10 17:12	022210-1
	Barium	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	22-FEB-10 17:12	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Calcium	5160	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Chromium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Cobalt	529	ug/L	500	ug/L	105.8	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Iron	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Lead	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Magnesium	5450	ug/L	5000	ug/L	108.9	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Manganese	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Sodium	10500	ug/L	10000	ug/L	104.8	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
	Zinc	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 17:12	022210-1
CCV09	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Antimony	530	ug/L	500	ug/L	106	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Barium	520	ug/L	500	ug/L	103.9	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Cadmium	530	ug/L	500	ug/L	106.1	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Calcium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Chromium	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Cobalt	536	ug/L	500	ug/L	107.3	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Iron	5380	ug/L	5000	ug/L	107.6	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Lead	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Magnesium	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Manganese	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Potassium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Silver	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Sodium	11000	ug/L	10000	ug/L	109.7	90.0 – 110.0	P	22-FEB-10 17:49	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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>
CCV10	Vanadium	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Zinc	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	22-FEB-10 17:49	022210-1
	Aluminum	4860	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Antimony	537	ug/L	500	ug/L	107.5	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Barium	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Cadmium	535	ug/L	500	ug/L	106.9	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Calcium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Chromium	520	ug/L	500	ug/L	104	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Cobalt	539	ug/L	500	ug/L	107.9	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Copper	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Iron	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Lead	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Magnesium	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Manganese	515	ug/L	500	ug/L	103	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Potassium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Silver	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Sodium	10400	ug/L	10000	ug/L	104	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Vanadium	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
	Zinc	520	ug/L	500	ug/L	103.9	90.0 – 110.0	P	22-FEB-10 18:51	022210-1
CCV11	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Antimony	544	ug/L	500	ug/L	108.8	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Barium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Cadmium	539	ug/L	500	ug/L	107.8	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Calcium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Chromium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Cobalt	543	ug/L	500	ug/L	108.6	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	22-FEB-10 20:08	022210-1
	Iron	5330	ug/L	5000	ug/L	106.7	90.0 – 110.0	P	22-FEB-10 20:08	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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	Lead	535	ug/L	500	ug/L	106.9	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Magnesium	5420	ug/L	5000	ug/L	108.4	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Manganese	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Potassium	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Silver	509	ug/L	500	ug/L	101.9	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Vanadium	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
	Zinc	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	22-FEB-10 20:08	022210-1
CCV12	Aluminum	4910	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Antimony	539	ug/L	500	ug/L	107.8	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Barium	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Cadmium	535	ug/L	500	ug/L	107	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Calcium	5260	ug/L	5000	ug/L	105.2	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Chromium	518	ug/L	500	ug/L	103.5	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Cobalt	537	ug/L	500	ug/L	107.5	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Iron	5330	ug/L	5000	ug/L	106.5	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Lead	535	ug/L	500	ug/L	106.9	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Magnesium	5520	ug/L	5000	ug/L	110.5	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Manganese	516	ug/L	500	ug/L	103.1	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Potassium	5260	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Sodium	10200	ug/L	10000	ug/L	101.6	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
	Zinc	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	22-FEB-10 21:10	022210-1
CCV13	Aluminum	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	22-FEB-10 22:13	022210-1
	Antimony	536	ug/L	500	ug/L	107.2	90.0 - 110.0	P	22-FEB-10 22:13	022210-1
	Barium	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	22-FEB-10 22:13	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Chromium	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Cobalt	541	ug/L	500	ug/L	108.2	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Lead	533	ug/L	500	ug/L	106.6	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Magnesium	5460	ug/L	5000	ug/L	109.2	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Potassium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Sodium	9780	ug/L	10000	ug/L	97.8	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Vanadium	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Zinc	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
CCV14	Aluminum	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Antimony	545	ug/L	500	ug/L	108.9	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Barium	531	ug/L	500	ug/L	106.1	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Cadmium	547	ug/L	500	ug/L	109.4	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Chromium	529	ug/L	500	ug/L	105.9	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Cobalt	549	ug/L	500	ug/L	109.9	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Copper	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Lead	540	ug/L	500	ug/L	107.9	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Magnesium	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Manganese	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Potassium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Silver	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Sodium	9950	ug/L	10000	ug/L	99.5	90.0 – 110.0	P	22-FEB-10 23:15	022210-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1624

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>
CCV15	Vanadium	525	ug/L	500	ug/L	105	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Zinc	529	ug/L	500	ug/L	105.9	90.0 – 110.0	P	22-FEB-10 23:15	022210-1
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Antimony	551	ug/L	500	ug/L	110.2	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Barium	532	ug/L	500	ug/L	106.3	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Cadmium	545	ug/L	500	ug/L	109.1	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Calcium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Chromium	530	ug/L	500	ug/L	105.9	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Cobalt	549	ug/L	500	ug/L	109.8	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Copper	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Iron	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Lead	541	ug/L	500	ug/L	108.3	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Magnesium	5450	ug/L	5000	ug/L	108.9	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Manganese	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Potassium	5410	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Silver	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Vanadium	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	23-FEB-10 00:04	022210-1
	Zinc	530	ug/L	500	ug/L	106	90.0 – 110.0	P	23-FEB-10 00:04	022210-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1624

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	.184	ug/L	.2	ug/L	92	70.0 – 130.0	AV	25-FEB-10 09:30	02510S1-8
	Thallium	1.24	ug/L	1	ug/L	124.2	70.0 – 130.0	MS	25-FEB-10 20:17	100225-2
	Nickel	2.2	ug/L	2	ug/L	110.2	70.0 – 130.0	MS	26-FEB-10 11:38	100226-3
	Arsenic	5.47	ug/L	5	ug/L	109.3	70.0 – 130.0	MS	26-FEB-10 11:38	100226-3
	Selenium	5.71	ug/L	5	ug/L	114.2	70.0 – 130.0	MS	26-FEB-10 11:38	100226-3
	Beryllium	.572	ug/L	.5	ug/L	114.4	70.0 – 130.0	MS	26-FEB-10 11:38	100226-3
	Uranium	.213	ug/L	.2	ug/L	106.5	70.0 – 130.0	MS	26-FEB-10 16:29	100226-7
PQL01										
	Magnesium	206	ug/L	300	ug/L	68.8	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Chromium	4.71	ug/L	5	ug/L	94.2	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Calcium	200	ug/L	200	ug/L	100.1	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Zinc	9.92	ug/L	10	ug/L	99.2	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Vanadium	5.21	ug/L	5	ug/L	104.3	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Copper	9.39	ug/L	10	ug/L	93.9	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Cobalt	4.89	ug/L	5	ug/L	97.7	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Cadmium	5.07	ug/L	5	ug/L	101.3	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Potassium	127	ug/L	150	ug/L	84.7	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Sodium	309	ug/L	300	ug/L	103	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Lead	11	ug/L	10	ug/L	109.6	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Iron	93.1	ug/L	100	ug/L	93.1	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Aluminum	204	ug/L	200	ug/L	101.8	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Antimony	8.02	ug/L	10	ug/L	80.2	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Barium	5.07	ug/L	5	ug/L	101.3	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Silver	4.23	ug/L	5	ug/L	84.5	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
	Manganese	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	22-FEB-10 12:12	022210-1
PQL02										
	Aluminum	181	ug/L	200	ug/L	90.3	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Silver	3.87	ug/L	5	ug/L	77.4	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Antimony	16.9	ug/L	10	ug/L	168.5	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Cadmium	5.39	ug/L	5	ug/L	107.7	70.0 – 130.0	P	22-FEB-10 14:14	022210-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1624

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

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>
PQL03	Calcium	213	ug/L	200	ug/L	106.4	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Zinc	10.2	ug/L	10	ug/L	101.9	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Vanadium	5.03	ug/L	5	ug/L	100.6	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Copper	8.8	ug/L	10	ug/L	88	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Cobalt	4.83	ug/L	5	ug/L	96.6	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Chromium	4.86	ug/L	5	ug/L	97.2	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Barium	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Sodium	318	ug/L	300	ug/L	105.9	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Potassium	178	ug/L	150	ug/L	118.8	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Lead	9.91	ug/L	10	ug/L	99.1	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Magnesium	333	ug/L	300	ug/L	111	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Manganese	10.6	ug/L	10	ug/L	105.5	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Iron	96.6	ug/L	100	ug/L	96.6	70.0 – 130.0	P	22-FEB-10 14:14	022210-1
	Barium	5.3	ug/L	5	ug/L	105.9	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Antimony	10.6	ug/L	10	ug/L	106.3	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Sodium	363	ug/L	300	ug/L	121	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Silver	3.9	ug/L	5	ug/L	78	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Potassium	223	ug/L	150	ug/L	148.9	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Manganese	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Magnesium	250	ug/L	300	ug/L	83.4	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Lead	11.2	ug/L	10	ug/L	111.5	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Iron	114	ug/L	100	ug/L	113.6	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Aluminum	184	ug/L	200	ug/L	92.2	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Cadmium	5.31	ug/L	5	ug/L	106.3	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Chromium	4.8	ug/L	5	ug/L	96	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Cobalt	5.05	ug/L	5	ug/L	101	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Copper	9.04	ug/L	10	ug/L	90.4	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Vanadium	4.47	ug/L	5	ug/L	89.5	70.0 – 130.0	P	22-FEB-10 16:07	022210-1
	Zinc	10.1	ug/L	10	ug/L	100.7	70.0 – 130.0	P	22-FEB-10 16:07	022210-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1624

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

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>
	Calcium	213	ug/L	200	ug/L	106.7	70.0 – 130.0	P	22-FEB-10 16:07	022210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 12:04	022210-1
	Antimony	4.42	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 12:04	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:04	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:04	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 12:04	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 12:04	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 12:04	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 12:04	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 12:04	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 12:04	022210-1
	Magnesium	-101.01	+/-300	J	85.0	300	SOL	P	22-FEB-10 12:04	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 12:04	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 12:04	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:04	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 12:04	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:04	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 12:04	022210-1
	Mercury	0.068	+/-0.2	U	0.068	0.2	SOL	AV	25-FEB-10 09:28	02510S1-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 20:11	100225-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 11:36	100226-3
	Beryllium	0.1	+/-0.5	U	0.1	0.5	SOL	MS	26-FEB-10 11:36	100226-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 11:36	100226-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 11:36	100226-3
	Uranium	0.066	+/-0.2	U	0.066	0.2	SOL	MS	26-FEB-10 16:28	100226-7
CCB01										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 12:52	022210-1
	Antimony	12.32	+/-10		3.3	10.0	SOL	P	22-FEB-10 12:52	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:52	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:52	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 12:52	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 12:52	022210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 12:52	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 12:52	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 12:52	022210-1
	Lead	4.91	+/-10	J	2.5	10.0	SOL	P	22-FEB-10 12:52	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 12:52	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 12:52	022210-1
	Potassium	135.32	+/-250	J	64.0	250	SOL	P	22-FEB-10 12:52	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:52	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 12:52	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 12:52	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 12:52	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 09:33	02510S1-8
	Thallium	0.632	+/-1	J	0.3	1.0	SOL	MS	25-FEB-10 20:41	100225-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 11:49	100226-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 11:49	100226-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 11:49	100226-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 11:49	100226-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	26-FEB-10 16:36	100226-7
CCB02	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 13:09	022210-1
	Antimony	8.87	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 13:09	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:09	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:09	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 13:09	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 13:09	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 13:09	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 13:09	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 13:09	022210-1
	Lead	2.96	+/-10	J	2.5	10.0	SOL	P	22-FEB-10 13:09	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 13:09	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 13:09	022210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 13:09	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:09	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 13:09	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:09	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 13:09	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 09:53	02510S1-8
	Thallium	0.59	+/-1	J	0.3	1.0	SOL	MS	25-FEB-10 20:59	100225-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 12:11	100226-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 12:11	100226-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 12:11	100226-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 12:11	100226-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	26-FEB-10 16:51	100226-7
CCB03	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 13:47	022210-1
	Antimony	17.04	+/-10		3.3	10.0	SOL	P	22-FEB-10 13:47	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:47	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:47	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 13:47	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 13:47	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 13:47	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 13:47	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 13:47	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 13:47	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 13:47	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 13:47	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 13:47	022210-1
	Silver	-1.1	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 13:47	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 13:47	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 13:47	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 13:47	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 10:13	02510S1-8

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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>
	Thallium	0.512	+/-1	J	0.3	1.0	SOL	MS	25-FEB-10 21:55	100225-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 12:29	100226-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 12:29	100226-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 12:29	100226-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 12:29	100226-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	26-FEB-10 17:03	100226-7
CCB04	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 14:21	022210-1
	Antimony	6.07	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 14:21	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 14:21	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 14:21	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 14:21	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 14:21	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 14:21	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 14:21	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 14:21	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 14:21	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 14:21	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 14:21	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 14:21	022210-1
	Silver	-1.04	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 14:21	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 14:21	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 14:21	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 14:21	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 10:33	02510S1-8
	Thallium	0.463	+/-1	J	0.3	1.0	SOL	MS	25-FEB-10 22:38	100225-2
CCB05	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 14:50	022210-1
	Antimony	5.61	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 14:50	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 14:50	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 14:50	022210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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	22-FEB-10 14:50	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 14:50	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 14:50	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 14:50	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 14:50	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 14:50	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 14:50	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 14:50	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 14:50	022210-1
	Silver	-1.05	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 14:50	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 14:50	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 14:50	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 14:50	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 10:53	02510S1-8
CCB06	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 16:14	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 16:14	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 16:14	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 16:14	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 16:14	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 16:14	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 16:14	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 16:14	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 16:14	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 16:14	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 16:14	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 16:14	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 16:14	022210-1
	Silver	-1.06	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 16:14	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 16:14	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 16:14	022210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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>
CCB07	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 16:14	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 11:14	02510S1-8
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 16:35	022210-1
	Antimony	4.07	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 16:35	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 16:35	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 16:35	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 16:35	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 16:35	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 16:35	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 16:35	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 16:35	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 16:35	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 16:35	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 16:35	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 16:35	022210-1
	Silver	-1.23	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 16:35	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 16:35	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 16:35	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 16:35	022210-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	25-FEB-10 11:34	02510S1-8
CCB08	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 17:19	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 17:19	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:19	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:19	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 17:19	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 17:19	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 17:19	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 17:19	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 17:19	022210-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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	22-FEB-10 17:19	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 17:19	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 17:19	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 17:19	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:19	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 17:19	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:19	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 17:19	022210-1
CCB09	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 17:56	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Magnesium	-92.39	+/-300	J	85.0	300	SOL	P	22-FEB-10 17:56	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Silver	-1.2	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 17:56	022210-1
CCB10	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 18:58	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 18:58	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:58	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:58	022210-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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>
CCB11	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 18:58	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 18:58	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 18:58	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 18:58	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 18:58	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 18:58	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 18:58	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 18:58	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 18:58	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:58	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 18:58	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:58	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 18:58	022210-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 20:15	022210-1
CCB11	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 20:15	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:15	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:15	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 20:15	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 20:15	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 20:15	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 20:15	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 20:15	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 20:15	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 20:15	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 20:15	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 20:15	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:15	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 20:15	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:15	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 20:15	022210-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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>
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 21:17	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 21:17	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:17	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:17	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 21:17	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 21:17	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 21:17	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 21:17	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 21:17	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 21:17	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 21:17	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 21:17	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 21:17	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:17	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 21:17	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:17	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 21:17	022210-1
CCB13	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 22:20	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 22:20	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:20	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:20	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 22:20	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 22:20	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 22:20	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 22:20	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 22:20	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 22:20	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 22:20	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 22:20	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 22:20	022210-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

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	22-FEB-10 22:20	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 22:20	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:20	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 22:20	022210-1
CCB14	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 23:22	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 23:22	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 23:22	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 23:22	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 23:22	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 23:22	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 23:22	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	22-FEB-10 23:22	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 23:22	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 23:22	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 23:22	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 23:22	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 23:22	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 23:22	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 23:22	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 23:22	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 23:22	022210-1
CCB15	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	23-FEB-10 00:11	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 00:11	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:11	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:11	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 00:11	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	23-FEB-10 00:11	022210-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	23-FEB-10 00:11	022210-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	23-FEB-10 00:11	022210-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 00:11	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 00:11	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 00:11	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	23-FEB-10 00:11	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	23-FEB-10 00:11	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:11	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	23-FEB-10 00:11	022210-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:11	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 00:11	022210-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1624
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>
1202036894	Magnesium	7190	ug/Kg	+/-25400	U	P	7190	25400
	Manganese	169	ug/Kg	+/-846	U	P	169	846
	Potassium	5640	ug/Kg	+/-21200	J	P	5410	21200
	Silver	84.6	ug/Kg	+/-423	U	P	84.6	423
	Aluminum	5750	ug/Kg	+/-16900	U	P	5750	16900
	Sodium	5920	ug/Kg	+/-21200	U	P	5920	21200
	Vanadium	84.6	ug/Kg	+/-423	U	P	84.6	423
	Zinc	279	ug/Kg	+/-846	U	P	279	846
	Antimony	279	ug/Kg	+/-846	U	P	279	846
	Lead	212	ug/Kg	+/-846	U	P	212	846
	Iron	6770	ug/Kg	+/-21200	U	P	6770	21200
	Copper	254	ug/Kg	+/-846	U	P	254	846
	Cobalt	127	ug/Kg	+/-423	U	P	127	423
	Chromium	127	ug/Kg	+/-423	U	P	127	423
	Calcium	6770	ug/Kg	+/-21200	U	P	6770	21200
	Cadmium	84.6	ug/Kg	+/-423	U	P	84.6	423
	Barium	84.6	ug/Kg	+/-423	U	P	84.6	423
1202036903	Arsenic	0.172	mg/kg	+/-0.861	U	MS	0.172	0.861
	Beryllium	0.0172	mg/kg	+/-0.0861	U	MS	0.0172	0.0861
	Nickel	0.0861	mg/kg	+/-0.344	U	MS	0.0861	0.344
	Selenium	0.43	mg/kg	+/-0.861	U	MS	0.43	0.861
	Thallium	0.0759	mg/kg	+/-0.172	J	MS	0.0516	0.172
	Uranium	0.0114	mg/kg	+/-0.0344	U	MS	0.0114	0.0344
1202039410	Mercury	4.01	ug/kg	+/-11.8	U	AV	4.01	11.8

METALS
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Interference Check Sample

SDG No: 10-1624

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	511000	ug/L	500000	ug/L	102	80.0 – 120.0	22-FEB-10 12:18	022210-1
	Antimony	0.142	ug/L					22-FEB-10 12:18	022210-1
	Barium	1.13	ug/L					22-FEB-10 12:18	022210-1
	Cadmium	0.207	ug/L					22-FEB-10 12:18	022210-1
	Calcium	480000	ug/L	500000	ug/L	96.1	80.0 – 120.0	22-FEB-10 12:18	022210-1
	Chromium	3.74	ug/L					22-FEB-10 12:18	022210-1
	Cobalt	-1.54	ug/L					22-FEB-10 12:18	022210-1
	Copper	4.52	ug/L					22-FEB-10 12:18	022210-1
	Iron	192000	ug/L	200000	ug/L	96	80.0 – 120.0	22-FEB-10 12:18	022210-1
	Lead	-6.65	ug/L					22-FEB-10 12:18	022210-1
	Magnesium	504000	ug/L	500000	ug/L	101	80.0 – 120.0	22-FEB-10 12:18	022210-1
	Manganese	-1.3	ug/L					22-FEB-10 12:18	022210-1
	Potassium	-182.0	ug/L					22-FEB-10 12:18	022210-1
	Silver	-0.419	ug/L					22-FEB-10 12:18	022210-1
	Sodium	32.9	ug/L					22-FEB-10 12:18	022210-1
	Vanadium	-1.63	ug/L					22-FEB-10 12:18	022210-1
	Zinc	-1.68	ug/L					22-FEB-10 12:18	022210-1
ICSAB01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Antimony	556	ug/L	500	ug/L	111	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Barium	489	ug/L	500	ug/L	97.9	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Cadmium	459	ug/L	500	ug/L	91.8	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Calcium	482000	ug/L	500000	ug/L	96.3	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Chromium	483	ug/L	500	ug/L	96.6	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Cobalt	443	ug/L	500	ug/L	88.7	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Copper	544	ug/L	500	ug/L	109	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Iron	189000	ug/L	200000	ug/L	94.3	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Lead	450	ug/L	500	ug/L	90	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Magnesium	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	22-FEB-10 12:25	022210-1

METALS

-4-

Interference Check Sample

SDG No: 10-1624

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	474	ug/L	500	ug/L	94.8	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Potassium	5680	ug/L	5000	ug/L	114	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Silver	270	ug/L	250	ug/L	108	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Sodium	5430	ug/L	5000	ug/L	109	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Vanadium	506	ug/L	500	ug/L	101	80.0 – 120.0	22-FEB-10 12:25	022210-1
	Zinc	488	ug/L	500	ug/L	97.5	80.0 – 120.0	22-FEB-10 12:25	022210-1

METALS
-4-
Interference Check Sample

SDG No: 10-1624

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.025	ug/L					25-FEB-10 20:23	100225-2
ICSAB01	Thallium	20.9	ug/L	20	ug/L	105	80.0 - 120.0	25-FEB-10 20:29	100225-2

METALS
-4-
Interference Check Sample

SDG No: 10-1624

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	-0.012	ug/L					26-FEB-10 11:41	100226-3
	Beryllium	0.086	ug/L					26-FEB-10 11:41	100226-3
	Nickel	3.5	ug/L					26-FEB-10 11:41	100226-3
	Selenium	-0.962	ug/L					26-FEB-10 11:41	100226-3
ICSAB01									
	Arsenic	20.9	ug/L	20	ug/L	104	80.0 – 120.0	26-FEB-10 11:44	100226-3
	Beryllium	19.1	ug/L	20	ug/L	95.4	80.0 – 120.0	26-FEB-10 11:44	100226-3
	Nickel	23.7	ug/L	23.31	ug/L	101	80.0 – 120.0	26-FEB-10 11:44	100226-3
	Selenium	20.3	ug/L	20	ug/L	101	80.0 – 120.0	26-FEB-10 11:44	100226-3

METALS
-4-
Interference Check Sample

SDG No: 10-1624

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	-0.007	ug/L					26-FEB-10 16:31	100226-7
ICSAB01	Uranium	20.2	ug/L	20	ug/L	101	80.0 - 120.0	26-FEB-10 16:33	100226-7

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1624

Client ID RE15-10-8361S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 82

Sample ID: 246443001

Spike ID: 1202036897

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7150000		2880000		594000	721	N/A	P
Antimony	ug/Kg	75-125	60700		387	U	59400	102		P
Barium	ug/Kg	75-125	118000		44500		59400	124		P
Cadmium	ug/Kg	75-125	62100		117	U	59400	104		P
Calcium	ug/Kg	75-125	1530000		775000		594000	127	N	P
Chromium	ug/Kg	75-125	74900		12600		59400	105		P
Cobalt	ug/Kg	75-125	62800		1660		59400	103		P
Copper	ug/Kg	75-125	69800		4390		59400	110		P
Iron	ug/Kg		9780000		8630000		594000	195	N/A	P
Lead	ug/Kg	75-125	72500		11300		59400	103		P
Magnesium	ug/Kg	75-125	1670000		549000		594000	188	N	P
Manganese	ug/Kg		354000		246000		59400	181	N/A	P
Potassium	ug/Kg	75-125	1520000		498000		594000	172	N	P
Silver	ug/Kg	75-125	59300		117	U	59400	99.7		P
Sodium	ug/Kg	75-125	656000		52700		594000	102		P
Vanadium	ug/Kg	75-125	72200		8570		59400	107		P
Zinc	ug/Kg	75-125	105000		36100		59400	116		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1624 Client ID RE15-10-8361SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246443001 Spike ID: 1202036898

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		6620000		2880000		586000	640	N/A	P
Antimony	ug/Kg	75-125	59300		387	U	58600	101		P
Barium	ug/Kg	75-125	111000		44500		58600	114		P
Cadmium	ug/Kg	75-125	59000		117	U	58600	101		P
Calcium	ug/Kg	75-125	1440000		775000		586000	114		P
Chromium	ug/Kg	75-125	74400		12600		58600	106		P
Cobalt	ug/Kg	75-125	61000		1660		58600	101		P
Copper	ug/Kg	75-125	67100		4390		58600	107		P
Iron	ug/Kg		9300000		8630000		586000	115	N/A	P
Lead	ug/Kg	75-125	70700		11300		58600	101		P
Magnesium	ug/Kg	75-125	1490000		549000		586000	160	N	P
Manganese	ug/Kg		310000		246000		58600	109	N/A	P
Potassium	ug/Kg	75-125	1370000		498000		586000	148	N	P
Silver	ug/Kg	75-125	57700		117	U	58600	98.4		P
Sodium	ug/Kg	75-125	648000		52700		586000	102		P
Vanadium	ug/Kg	75-125	69100		8570		58600	103		P
Zinc	ug/Kg	75-125	96600		36100		58600	103		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1624

Client ID: RE15-10-8361S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 82

Sample ID: 246443001

Spike ID: 1202036906

<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>
Selenium	mg/kg	75-125	2.52		0.579	U	2.32	100		MS
Thallium	mg/kg	75-125	12.5		0.152	J	11.6	106		MS
Uranium	mg/kg	75-125	10.3		4.08		5.79	107		MS
Arsenic	mg/kg	75-125	11.1		1.16		9.26	107		MS
Beryllium	mg/kg	75-125	5.97		0.435		5.79	95.6		MS
Nickel	mg/kg	75-125	9.04		3.21		5.79	101		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1624 Client ID RE15-10-8361SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246443001 Spike ID: 1202036907

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.8		1.16		9.5	102		MS
Beryllium	mg/kg	75-125	5.83		0.435		5.94	90.9		MS
Nickel	mg/kg	75-125	9.32		3.21		5.94	103		MS
Selenium	mg/kg	75-125	2.5		0.579	U	2.37	96.7		MS
Thallium	mg/kg	75-125	11.5		0.152	J	11.9	95.9		MS
Uranium	mg/kg	75-125	9.58		4.08		5.94	92.6		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1624 **Client ID** RE46-10-11883S**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 96.1**Sample ID:** 246432001 **Spike ID:** 1202039413

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	153		10.9		124	114		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1624 Client ID RE46-10-11883SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 96.1

Sample ID: 246432001 Spike ID: 1202039415

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	142		10.9		115	114		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8361D

Sample ID: 246443001

Duplicate ID: 1202036895

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	2880000		3080000		6.73		P
Antimony	ug/Kg		387 U		398 U				P
Barium	ug/Kg	+/-20%	44500		48500		8.69		P
Cadmium	ug/Kg		117 U		121 U				P
Calcium	ug/Kg	+/-20%	775000		866000		11		P
Chromium	ug/Kg	+/-20%	12600		9840		24.2	*	P
Cobalt	ug/Kg	+/-603	1660		2040		20.4		P
Copper	ug/Kg	+/-1210	4390		4550		3.69		P
Iron	ug/Kg	+/-20%	8630000		8050000		6.93		P
Lead	ug/Kg	+/-20%	11300		10400		8.15		P
Magnesium	ug/Kg	+/-20%	549000		588000		6.87		P
Manganese	ug/Kg	+/-20%	246000		272000		9.72		P
Potassium	ug/Kg	+/-20%	498000		527000		5.74		P
Silver	ug/Kg		117 U		121 U				P
Sodium	ug/Kg	+/-30100	52700		54000		2.4		P
Vanadium	ug/Kg	+/-20%	8570		8430		1.68		P
Zinc	ug/Kg	+/-20%	36100		33900		6.38		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8361SD

Sample ID: 1202036897

Duplicate ID: 1202036898

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	7150000		6620000		7.72		P
Antimony	ug/Kg	+/-20	60700		59300		2.3		P
Barium	ug/Kg	+/-20	118000		111000		5.71		P
Cadmium	ug/Kg	+/-20	62100		59000		4.98		P
Calcium	ug/Kg	+/-20	1530000		1440000		5.83		P
Chromium	ug/Kg	+/-20	74900		74400		.768		P
Cobalt	ug/Kg	+/-20	62800		61000		2.8		P
Copper	ug/Kg	+/-20	69800		67100		3.96		P
Iron	ug/Kg	+/-20	9780000		9300000		5.1		P
Lead	ug/Kg	+/-20	72500		70700		2.47		P
Magnesium	ug/Kg	+/-20	1670000		1490000		11.4		P
Manganese	ug/Kg	+/-20	354000		310000		13.2		P
Potassium	ug/Kg	+/-20	1520000		1370000		10.6		P
Silver	ug/Kg	+/-20	59300		57700		2.73		P
Sodium	ug/Kg	+/-20	656000		648000		1.23		P
Vanadium	ug/Kg	+/-20	72200		69100		4.36		P
Zinc	ug/Kg	+/-20	105000		96600		8.37		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8361D

Sample ID: 246443001

Duplicate ID: 1202036904

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.14	1.16		1.26		7.76		MS
Beryllium	mg/kg	+/-1.14	0.435		0.509		15.7		MS
Nickel	mg/kg	+/-20%	3.21		3.27		1.67		MS
Selenium	mg/kg		0.579 U		0.568 U				MS
Thallium	mg/kg	+/-227	0.152 J		0.0979 J		43		MS
Uranium	mg/kg	+/-20%	4.08		4.94		18.9		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8361SD

Sample ID: 1202036906

Duplicate ID: 1202036907

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	11.1		10.8		2.29		MS
Beryllium	mg/kg	+/-20	5.97		5.83		2.39		MS
Nickel	mg/kg	+/-20	9.04		9.32		3.06		MS
Selenium	mg/kg	+/-20	2.52		2.5		.794		MS
Thallium	mg/kg	+/-20	12.5		11.5		7.91		MS
Uranium	mg/kg	+/-20	10.3		9.58		7.32		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-11883D

Sample ID: 246432001

Duplicate ID: 1202039412

Percent Solids for Dup: 96.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-11.3	10.9		12.5		13.2		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1624

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-11883SD

Sample ID: 1202039413

Duplicate ID: 1202039415

Percent Solids for Dup: 96.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	153		142		7.45		AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1624

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>
1202036899								
	Aluminum	ug/Kg	10500000	9740000		92.8	56-144	P
	Antimony	ug/Kg	173000	189000		109	71-130	P
	Barium	ug/Kg	198000	219000		111	80-120	P
	Cadmium	ug/Kg	60700	65700		108	81-120	P
	Calcium	ug/Kg	9870000	10900000		110	83-117	P
	Chromium	ug/Kg	236000	256000		108	80-120	P
	Cobalt	ug/Kg	91200	101000		110	81-120	P
	Copper	ug/Kg	174000	198000		114	81-118	P
	Iron	ug/Kg	18000000	20600000		115	51-149	P
	Lead	ug/Kg	86000	91800		107	79-121	P
	Magnesium	ug/Kg	4000000	4430000		111	79-122	P
	Manganese	ug/Kg	558000	581000		104	81-119	P
	Potassium	ug/Kg	4300000	4980000		116	74-127	P
	Silver	ug/Kg	30100	34500		115	66-134	P
	Sodium	ug/Kg	1020000	1090000		107	74-127	P
	Vanadium	ug/Kg	115000	132000		115	79-121	P
	Zinc	ug/Kg	594000	643000		108	80-121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1624

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>
1202036908								
	Arsenic	mg/kg	104	114		110	78-123	MS
	Beryllium	mg/kg	77.6	81.5		105	84-116	MS
	Nickel	mg/kg	134	145		109	78-123	MS
	Selenium	mg/kg	286	312		109	77-123	MS
	Thallium	mg/kg	121	144		119	78-122	MS
	Uranium	mg/kg	2.13	2.18		102	73-127	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1624
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>
1202039411	Mercury	ug/kg	5150	5570		108	71.6-128.3	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1624 Client ID RE15-10-8361L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246443001 Serial Dilution ID: 1202036896

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	24500		24200		1.43		10	P
Antimony	3.3	U	16.5	U				P
Barium	379		385		1.58		10	P
Cadmium	1	U	5	U				P
Calcium	6610		6950		5.14		10	P
Chromium	107		105		2.34		10	P
Cobalt	14.2		14	J	1.41			P
Copper	37.4		30.1	J	19.5			P
Iron	73500		75500		2.72		10	P
Lead	96		105		8.85			P
Magnesium	4680		4420		5.56		10	P
Manganese	2100		2170		3.33		10	P
Potassium	4240		4360		2.83		10	P
Silver	1	U	5	U				P
Sodium	449		498	J	10.9			P
Vanadium	73.1		75		2.6		10	P
Zinc	308		308		0		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1624 Client ID. RE15-10-8361L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246443001 Serial Dilution ID: 1202036905

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	5.03		5.05	J	.398			MS
Beryllium	1.88		2.15	J	14.1			MS
Nickel	13.9		15.9		14			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.655	J	1.5	U	100			MS
Uranium	17.6		18.1		2.84		10	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1624 **Client ID** RE46-10-11883L

Contract: LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 246432001 **Serial Dilution ID:** 1202039414

<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	.21		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1624

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	950494						
1202036894	MB for batch 950494	MB	S	20-FEB-10	.591g	50mL	
1202036899	LCS for batch 950494	LCS	S	20-FEB-10	.521g	50mL	
1202036897	RE15-10-8361S	MS	S	20-FEB-10	.514g	50mL	
1202036898	RE15-10-8361SD	MSD	S	20-FEB-10	.521g	50mL	
1202036895	RE15-10-8361D	DUP	S	20-FEB-10	.506g	50mL	
246443001	RE15-10-8361	SAMPLE	S	20-FEB-10	.52g	50mL	
246443002	RE15-10-8362	SAMPLE	S	20-FEB-10	.529g	50mL	
246443003	RE15-10-8359	SAMPLE	S	20-FEB-10	.523g	50mL	
246443004	RE15-10-8358	SAMPLE	S	20-FEB-10	.507g	50mL	
246443005	RE15-10-8360	SAMPLE	S	20-FEB-10	.542g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1624

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	950497						
1202036903	MB for batch 950497	MB	S	20-FEB-10	.581g	50mL	
1202036908	LCS for batch 950497	LCS	S	20-FEB-10	.511g	50mL	
1202036906	RE15-10-8361S	MS	S	20-FEB-10	.527g	50mL	
1202036907	RE15-10-8361SD	MSD	S	20-FEB-10	.514g	50mL	
1202036904	RE15-10-8361D	DUP	S	20-FEB-10	.537g	50mL	
246443001	RE15-10-8361	SAMPLE	S	20-FEB-10	.527g	50mL	
246443002	RE15-10-8362	SAMPLE	S	20-FEB-10	.524g	50mL	
246443003	RE15-10-8359	SAMPLE	S	20-FEB-10	.541g	50mL	
246443004	RE15-10-8358	SAMPLE	S	20-FEB-10	.551g	50mL	
246443005	RE15-10-8360	SAMPLE	S	20-FEB-10	.539g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1624

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	951608						
1202039410	MB for batch 951608	MB	S	24-FEB-10	.509g	30mL	
1202039411	LCS for batch 951608	LCS	S	24-FEB-10	.201g	30mL	
1202039413	RE46-10-11883S	MS	S	24-FEB-10	.503g	30mL	
1202039415	RE46-10-11883SD	MSD	S	24-FEB-10	.543g	30mL	
1202039412	RE46-10-11883D	DUP	S	24-FEB-10	.553g	30mL	
246443001	RE15-10-8361	SAMPLE	S	24-FEB-10	.59g	30mL	
246443002	RE15-10-8362	SAMPLE	S	24-FEB-10	.503g	30mL	
246443003	RE15-10-8359	SAMPLE	S	24-FEB-10	.549g	30mL	
246443004	RE15-10-8358	SAMPLE	S	24-FEB-10	.584g	30mL	
246443005	RE15-10-8360	SAMPLE	S	24-FEB-10	.582g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1624

Method MS

Data File: 100225-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	19:46																					X			
S10	1	19:52																					X			
S100	1	19:58																					X			
ICV01	1	20:04																					X			
ICB01	1	20:11																					X			
CRDL01	1	20:17																					X			
ICSA01	1	20:23																					X			
ICSAB01	1	20:29																					X			
CCV01	1	20:35																					X			
CCB01	1	20:41																					X			
LR01	1	20:47																					X			
CCV02	1	20:53																					X			
CCB02	1	20:59																					X			
1202036903	2	21:06																					X			
1202036908	40	21:12																					X			
246443001	2	21:18																					X			
1202036904	2	21:24																					X			
1202036906	2	21:30																					X			
1202036907	2	21:36																					X			
1202036905	10	21:42																					X			
CCV03	1	21:49																					X			
CCB03	1	21:55																					X			
246443002	2	22:01																					X			
246443003	2	22:07																					X			
246443004	2	22:13																					X			
246443005	2	22:19																					X			
ZZZZZZ	2	22:25																								
CCV04	1	22:31																					X			
CCB04	1	22:38																					X			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 26-FEB-10

End Date: 26-FEB-10

Client Sdg: 10-1624

Method MS

Data File: 100226-3

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	11:26			X		X											X	X							
S10	1	11:28			X		X											X	X							
S100	1	11:31			X		X											X	X							
ICV01	1	11:33			X		X											X	X							
ICB01	1	11:36			X		X											X	X							
CRDL01	1	11:38			X		X											X	X							
ICSA01	1	11:41			X		X											X	X							
ICSAB01	1	11:44			X		X											X	X							
CCV01	1	11:46			X		X											X	X							
CCB01	1	11:49			X		X											X	X							
1202036903	2	11:51			X		X											X	X							
1202036908	40	11:54			X		X											X	X							
246443001	2	11:56			X		X											X	X							
1202036904	2	11:59			X		X											X	X							
1202036906	2	12:01			X		X											X	X							
1202036907	2	12:04			X		X											X	X							
1202036905	10	12:06			X		X											X	X							
CCV02	1	12:09			X		X											X	X							
CCB02	1	12:11			X		X											X	X							
246443002	2	12:14			X		X											X	X							
246443003	2	12:16			X		X											X	X							
246443004	2	12:19			X		X											X	X							
246443005	2	12:22			X		X											X	X							
ZZZZZZ	2	12:24																								
CCV03	1	12:27			X		X											X	X							
CCB03	1	12:29			X		X											X	X							

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 26-FEB-10

Client Sdg: 10-1624

Method MS

Data File: 100226-7

End Date: 26-FEB-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	16:21																						X		
S10	1	16:23																						X		
S100	1	16:24																						X		
ICV01	1	16:26																						X		
ICB01	1	16:28																						X		
CRDL01	1	16:29																						X		
ICSA01	1	16:31																						X		
ICSAB01	1	16:33																						X		
CCV01	1	16:34																						X		
CCB01	1	16:36																						X		
1202036903	2	16:38																						X		
1202036908	40	16:39																						X		
246443001	2	16:41																						X		
1202036904	2	16:43																						X		
1202036906	2	16:44																						X		
1202036907	2	16:46																						X		
1202036905	10	16:48																						X		
CCV02	1	16:49																						X		
CCB02	1	16:51																						X		
246443002	2	16:53																						X		
246443003	2	16:54																						X		
246443004	2	16:56																						X		
246443005	2	16:58																						X		
ZZZZZZ	2	16:59																								
CCV03	1	17:01																						X		
CCB03	1	17:03																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 22-FEB-10

End Date: 23-FEB-10

Client Sdg: 10-1624

Method P

Data File: 022210-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	11:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	11:32		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	11:38	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	11:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	11:52	X						X				X		X							X				
ICV01	1	11:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	12:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	12:12	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	12:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	12:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	12:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	12:38	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	12:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	12:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	13:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	13:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	13:16	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR04	1	13:23	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	13:29																								
CCV03	1	13:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	13:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	13:54																								
ZZZZZZ	1	14:01																								
CCV04	1	14:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL02	1	14:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	14:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	14:32																								
CCV05	1	14:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	14:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	14:57																								
ZZZZZZ	1	15:04																								
ZZZZZZ	1	15:11																								
ZZZZZZ	1	15:18																								
ZZZZZZ	1	15:25																								
ZZZZZZ	1	15:32																								
ZZZZZZ	1	15:39																								
ZZZZZZ	1	15:46																								
ZZZZZZ	5	15:53																								
CCV06	1	16:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL03	1	16:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

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	21:45																								
ZZZZZZ	1	21:52																								
ZZZZZZ	1	21:59																								
ZZZZZZ	1	22:06																								
CCV13	1	22:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	22:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202036894	1	22:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202036899	1	22:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
246443001	1	22:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202036895	1	22:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202036897	1	22:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202036898	1	23:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202036896	5	23:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV14	1	23:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB14	1	23:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
246443002	1	23:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
246443003	1	23:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
246443004	1	23:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
246443005	1	23:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	23:57																								
CCV15	1	00:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB15	1	00:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 25-FEB-10

Client Sdg: 10-1624

Method AV

Data File: 02510S1-8

End Date: 25-FEB-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:16															X									
S0.2	1	09:18															X									
S0.5	1	09:20															X									
S2.0	1	09:21															X									
S5.0	1	09:23															X									
S10.0	1	09:25															X									
ICV01	1	09:26															X									
ICB01	1	09:28															X									
CRDL01	1	09:30															X									
CCV01	1	09:32															X									
CCB01	1	09:33															X									
ZZZZZZ	1	09:35																								
ZZZZZZ	1	09:37																								
ZZZZZZ	1	09:38																								
ZZZZZZ	1	09:40																								
ZZZZZZ	1	09:42																								
ZZZZZZ	1	09:43																								
ZZZZZZ	5	09:45																								
ZZZZZZ	1	09:47																								
ZZZZZZ	1	09:48																								
ZZZZZZ	1	09:50																								
CCV02	1	09:52															X									
CCB02	1	09:53															X									
ZZZZZZ	1	09:55																								
ZZZZZZ	1	09:57																								
ZZZZZZ	1	09:58																								
ZZZZZZ	1	10:00																								
ZZZZZZ	1	10:02																								
ZZZZZZ	1	10:03																								
ZZZZZZ	1	10:05																								
ZZZZZZ	1	10:07																								
ZZZZZZ	1	10:08																								
ZZZZZZ	1	10:10																								
CCV03	1	10:12															X									
CCB03	1	10:13															X									
ZZZZZZ	1	10:15																								
ZZZZZZ	1	10:17																								
ZZZZZZ	1	10:18																								
ZZZZZZ	1	10:20																								
ZZZZZZ	5	10:22																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	10:23
ZZZZZZ	1	10:25
ZZZZZZ	1	10:27
ZZZZZZ	1	10:28
ZZZZZZ	1	10:30
CCV04	1	10:32
CCB04	1	10:33
ZZZZZZ	1	10:35
ZZZZZZ	1	10:37
ZZZZZZ	1	10:38
ZZZZZZ	1	10:40
ZZZZZZ	1	10:42
ZZZZZZ	1	10:43
1202039410	1	10:45
1202039411	10	10:47
ZZZZZZ	1	10:48
1202039412	1	10:50
CCV05	1	10:52
CCB05	1	10:53
1202039413	1	10:55
1202039415	1	10:57
1202039414	5	10:59
ZZZZZZ	1	11:00
ZZZZZZ	1	11:02
ZZZZZZ	1	11:04
ZZZZZZ	1	11:05
ZZZZZZ	1	11:07
ZZZZZZ	1	11:09
ZZZZZZ	1	11:10
CCV06	1	11:12
CCB06	1	11:14
ZZZZZZ	1	11:15
ZZZZZZ	1	11:17
246443001	1	11:19
246443002	1	11:20
246443003	1	11:22
246443004	1	11:24
246443005	1	11:25
ZZZZZZ	1	11:27
ZZZZZZ	1	11:29

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	10	11:30																								
CCV07	1	11:32																X								
CCB07	1	11:34																X								

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1624

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. 10-1624

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. 10-1624

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1624**

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-
Interement Correction Factors

Lab Code: GEL

GEL Job No: 10-1624

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interement Correction Factors (apparent ppb analyte/ppm interferent)

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1624

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: **10-1624**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1624**

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: GELGEL Job No: **10-1624**

Contract: LANL01004

Instrument: OPTIMA3

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

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1624

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. 10-1624

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>
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	01-FEB-10
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

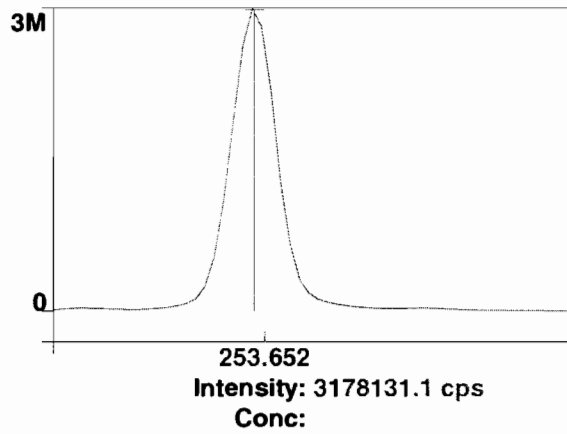
Raw Data

Method: Hg_ReAlign
Result: 030410

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

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Analysis Begun

Start Time: 2/22/2010 11:25:15

Plasma On Time: 2/22/2010 05:55:10

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022210.sif

Batch ID:

Results Data Set: 022210

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

=====
Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/22/2010 11:25:16

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4354.4	4354.4	0.000 %		11:27:09
1	Y RADIAL	4788.9	4788.9	0.000 %		11:27:09
1	Al 396.153Radial†	-99.5	-100.4	[0.00] ug/L		11:27:29
1	Ca 317.933Radial†	22.9	23.2	[0.00] ug/L		11:27:29
1	Fe 238.204 Radial†	10.4	10.5	[0.00] ug/L		11:27:29
1	K 766.490 Radial†	2565.7	2590.1	[0.00] ug/L		11:27:09
1	Mg 279.077 IEC†	4.0	4.1	[0.00] ug/L		11:27:29
1	Na 589.592 Radial†	-662.2	-668.5	[0.00] ug/L		11:27:09
1	Sr 421.552†	-8.9	-9.0	[0.00] ug/L		11:27:09
1	Sc 361.383	885074.8	885074.8	0.0000 %		11:28:26
1	Y 371.029	744058.3	744058.3	0.0000 %		11:28:26
1	Ag 328.068†	427.8	424.7	[0.00] ug/L		11:28:26
1	As 188.979†	-22.4	-22.2	[0.00] ug/L		11:28:46
1	B 249.677†	-480.1	-476.5	[0.00] ug/L		11:28:46
1	Ba 233.527†	-7.6	-7.5	[0.00] ug/L		11:28:46
1	Be 313.107†	-3879.1	-3850.4	[0.00] ug/L		11:28:26
1	Cd 226.502†	-179.3	-177.9	[0.00] ug/L		11:28:46
1	Co 228.616†	-52.5	-52.1	[0.00] ug/L		11:28:46
1	Cr 267.716†	82.7	82.1	[0.00] ug/L		11:28:46
1	Cu 324.752†	6254.6	6208.4	[0.00] ug/L		11:28:26
1	Mn 257.610†	447.2	443.9	[0.00] ug/L		11:28:46
1	Mo 202.031†	-0.3	-0.3	[0.00] ug/L		11:28:46
1	Ni 231.604†	73.0	72.4	[0.00] ug/L		11:28:46
1	P 214.914†	195.0	193.5	[0.00] ug/L		11:28:46
1	Pb 220.353†	-61.5	-61.0	[0.00] ug/L		11:28:46
1	S 181.975 Axial†	32.5	32.2	[0.00] ug/L		11:28:46
1	Sb 206.836†	34.6	34.3	[0.00] ug/L		11:28:46
1	Se 196.026†	-24.4	-24.2	[0.00] ug/L		11:28:46
1	Si 251.611†	513.3	509.5	[0.00] ug/L		11:28:46
1	Sn 189.927†	17.1	17.0	[0.00] ug/L		11:28:46
1	Ti 334.940†	-1176.0	-1167.3	[0.00] ug/L		11:28:26
1	Tl 190.801†	-31.1	-30.9	[0.00] ug/L		11:28:46
1	U 409.014†	-2351.2	-2333.8	[0.00] ug/L		11:28:26
1	V 292.402†	-1330.4	-1320.5	[0.00] ug/L		11:28:26
1	Zn 213.857†	594.6	590.2	[0.00] ug/L		11:28:46
1	SiO2†	522.9	519.0	[0.00] ug/L		11:29:42
2	Sc Radial	4443.3	4443.3	0.000 %		11:27:34
2	Y RADIAL	4863.5	4863.5	0.000 %		11:27:34
2	Al 396.153Radial†	-101.6	-100.5	[0.00] ug/L		11:27:54
2	Ca 317.933Radial†	15.9	15.7	[0.00] ug/L		11:27:54
2	Fe 238.204 Radial†	12.8	12.6	[0.00] ug/L		11:27:54
2	K 766.490 Radial†	2384.3	2358.7	[0.00] ug/L		11:27:34
2	Mg 279.077 IEC†	2.8	2.8	[0.00] ug/L		11:27:54
2	Na 589.592 Radial†	-688.9	-681.6	[0.00] ug/L		11:27:34
2	Sr 421.552†	39.0	38.6	[0.00] ug/L		11:27:34
2	Sc 361.383	877920.7	877920.7	0.0000 %		11:28:51
2	Y 371.029	738945.3	738945.3	0.0000 %		11:28:51

2	Ag 328.068†	461.0	461.4	[0.00]	ug/L	11:28:51
2	As 188.979†	-23.2	-23.2	[0.00]	ug/L	11:29:11
2	B 249.677†	-457.1	-457.4	[0.00]	ug/L	11:29:11
2	Ba 233.527†	-8.7	-8.7	[0.00]	ug/L	11:29:11
2	Be 313.107†	-3884.2	-3886.9	[0.00]	ug/L	11:28:51
2	Cd 226.502†	-162.4	-162.6	[0.00]	ug/L	11:29:11
2	Co 228.616†	-49.4	-49.4	[0.00]	ug/L	11:29:11
2	Cr 267.716†	77.4	77.5	[0.00]	ug/L	11:29:11
2	Cu 324.752†	6205.9	6210.2	[0.00]	ug/L	11:28:51
2	Mn 257.610†	442.5	442.8	[0.00]	ug/L	11:29:11
2	Mo 202.031†	18.3	18.3	[0.00]	ug/L	11:29:11
2	Ni 231.604†	75.2	75.2	[0.00]	ug/L	11:29:11
2	P 214.914†	194.9	195.1	[0.00]	ug/L	11:29:11
2	Pb 220.353†	-53.8	-53.8	[0.00]	ug/L	11:29:11
2	S 181.975 Axial†	32.4	32.4	[0.00]	ug/L	11:29:11
2	Sb 206.836†	36.8	36.8	[0.00]	ug/L	11:29:11
2	Se 196.026†	-22.6	-22.6	[0.00]	ug/L	11:29:11
2	Si 251.611†	539.1	539.5	[0.00]	ug/L	11:29:11
2	Sn 189.927†	12.2	12.2	[0.00]	ug/L	11:29:11
2	Ti 334.940†	-1179.9	-1180.7	[0.00]	ug/L	11:28:51
2	Tl 190.801†	-29.9	-29.9	[0.00]	ug/L	11:29:11
2	U 409.014†	-2494.0	-2495.8	[0.00]	ug/L	11:28:51
2	V 292.402†	-1370.3	-1371.2	[0.00]	ug/L	11:28:51
2	Zn 213.857†	590.1	590.5	[0.00]	ug/L	11:29:11
2	SiO2†	519.7	520.1	[0.00]	ug/L	11:29:47
3	Sc Radial	4389.5	4389.5	0.000	%	11:27:59
3	Y RADIAL	4823.0	4823.0	0.000	%	11:27:59
3	Al 396.153Radial†	-111.6	-111.7	[0.00]	ug/L	11:28:19
3	Ca 317.933Radial†	20.4	20.5	[0.00]	ug/L	11:28:19
3	Fe 238.204 Radial†	10.2	10.2	[0.00]	ug/L	11:28:19
3	K 766.490 Radial†	2510.4	2513.9	[0.00]	ug/L	11:27:59
3	Mg 279.077 IEC†	1.7	1.8	[0.00]	ug/L	11:28:19
3	Na 589.592 Radial†	-731.0	-732.0	[0.00]	ug/L	11:27:59
3	Sr 421.552†	10.9	10.9	[0.00]	ug/L	11:27:59
3	Sc 361.383	872587.2	872587.2	0.0000	%	11:29:16
3	Y 371.029	735072.5	735072.5	0.0000	%	11:29:16
3	Ag 328.068†	439.9	442.8	[0.00]	ug/L	11:29:16
3	As 188.979†	-27.8	-28.0	[0.00]	ug/L	11:29:37
3	B 249.677†	-467.1	-470.3	[0.00]	ug/L	11:29:37
3	Ba 233.527†	-5.2	-5.2	[0.00]	ug/L	11:29:37
3	Be 313.107†	-3793.4	-3819.2	[0.00]	ug/L	11:29:16
3	Cd 226.502†	-191.1	-192.4	[0.00]	ug/L	11:29:37
3	Co 228.616†	-51.2	-51.6	[0.00]	ug/L	11:29:37
3	Cr 267.716†	78.0	78.6	[0.00]	ug/L	11:29:37
3	Cu 324.752†	6148.3	6190.1	[0.00]	ug/L	11:29:16
3	Mn 257.610†	459.5	462.6	[0.00]	ug/L	11:29:37
3	Mo 202.031†	4.6	4.7	[0.00]	ug/L	11:29:37
3	Ni 231.604†	70.9	71.4	[0.00]	ug/L	11:29:37
3	P 214.914†	198.0	199.4	[0.00]	ug/L	11:29:37
3	Pb 220.353†	-42.3	-42.6	[0.00]	ug/L	11:29:37
3	S 181.975 Axial†	28.7	28.9	[0.00]	ug/L	11:29:37
3	Sb 206.836†	32.9	33.1	[0.00]	ug/L	11:29:37
3	Se 196.026†	-11.1	-11.2	[0.00]	ug/L	11:29:37
3	Si 251.611†	517.3	520.9	[0.00]	ug/L	11:29:37
3	Sn 189.927†	11.2	11.3	[0.00]	ug/L	11:29:37
3	Ti 334.940†	-1152.0	-1159.9	[0.00]	ug/L	11:29:16
3	Tl 190.801†	-21.9	-22.0	[0.00]	ug/L	11:29:37
3	U 409.014†	-2429.7	-2446.3	[0.00]	ug/L	11:29:16
3	V 292.402†	-1341.5	-1350.7	[0.00]	ug/L	11:29:16
3	Zn 213.857†	583.8	587.8	[0.00]	ug/L	11:29:37
3	SiO2†	549.2	553.0	[0.00]	ug/L	11:29:52

Mean Data: S0

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	878527.6	6265.87	0.71%	0.0000	%
Sc Radial	4395.7	44.80	1.02%	0.000	%
Y 371.029	739358.7	4507.16	0.61%	0.0000	%
Y RADIAL	4825.1	37.35	0.77%	0.000	%
Ag 328.068†	443.0	18.36	4.14%	[0.00]	ug/L

Al 396.153Radial†	-104.2	6.51	6.25%	[0.00]	ug/L
As 188.979†	-24.5	3.09	12.65%	[0.00]	ug/L
B 249.677†	-468.1	9.74	2.08%	[0.00]	ug/L
Ba 233.527†	-7.1	1.76	24.74%	[0.00]	ug/L
Be 313.107†	-3852.2	33.86	0.88%	[0.00]	ug/L
Ca 317.933Radial†	19.8	3.79	19.16%	[0.00]	ug/L
Cd 226.502†	-177.6	14.92	8.40%	[0.00]	ug/L
Co 228.616†	-51.0	1.42	2.79%	[0.00]	ug/L
Cr 267.716†	79.4	2.41	3.03%	[0.00]	ug/L
Cu 324.752†	6202.9	11.11	0.18%	[0.00]	ug/L
Fe 238.204 Radial†	11.1	1.33	11.96%	[0.00]	ug/L
K 766.490 Radial†	2487.6	117.90	4.74%	[0.00]	ug/L
Mg 279.077 IEC†	2.9	1.15	40.37%	[0.00]	ug/L
Mn 257.610†	449.7	11.15	2.48%	[0.00]	ug/L
Mo 202.031†	7.5	9.65	128.00%	[0.00]	ug/L
Na 589.592 Radial†	-694.0	33.55	4.83%	[0.00]	ug/L
Ni 231.604†	73.0	1.98	2.71%	[0.00]	ug/L
P 214.914†	196.0	3.04	1.55%	[0.00]	ug/L
Pb 220.353†	-52.5	9.28	17.67%	[0.00]	ug/L
S 181.975 Axial†	31.2	1.98	6.33%	[0.00]	ug/L
Sb 206.836†	34.7	1.89	5.43%	[0.00]	ug/L
Se 196.026†	-19.3	7.08	36.60%	[0.00]	ug/L
Si 251.611†	523.3	15.13	2.89%	[0.00]	ug/L
Sn 189.927†	13.5	3.08	22.86%	[0.00]	ug/L
Sr 421.552†	13.5	23.92	177.20%	[0.00]	ug/L
Ti 334.940†	-1169.3	10.57	0.90%	[0.00]	ug/L
Tl 190.801†	-27.6	4.84	17.53%	[0.00]	ug/L
U 409.014†	-2425.3	82.98	3.42%	[0.00]	ug/L
V 292.402†	-1347.5	25.50	1.89%	[0.00]	ug/L
Zn 213.857†	589.5	1.50	0.25%	[0.00]	ug/L
SiO2†	530.7	19.29	3.64%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/22/2010 11:32:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4357.6	4357.6	99.1	%	11:33:59
1	Y RADIAL	4776.7	4776.7	99.00	%	11:33:59
1	K 766.490 Radial†	7764.8	5345.1	[1000]	ug/L	11:33:54
1	Sr 421.552†	15269.9	15389.9	[100]	ug/L	11:33:59
1	Sc 361.383	875530.6	875530.6	99.659	%	11:34:26
1	Y 371.029	735490.5	735490.5	99.477	%	11:34:26
1	Ag 328.068†	21499.2	21129.9	[100]	ug/L	11:34:26
1	As 188.979†	176.7	201.8	[100]	ug/L	11:34:46
1	B 249.677†	3430.9	3910.8	[100]	ug/L	11:34:26
1	Ba 233.527†	12180.4	12229.3	[100]	ug/L	11:34:26
1	Be 313.107†	250467.2	255176.7	[100]	ug/L	11:34:26
1	Cd 226.502†	7773.8	7978.1	[100]	ug/L	11:34:26
1	Co 228.616†	4405.2	4471.3	[100]	ug/L	11:34:46
1	Cr 267.716†	8537.1	8486.9	[100]	ug/L	11:34:26
1	Cu 324.752†	39126.3	33057.3	[100]	ug/L	11:34:26
1	Mn 257.610†	86363.5	86209.4	[100]	ug/L	11:34:26
1	Mo 202.031†	1304.3	1301.2	[100]	ug/L	11:34:46
1	Ni 231.604†	3710.1	3649.8	[100]	ug/L	11:34:46
1	P 214.914†	947.4	754.6	[500]	ug/L	11:34:46
1	Pb 220.353†	700.1	755.0	[100]	ug/L	11:34:46
1	S 181.975 Axial†	153.3	122.7	[200]	ug/L	11:34:46
1	Sb 206.836†	297.4	263.7	[100]	ug/L	11:34:46
1	Se 196.026†	121.4	141.2	[100]	ug/L	11:34:46
1	Si 251.611†	15273.9	14802.9	[500]	ug/L	11:34:26
1	Sn 189.927†	505.2	493.5	[100]	ug/L	11:34:46
1	Ti 334.940†	62354.0	63736.8	[100]	ug/L	11:34:26
1	Tl 190.801†	272.2	300.8	[100]	ug/L	11:34:46
1	U 409.014†	1310.2	3740.0	[100]	ug/L	11:34:26
1	V 292.402†	12196.6	13585.8	[100]	ug/L	11:34:26
1	Zn 213.857†	9985.1	9429.8	[100]	ug/L	11:34:26
1	SiO2†	15078.0	14599.0	[1069.5]	ug/L	11:35:42
2	Sc Radial	4258.3	4258.3	96.9	%	11:34:09
2	Y RADIAL	4664.3	4664.3	96.67	%	11:34:09
2	K 766.490 Radial†	7554.4	5310.6	[1000]	ug/L	11:34:04
2	Sr 421.552†	15001.9	15472.5	[100]	ug/L	11:34:09
2	Sc 361.383	877897.5	877897.5	99.928	%	11:34:52
2	Y 371.029	737737.4	737737.4	99.781	%	11:34:52
2	Ag 328.068†	21537.9	21110.4	[100]	ug/L	11:34:52
2	As 188.979†	182.9	207.5	[100]	ug/L	11:35:12
2	B 249.677†	3462.5	3933.1	[100]	ug/L	11:34:52
2	Ba 233.527†	12270.4	12286.3	[100]	ug/L	11:34:52
2	Be 313.107†	251546.9	255579.6	[100]	ug/L	11:34:52
2	Cd 226.502†	7838.0	8021.2	[100]	ug/L	11:34:52
2	Co 228.616†	4421.3	4475.5	[100]	ug/L	11:35:12
2	Cr 267.716†	8492.7	8419.4	[100]	ug/L	11:34:52
2	Cu 324.752†	39170.6	32995.8	[100]	ug/L	11:34:52
2	Mn 257.610†	86746.2	86358.8	[100]	ug/L	11:34:52
2	Mo 202.031†	1321.1	1314.5	[100]	ug/L	11:35:12
2	Ni 231.604†	3702.8	3632.5	[100]	ug/L	11:35:12
2	P 214.914†	935.4	740.0	[500]	ug/L	11:35:12
2	Pb 220.353†	691.7	744.7	[100]	ug/L	11:35:12
2	S 181.975 Axial†	156.6	125.5	[200]	ug/L	11:35:12
2	Sb 206.836†	300.2	265.7	[100]	ug/L	11:35:12
2	Se 196.026†	111.3	130.8	[100]	ug/L	11:35:12
2	Si 251.611†	15315.2	14802.9	[500]	ug/L	11:34:52
2	Sn 189.927†	511.0	497.9	[100]	ug/L	11:35:12
2	Ti 334.940†	62687.7	63902.0	[100]	ug/L	11:34:52
2	Tl 190.801†	270.1	297.9	[100]	ug/L	11:35:12
2	U 409.014†	1258.2	3684.4	[100]	ug/L	11:34:52

2	V 292.402†	12379.4	13735.7	[100]	ug/L	11:34:52
2	Zn 213.857†	10057.3	9475.1	[100]	ug/L	11:34:52
2	SiO2†	15102.5	14582.7	[1069.5]	ug/L	11:35:48
3	Sc Radial	4360.0	4360.0	99.2	%	11:34:19
3	Y RADIAL	4766.2	4766.2	98.78	%	11:34:19
3	K 766.490 Radial†	7497.6	5071.5	[1000]	ug/L	11:34:14
3	Sr 421.552†	15232.3	15343.8	[100]	ug/L	11:34:19
3	Sc 361.383	864791.3	864791.3	98.436	%	11:35:17
3	Y 371.029	726543.5	726543.5	98.267	%	11:35:17
3	Ag 328.068†	21348.9	21245.1	[100]	ug/L	11:35:17
3	As 188.979†	183.0	210.4	[100]	ug/L	11:35:37
3	B 249.677†	3363.0	3884.5	[100]	ug/L	11:35:17
3	Ba 233.527†	12157.3	12357.6	[100]	ug/L	11:35:17
3	Be 313.107†	248507.7	256307.1	[100]	ug/L	11:35:17
3	Cd 226.502†	7743.1	8043.7	[100]	ug/L	11:35:17
3	Co 228.616†	4410.2	4531.3	[100]	ug/L	11:35:37
3	Cr 267.716†	8462.0	8517.0	[100]	ug/L	11:35:17
3	Cu 324.752†	38540.2	32949.5	[100]	ug/L	11:35:17
3	Mn 257.610†	85879.1	86793.4	[100]	ug/L	11:35:17
3	Mo 202.031†	1297.5	1310.6	[100]	ug/L	11:35:37
3	Ni 231.604†	3702.0	3687.8	[100]	ug/L	11:35:37
3	P 214.914†	948.5	767.6	[500]	ug/L	11:35:37
3	Pb 220.353†	703.7	767.4	[100]	ug/L	11:35:37
3	S 181.975 Axial†	155.2	126.5	[200]	ug/L	11:35:37
3	Sb 206.836†	295.9	265.9	[100]	ug/L	11:35:37
3	Se 196.026†	121.1	142.4	[100]	ug/L	11:35:37
3	Si 251.611†	15086.4	14802.8	[500]	ug/L	11:35:17
3	Sn 189.927†	511.9	506.5	[100]	ug/L	11:35:37
3	Ti 334.940†	61825.6	63976.9	[100]	ug/L	11:35:17
3	Tl 190.801†	267.4	299.3	[100]	ug/L	11:35:37
3	U 409.014†	1267.4	3712.8	[100]	ug/L	11:35:17
3	V 292.402†	12179.1	13720.1	[100]	ug/L	11:35:17
3	Zn 213.857†	9953.3	9521.9	[100]	ug/L	11:35:17
3	SiO2†	15304.1	15016.5	[1069.5]	ug/L	11:35:53

Mean Data: S0.1

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	872739.8	6984.55	0.80%	99.341	%
Sc Radial	4325.3	58.02	1.34%	98.4	%
Y 371.029	733257.1	5921.74	0.81%	99.175	%
Y RADIAL	4735.7	62.11	1.31%	98.15	%
Ag 328.068†	21161.8	72.76	0.34%	[100]	ug/L
As 188.979†	206.6	4.39	2.13%	[100]	ug/L
B 249.677†	3909.5	24.31	0.62%	[100]	ug/L
Ba 233.527†	12291.0	64.28	0.52%	[100]	ug/L
Be 313.107†	255687.8	572.94	0.22%	[100]	ug/L
Cd 226.502†	8014.3	33.37	0.42%	[100]	ug/L
Co 228.616†	4492.7	33.49	0.75%	[100]	ug/L
Cr 267.716†	8474.5	49.99	0.59%	[100]	ug/L
Cu 324.752†	33000.9	54.07	0.16%	[100]	ug/L
K 766.490 Radial†	5242.4	148.98	2.84%	[1000]	ug/L
Mn 257.610†	86453.9	303.42	0.35%	[100]	ug/L
Mo 202.031†	1308.8	6.83	0.52%	[100]	ug/L
Ni 231.604†	3656.7	28.32	0.77%	[100]	ug/L
P 214.914†	754.1	13.79	1.83%	[500]	ug/L
Pb 220.353†	755.7	11.34	1.50%	[100]	ug/L
S 181.975 Axial†	124.9	1.97	1.58%	[200]	ug/L
Sb 206.836†	265.1	1.19	0.45%	[100]	ug/L
Se 196.026†	138.1	6.40	4.63%	[100]	ug/L
Si 251.611†	14802.9	0.05	0.00%	[500]	ug/L
Sn 189.927†	499.3	6.64	1.33%	[100]	ug/L
Sr 421.552†	15402.1	65.22	0.42%	[100]	ug/L
Ti 334.940†	63871.9	122.87	0.19%	[100]	ug/L
Tl 190.801†	299.3	1.42	0.47%	[100]	ug/L
U 409.014†	3712.4	27.80	0.75%	[100]	ug/L
V 292.402†	13680.5	82.42	0.60%	[100]	ug/L
Zn 213.857†	9475.6	46.08	0.49%	[100]	ug/L
SiO2†	14732.7	245.88	1.67%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/22/2010 11:38:03

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	4324.0	4324.0	98.4 %		11:39:55
1	Y RADIAL	4725.2	4725.2	97.93 %		11:39:55
1	Al 396.153Radial†	5317.7	5510.1	[5000] ug/L		11:39:55
1	Ca 317.933Radial†	2481.1	2502.5	[5000] ug/L		11:40:15
1	K 766.490 Radial†	27868.2	25842.8	[5000] ug/L		11:39:55
1	Mg 279.077 IEC†	114.4	113.4	[5000] ug/L		11:40:15
1	Sr 421.552†	75021.1	76251.9	[500] ug/L		11:39:55
1	Sc 361.383	887744.6	887744.6	101.05 %		11:41:13
1	Y 371.029	737202.2	737202.2	99.708 %		11:41:13
1	Ag 328.068†	103510.9	101993.3	[500] ug/L		11:41:18
1	As 188.979†	999.5	1013.6	[500] ug/L		11:41:38
1	B 249.677†	19074.8	19344.9	[500] ug/L		11:41:18
1	Ba 233.527†	59064.5	58458.4	[500] ug/L		11:41:18
1	Be 313.107†	1251360.9	1242220.8	[500] ug/L		11:41:13
1	Cd 226.502†	38313.4	38093.3	[500] ug/L		11:41:18
1	Co 228.616†	21879.2	21703.1	[500] ug/L		11:41:18
1	Cr 267.716†	40883.0	40379.2	[500] ug/L		11:41:18
1	Cu 324.752†	166067.0	158139.9	[500] ug/L		11:41:18
1	Mn 257.610†	415986.1	411217.3	[500] ug/L		11:41:13
1	Mo 202.031†	6361.9	6288.3	[500] ug/L		11:41:38
1	Ni 231.604†	17935.5	17676.2	[500] ug/L		11:41:18
1	P 214.914†	3899.3	3662.8	[2500] ug/L		11:41:38
1	Pb 220.353†	3594.2	3609.4	[500] ug/L		11:41:38
1	S 181.975 Axial†	646.5	608.6	[1000] ug/L		11:41:38
1	Sb 206.836†	1342.1	1293.4	[500] ug/L		11:41:38
1	Se 196.026†	676.2	688.6	[500] ug/L		11:41:38
1	Si 251.611†	72938.5	71658.0	[2500] ug/L		11:41:18
1	Sn 189.927†	2468.0	2428.9	[500] ug/L		11:41:38
1	Ti 334.940†	303143.6	301165.5	[500] ug/L		11:41:18
1	Tl 190.801†	1431.4	1444.1	[500] ug/L		11:41:38
1	U 409.014†	15285.6	17552.2	[500] ug/L		11:41:18
1	V 292.402†	65419.3	66087.5	[500] ug/L		11:41:18
1	Zn 213.857†	46503.7	45431.4	[500] ug/L		11:41:18
1	SiO2†	73872.0	72574.3	[5347.5] ug/L		11:42:45
2	Sc Radial	4341.9	4341.9	98.8 %		11:40:20
2	Y RADIAL	4718.4	4718.4	97.79 %		11:40:20
2	Al 396.153Radial†	5370.2	5541.0	[5000] ug/L		11:40:20
2	Ca 317.933Radial†	2455.4	2466.0	[5000] ug/L		11:40:40
2	K 766.490 Radial†	28041.4	25901.5	[5000] ug/L		11:40:20
2	Mg 279.077 IEC†	112.6	111.1	[5000] ug/L		11:40:40
2	Sr 421.552†	75753.6	76679.4	[500] ug/L		11:40:20
2	Sc 361.383	885884.5	885884.5	100.84 %		11:41:44
2	Y 371.029	736723.1	736723.1	99.644 %		11:41:44
2	Ag 328.068†	103616.1	102312.7	[500] ug/L		11:41:49
2	As 188.979†	998.2	1014.3	[500] ug/L		11:42:09
2	B 249.677†	19243.7	19552.0	[500] ug/L		11:41:49
2	Ba 233.527†	59200.7	58716.2	[500] ug/L		11:41:49
2	Be 313.107†	1246921.1	1240418.1	[500] ug/L		11:41:44
2	Cd 226.502†	38413.8	38272.4	[500] ug/L		11:41:49
2	Co 228.616†	21883.6	21752.9	[500] ug/L		11:41:49
2	Cr 267.716†	41041.1	40620.9	[500] ug/L		11:41:49
2	Cu 324.752†	166051.3	158469.4	[500] ug/L		11:41:49
2	Mn 257.610†	413107.4	409227.0	[500] ug/L		11:41:44
2	Mo 202.031†	6386.2	6325.6	[500] ug/L		11:42:09
2	Ni 231.604†	17982.0	17759.6	[500] ug/L		11:41:49
2	P 214.914†	3915.1	3686.6	[2500] ug/L		11:42:09
2	Pb 220.353†	3612.8	3635.3	[500] ug/L		11:42:09
2	S 181.975 Axial†	650.5	613.9	[1000] ug/L		11:42:09
2	Sb 206.836†	1339.2	1293.3	[500] ug/L		11:42:09

2	Se 196.026†	674.6	688.3	[500]	ug/L	11:42:09
2	Si 251.611†	73003.0	71873.5	[2500]	ug/L	11:41:49
2	Sn 189.927†	2471.2	2437.2	[500]	ug/L	11:42:09
2	Ti 334.940†	303737.4	302384.3	[500]	ug/L	11:41:49
2	Tl 190.801†	1423.3	1439.1	[500]	ug/L	11:42:09
2	U 409.014†	15130.6	17430.2	[500]	ug/L	11:41:49
2	V 292.402†	65608.8	66411.5	[500]	ug/L	11:41:49
2	Zn 213.857†	46525.5	45549.7	[500]	ug/L	11:41:49
2	SiO2†	73932.3	72787.6	[5347.5]	ug/L	11:42:51
3	Sc Radial	4319.9	4319.9	98.3	%	11:40:46
3	Y RADIAL	4680.2	4680.2	97.00	%	11:40:46
3	Al 396.153Radial†	5256.8	5453.3	[5000]	ug/L	11:40:46
3	Ca 317.933Radial†	2483.9	2507.7	[5000]	ug/L	11:41:06
3	K 766.490 Radial†	27698.0	25696.5	[5000]	ug/L	11:40:46
3	Mg 279.077 IEC†	115.4	114.6	[5000]	ug/L	11:41:06
3	Sr 421.552†	74155.6	75443.5	[500]	ug/L	11:40:46
3	Sc 361.383	889409.2	889409.2	101.24	%	11:42:15
3	Y 371.029	739132.9	739132.9	99.969	%	11:42:15
3	Ag 328.068†	104492.9	102771.5	[500]	ug/L	11:42:20
3	As 188.979†	999.1	1011.4	[500]	ug/L	11:42:40
3	B 249.677†	19383.7	19614.6	[500]	ug/L	11:42:20
3	Ba 233.527†	59642.7	58920.1	[500]	ug/L	11:42:20
3	Be 313.107†	1261008.0	1249432.2	[500]	ug/L	11:42:15
3	Cd 226.502†	38853.4	38555.7	[500]	ug/L	11:42:20
3	Co 228.616†	22093.3	21874.1	[500]	ug/L	11:42:20
3	Cr 267.716†	41391.6	40805.8	[500]	ug/L	11:42:20
3	Cu 324.752†	167501.6	159249.3	[500]	ug/L	11:42:20
3	Mn 257.610†	418518.8	412948.6	[500]	ug/L	11:42:15
3	Mo 202.031†	6408.5	6322.6	[500]	ug/L	11:42:40
3	Ni 231.604†	18157.2	17862.1	[500]	ug/L	11:42:20
3	P 214.914†	3926.8	3682.8	[2500]	ug/L	11:42:40
3	Pb 220.353†	3655.7	3663.4	[500]	ug/L	11:42:40
3	S 181.975 Axial†	656.0	616.8	[1000]	ug/L	11:42:40
3	Sb 206.836†	1359.8	1308.4	[500]	ug/L	11:42:40
3	Se 196.026†	669.7	680.8	[500]	ug/L	11:42:40
3	Si 251.611†	73729.0	72303.7	[2500]	ug/L	11:42:20
3	Sn 189.927†	2500.8	2456.7	[500]	ug/L	11:42:40
3	Ti 334.940†	306458.2	303878.1	[500]	ug/L	11:42:20
3	Tl 190.801†	1429.5	1439.6	[500]	ug/L	11:42:40
3	U 409.014†	15482.1	17718.0	[500]	ug/L	11:42:20
3	V 292.402†	66072.4	66611.4	[500]	ug/L	11:42:20
3	Zn 213.857†	46958.9	45794.9	[500]	ug/L	11:42:20
3	SiO2†	73866.1	72431.7	[5347.5]	ug/L	11:42:56

Mean Data: S0.5

Analyte	Mean Corrected				Calib
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	887679.4	1763.28	0.20%	101.04	%
Sc Radial	4328.6	11.69	0.27%	98.5	%
Y 371.029	737686.1	1275.67	0.17%	99.774	%
Y RADIAL	4707.9	24.27	0.52%	97.57	%
Ag 328.068†	102359.2	391.21	0.38%	[500]	ug/L
Al 396.153Radial†	5501.5	44.48	0.81%	[5000]	ug/L
As 188.979†	1013.1	1.56	0.15%	[500]	ug/L
B 249.677†	19503.8	141.18	0.72%	[500]	ug/L
Ba 233.527†	58698.2	231.37	0.39%	[500]	ug/L
Be 313.107†	1244023.7	4769.82	0.38%	[500]	ug/L
Ca 317.933Radial†	2492.1	22.71	0.91%	[5000]	ug/L
Cd 226.502†	38307.1	233.17	0.61%	[500]	ug/L
Co 228.616†	21776.7	87.92	0.40%	[500]	ug/L
Cr 267.716†	40602.0	213.94	0.53%	[500]	ug/L
Cu 324.752†	158619.5	569.76	0.36%	[500]	ug/L
K 766.490 Radial†	25813.6	105.57	0.41%	[5000]	ug/L
Mg 279.077 IEC†	113.0	1.76	1.56%	[5000]	ug/L
Mn 257.610†	411131.0	1862.30	0.45%	[500]	ug/L
Mo 202.031†	6312.2	20.72	0.33%	[500]	ug/L
Ni 231.604†	17766.0	93.08	0.52%	[500]	ug/L
P 214.914†	3677.4	12.75	0.35%	[2500]	ug/L
Pb 220.353†	3636.0	27.04	0.74%	[500]	ug/L
S 181.975 Axial†	613.1	4.16	0.68%	[1000]	ug/L

Sb 206.836†	1298.4	8.68	0.67%	[500]	ug/L
Se 196.026†	685.9	4.40	0.64%	[500]	ug/L
Si 251.611†	71945.0	328.75	0.46%	[2500]	ug/L
Sn 189.927†	2441.0	14.29	0.59%	[500]	ug/L
Sr 421.552†	76124.9	627.62	0.82%	[500]	ug/L
Ti 334.940†	302476.0	1358.65	0.45%	[500]	ug/L
Tl 190.801†	1440.9	2.78	0.19%	[500]	ug/L
U 409.014†	17566.8	144.42	0.82%	[500]	ug/L
V 292.402†	66370.1	264.40	0.40%	[500]	ug/L
Zn 213.857†	45592.0	185.39	0.41%	[500]	ug/L
SiO2†	72597.9	179.15	0.25%	[5347.5]	ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/22/2010 11:45:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4465.1	4465.1	102 %		11:46:59
1	Y RADIAL	4823.8	4823.8	99.97 %		11:46:59
1	Al 396.153Radial†	11075.5	11007.8	[10000] ug/L		11:46:59
1	Ca 317.933Radial†	5122.2	5022.9	[10000] ug/L		11:46:59
1	Fe 238.204 Radial†	837.4	813.3	[10000] ug/L		11:47:19
1	K 766.490 Radial†	55296.7	51950.8	[10000] ug/L		11:46:59
1	Mg 279.077 IEC†	224.8	218.5	[10000] ug/L		11:47:19
1	Na 589.592 Radial†	34262.8	34425.0	[10000] ug/L		11:46:59
1	Sr 421.552†	157634.6	155174.2	[1000] ug/L		11:46:59
1	Sc 361.383	864410.3	864410.3	98.393 %		11:48:23
1	Y 371.029	720019.7	720019.7	97.384 %		11:48:23
1	Ag 328.068†	206776.4	209710.5	[1000] ug/L		11:48:23
1	As 188.979†	1984.0	2040.8	[1000] ug/L		11:48:43
1	B 249.677†	39156.9	40264.5	[1000] ug/L		11:48:23
1	Ba 233.527†	118270.4	120209.1	[1000] ug/L		11:48:23
1	Be 313.107†	2523160.4	2568219.9	[1000] ug/L		11:48:18
1	Cd 226.502†	76395.8	77821.1	[1000] ug/L		11:48:23
1	Co 228.616†	42584.7	43331.2	[1000] ug/L		11:48:43
1	Cr 267.716†	81877.7	83135.6	[1000] ug/L		11:48:23
1	Cu 324.752†	328865.5	328033.5	[1000] ug/L		11:48:23
1	Mn 257.610†	834617.9	847798.8	[1000] ug/L		11:48:18
1	Mo 202.031†	12666.4	12865.8	[1000] ug/L		11:48:43
1	Ni 231.604†	35599.7	36108.1	[1000] ug/L		11:48:23
1	P 214.914†	7594.6	7522.7	[5000] ug/L		11:48:43
1	Pb 220.353†	7243.5	7414.3	[1000] ug/L		11:48:43
1	S 181.975 Axial†	1255.8	1245.1	[2000] ug/L		11:48:43
1	Sb 206.836†	2662.1	2670.8	[1000] ug/L		11:48:43
1	Se 196.026†	1343.3	1384.6	[1000] ug/L		11:48:43
1	Si 251.611†	145407.4	147258.9	[5000] ug/L		11:48:23
1	Sn 189.927†	4922.4	4989.3	[1000] ug/L		11:48:43
1	Ti 334.940†	632615.4	644116.3	[1000] ug/L		11:48:18
1	Tl 190.801†	2846.0	2920.1	[1000] ug/L		11:48:43
1	U 409.014†	33473.8	36445.7	[1000] ug/L		11:48:23
1	V 292.402†	133104.3	136625.6	[1000] ug/L		11:48:23
1	Zn 213.857†	91639.7	92546.9	[1000] ug/L		11:48:23
1	SiO2†	147098.1	148969.7	[10695] ug/L		11:49:53
2	Sc Radial	4375.3	4375.3	99.5 %		11:47:25
2	Y RADIAL	4728.3	4728.3	97.99 %		11:47:25
2	Al 396.153Radial†	10928.3	11083.6	[10000] ug/L		11:47:25
2	Ca 317.933Radial†	5035.4	5039.1	[10000] ug/L		11:47:25
2	Fe 238.204 Radial†	839.4	832.2	[10000] ug/L		11:47:45
2	K 766.490 Radial†	54427.5	52194.0	[10000] ug/L		11:47:25
2	Mg 279.077 IEC†	222.3	220.4	[10000] ug/L		11:47:45
2	Na 589.592 Radial†	33627.2	34478.2	[10000] ug/L		11:47:25
2	Sr 421.552†	154490.3	155198.1	[1000] ug/L		11:47:25
2	Sc 361.383	880960.5	880960.5	100.28 %		11:48:55
2	Y 371.029	734430.9	734430.9	99.334 %		11:48:55
2	Ag 328.068†	211012.9	209987.2	[1000] ug/L		11:48:55
2	As 188.979†	2004.8	2023.7	[1000] ug/L		11:49:15
2	B 249.677†	40201.0	40558.0	[1000] ug/L		11:48:55
2	Ba 233.527†	120279.0	119954.0	[1000] ug/L		11:48:55
2	Be 313.107†	2493041.1	2490008.4	[1000] ug/L		11:48:50
2	Cd 226.502†	77808.0	77770.7	[1000] ug/L		11:48:55
2	Co 228.616†	42897.2	42829.7	[1000] ug/L		11:49:15
2	Cr 267.716†	83353.1	83043.6	[1000] ug/L		11:48:55
2	Cu 324.752†	336830.3	329697.2	[1000] ug/L		11:48:55
2	Mn 257.610†	823739.5	821014.9	[1000] ug/L		11:48:50
2	Mo 202.031†	12773.0	12730.2	[1000] ug/L		11:49:15
2	Ni 231.604†	36292.0	36118.7	[1000] ug/L		11:48:55

2	P 214.914†	7638.7	7421.6	[5000]	ug/L	11:49:15
2	Pb 220.353†	7290.1	7322.5	[1000]	ug/L	11:49:15
2	S 181.975 Axial†	1277.5	1242.8	[2000]	ug/L	11:49:15
2	Sb 206.836†	2703.1	2660.9	[1000]	ug/L	11:49:15
2	Se 196.026†	1345.7	1361.3	[1000]	ug/L	11:49:15
2	Si 251.611†	148576.9	147643.4	[5000]	ug/L	11:48:55
2	Sn 189.927†	4972.4	4945.2	[1000]	ug/L	11:49:15
2	Ti 334.940†	623217.7	622665.9	[1000]	ug/L	11:48:50
2	Tl 190.801†	2870.3	2889.9	[1000]	ug/L	11:49:15
2	U 409.014†	33974.3	36305.7	[1000]	ug/L	11:48:55
2	V 292.402†	135811.4	136783.8	[1000]	ug/L	11:48:55
2	Zn 213.857†	93509.6	92661.9	[1000]	ug/L	11:48:55
2	SiO2†	146610.7	145675.2	[10695]	ug/L	11:49:58
3	Sc Radial	4355.7	4355.7	99.1	%	11:47:50
3	Y RADIAL	4712.8	4712.8	97.67	%	11:47:50
3	Al 396.153Radial†	10852.8	11056.8	[10000]	ug/L	11:47:50
3	Ca 317.933Radial†	5035.8	5062.4	[10000]	ug/L	11:47:50
3	Fe 238.204 Radial†	842.5	839.1	[10000]	ug/L	11:48:10
3	K 766.490 Radial†	54168.8	52179.3	[10000]	ug/L	11:47:50
3	Mg 279.077 IEC†	224.0	223.2	[10000]	ug/L	11:48:10
3	Na 589.592 Radial†	33384.7	34385.6	[10000]	ug/L	11:47:50
3	Sr 421.552†	153345.0	154741.4	[1000]	ug/L	11:47:50
3	Sc 361.383	864868.4	864868.4	98.445	%	11:49:27
3	Y 371.029	719604.9	719604.9	97.328	%	11:49:27
3	Ag 328.068†	206769.2	209591.9	[1000]	ug/L	11:49:27
3	As 188.979†	2005.7	2061.8	[1000]	ug/L	11:49:47
3	B 249.677†	39303.4	40392.3	[1000]	ug/L	11:49:27
3	Ba 233.527†	118451.8	120329.7	[1000]	ug/L	11:49:27
3	Be 313.107†	2509742.7	2553232.1	[1000]	ug/L	11:49:22
3	Cd 226.502†	76538.9	77925.4	[1000]	ug/L	11:49:27
3	Co 228.616†	42695.3	43420.6	[1000]	ug/L	11:49:47
3	Cr 267.716†	81868.4	83082.0	[1000]	ug/L	11:49:27
3	Cu 324.752†	328638.8	327626.2	[1000]	ug/L	11:49:27
3	Mn 257.610†	830276.0	842939.1	[1000]	ug/L	11:49:22
3	Mo 202.031†	12676.4	12869.0	[1000]	ug/L	11:49:47
3	Ni 231.604†	35690.7	36181.3	[1000]	ug/L	11:49:27
3	P 214.914†	7628.1	7552.5	[5000]	ug/L	11:49:47
3	Pb 220.353†	7278.3	7445.8	[1000]	ug/L	11:49:47
3	S 181.975 Axial†	1267.6	1256.5	[2000]	ug/L	11:49:47
3	Sb 206.836†	2677.0	2684.6	[1000]	ug/L	11:49:47
3	Se 196.026†	1344.3	1384.9	[1000]	ug/L	11:49:47
3	Si 251.611†	145700.5	147478.3	[5000]	ug/L	11:49:27
3	Sn 189.927†	4961.3	5026.1	[1000]	ug/L	11:49:47
3	Ti 334.940†	628718.0	639816.9	[1000]	ug/L	11:49:22
3	Tl 190.801†	2868.4	2941.3	[1000]	ug/L	11:49:47
3	U 409.014†	33486.4	36440.5	[1000]	ug/L	11:49:27
3	V 292.402†	133231.1	136682.8	[1000]	ug/L	11:49:27
3	Zn 213.857†	91947.2	92809.8	[1000]	ug/L	11:49:27
3	SiO2†	147212.4	149006.7	[10695]	ug/L	11:50:03

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	870079.7	9425.77	1.08%	99.038	%
Sc Radial	4398.7	58.30	1.33%	100	%
Y 371.029	724685.2	8442.62	1.17%	98.015	%
Y RADIAL	4755.0	60.10	1.26%	98.55	%
Ag 328.068†	209763.2	202.89	0.10%	[1000]	ug/L
Al 396.153Radial†	11049.4	38.42	0.35%	[10000]	ug/L
As 188.979†	2042.1	19.09	0.93%	[1000]	ug/L
B 249.677†	40404.9	147.17	0.36%	[1000]	ug/L
Ba 233.527†	120164.3	191.82	0.16%	[1000]	ug/L
Be 313.107†	2537153.5	41510.88	1.64%	[1000]	ug/L
Ca 317.933Radial†	5041.5	19.83	0.39%	[10000]	ug/L
Cd 226.502†	77839.1	78.89	0.10%	[1000]	ug/L
Co 228.616†	43193.9	318.49	0.74%	[1000]	ug/L
Cr 267.716†	83087.1	46.21	0.06%	[1000]	ug/L
Cu 324.752†	328452.3	1097.18	0.33%	[1000]	ug/L
Fe 238.204 Radial†	828.2	13.37	1.61%	[10000]	ug/L
K 766.490 Radial†	52108.0	136.37	0.26%	[10000]	ug/L

Mg 279.077 IEC†	220.7	2.40	1.09%	[10000]	ug/L
Mn 257.610†	837250.9	14269.23	1.70%	[1000]	ug/L
Mo 202.031†	12821.7	79.21	0.62%	[1000]	ug/L
Na 589.592 Radial†	34429.6	46.45	0.13%	[10000]	ug/L
Ni 231.604†	36136.0	39.56	0.11%	[1000]	ug/L
P 214.914†	7498.9	68.64	0.92%	[5000]	ug/L
Pb 220.353†	7394.2	64.06	0.87%	[1000]	ug/L
S 181.975 Axial†	1248.1	7.33	0.59%	[2000]	ug/L
Sb 206.836†	2672.1	11.87	0.44%	[1000]	ug/L
Se 196.026†	1376.9	13.50	0.98%	[1000]	ug/L
Si 251.611†	147460.2	192.89	0.13%	[5000]	ug/L
Sn 189.927†	4986.9	40.52	0.81%	[1000]	ug/L
Sr 421.552†	155037.9	257.04	0.17%	[1000]	ug/L
Ti 334.940†	635533.0	11348.69	1.79%	[1000]	ug/L
Tl 190.801†	2917.1	25.82	0.89%	[1000]	ug/L
U 409.014†	36397.3	79.38	0.22%	[1000]	ug/L
V 292.402†	136697.4	80.10	0.06%	[1000]	ug/L
Zn 213.857†	92672.9	131.82	0.14%	[1000]	ug/L
SiO2†	147883.9	1912.88	1.29%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/22/2010 11:52:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4229.9	4229.9	96.2 %		11:54:27
1	Y RADIAL	4584.1	4584.1	95.01 %		11:54:27
1	Al 396.153Radial†	55116.9	57382.6	[50000] ug/L		11:54:07
1	Ca 317.933Radial†	24256.4	25187.8	[50000] ug/L		11:54:07
1	Fe 238.204 Radial†	1593.2	1644.6	[20000] ug/L		11:54:27
1	Mg 279.077 IEC†	1064.0	1102.9	[50000] ug/L		11:54:27
1	Na 589.592 Radial†	66437.7	69737.2	[20000] ug/L		11:54:07
1	Sc 361.383	860611.0	860611.0	97.961 %		11:55:24
1	Y 371.029	711000.5	711000.5	96.164 %		11:55:24
2	Sc Radial	4204.1	4204.1	95.6 %		11:54:52
2	Y RADIAL	4562.9	4562.9	94.56 %		11:54:52
2	Al 396.153Radial†	55040.1	57653.0	[50000] ug/L		11:54:32
2	Ca 317.933Radial†	24268.0	25354.3	[50000] ug/L		11:54:32
2	Fe 238.204 Radial†	1588.2	1649.5	[20000] ug/L		11:54:52
2	Mg 279.077 IEC†	1053.4	1098.6	[50000] ug/L		11:54:52
2	Na 589.592 Radial†	66108.0	69815.2	[20000] ug/L		11:54:32
2	Sc 361.383	858780.7	858780.7	97.752 %		11:55:30
2	Y 371.029	709584.3	709584.3	95.973 %		11:55:30
3	Sc Radial	4210.1	4210.1	95.8 %		11:55:17
3	Y RADIAL	4564.7	4564.7	94.60 %		11:55:17
3	Al 396.153Radial†	54310.7	56810.3	[50000] ug/L		11:54:57
3	Ca 317.933Radial†	23961.7	24998.8	[50000] ug/L		11:54:57
3	Fe 238.204 Radial†	1589.5	1648.5	[20000] ug/L		11:55:17
3	Mg 279.077 IEC†	1060.0	1103.9	[50000] ug/L		11:55:17
3	Na 589.592 Radial†	65240.6	68812.1	[20000] ug/L		11:54:57
3	Sc 361.383	866532.2	866532.2	98.635 %		11:55:35
3	Y 371.029	715717.0	715717.0	96.802 %		11:55:35

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib. Units
Sc 361.383	861974.7	4051.69	0.47%	98.116 %	
Sc Radial	4214.7	13.48	0.32%	95.9 %	
Y 371.029	712100.6	3210.94	0.45%	96.313 %	
Y RADIAL	4570.6	11.79	0.26%	94.72 %	
Al 396.153Radial†	57282.0	430.26	0.75%	[50000] ug/L	
Ca 317.933Radial†	25180.3	177.89	0.71%	[50000] ug/L	
Fe 238.204 Radial†	1647.5	2.58	0.16%	[20000] ug/L	
Mg 279.077 IEC†	1101.8	2.83	0.26%	[50000] ug/L	
Na 589.592 Radial†	69454.8	557.98	0.80%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	208.8	0.00000	0.999953	
Al 396.153Radial	3	Lin Thru 0	0.0	1.144	0.00000	0.999970	
As 188.979	3	Lin Thru 0	0.0	2.039	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	40.12	0.00000	0.999901	
Ba 233.527	3	Lin Thru 0	0.0	119.6	0.00000	0.999955	
Be 313.107	3	Lin Thru 0	0.0	2528	0.00000	0.999970	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5036	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	77.61	0.00000	0.999976	
Co 228.616	3	Lin Thru 0	0.0	43.28	0.00000	0.999989	
Cr 267.716	3	Lin Thru 0	0.0	82.73	0.00000	0.999956	
Cu 324.752	3	Lin Thru 0	0.0	326.2	0.00000	0.999906	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0825	0.00000	0.999998	
K 766.490 Radial	3	Lin Thru 0	0.0	5.202	0.00000	0.999993	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0220	0.00000	0.999997
Mn 257.610	3	Lin Thru 0	0.0	834.5	0.00000	0.999969
Mo 202.031	3	Lin Thru 0	0.0	12.78	0.00000	0.999979
Na 589.592 Radia	2	Lin Thru 0	0.0	3.467	0.00000	0.999994
Ni 231.604	3	Lin Thru 0	0.0	36.02	0.00000	0.999977
P 214.914	3	Lin Thru 0	0.0	1.494	0.00000	0.999970
Pb 220.353	3	Lin Thru 0	0.0	7.371	0.00000	0.999976
S 181.975 Axial	3	Lin Thru 0	0.0	0.6219	0.00000	0.999975
Sb 206.836	3	Lin Thru 0	0.0	2.657	0.00000	0.999936
Se 196.026	3	Lin Thru 0	0.0	1.376	0.00000	0.999999
Si 251.611	3	Lin Thru 0	0.0	29.35	0.00000	0.999953
Sn 189.927	3	Lin Thru 0	0.0	4.966	0.00000	0.999964
Sr 421.552	3	Lin Thru 0	0.0	154.5	0.00000	0.999974
Ti 334.940	3	Lin Thru 0	0.0	629.5	0.00000	0.999812
Tl 190.801	3	Lin Thru 0	0.0	2.911	0.00000	0.999985
U 409.014	3	Lin Thru 0	0.0	36.15	0.00000	0.999900
V 292.402	3	Lin Thru 0	0.0	135.9	0.00000	0.999933
Zn 213.857	3	Lin Thru 0	0.0	92.39	0.00000	0.999977
SiO2	3	Lin Thru 0	0.0	13.78	0.00000	0.999974

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/22/2010 11:57:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4377.6	4377.6	99.6 %		11:59:39
1	Y RADIAL	4772.1	4772.1	98.90 %		11:59:39
1	Al 396.153Radial†	5585.9	5713.2	4969.5 ug/L	4969.5 ppb	11:59:39
1	Ca 317.933Radial†	2503.2	2493.8	4952.1 ug/L	4952.1 ppb	12:00:00
1	Fe 238.204 Radial†	427.3	417.9	5083.5 ug/L	5083.5 ppb	12:00:00
1	K 766.490 Radial†	15469.2	13045.6	2504.6 ug/L	2504.6 ppb	11:59:39
1	Mg 279.077 IEC†	120.9	118.5	5378.0 ug/L	5378.0 ppb	12:00:00
1	Na 589.592 Radial†	7877.6	8604.2	2481.9 ug/L	2481.9 ppb	11:59:39
1	Sr 421.552†	82298.4	82625.3	534.84 ug/L	534.84 ppb	11:59:39
1	Sc 361.383	891967.6	891967.6	101.53 %		12:00:57
1	Y 371.029	744860.9	744860.9	100.74 %		12:00:57
1	Ag 328.068†	55661.3	54379.6	263.61 ug/L	263.61 ppb	12:00:57
1	As 188.979†	976.2	986.0	487.73 ug/L	487.73 ppb	12:01:17
1	B 249.677†	20551.1	20709.5	513.92 ug/L	513.92 ppb	12:00:57
1	Ba 233.527†	61905.0	60979.3	510.98 ug/L	510.98 ppb	12:00:57
1	Be 313.107†	664265.6	658108.7	261.51 ug/L	261.51 ppb	12:00:57
1	Cd 226.502†	39316.8	38902.0	501.12 ug/L	501.12 ppb	12:00:57
1	Co 228.616†	22802.8	22510.3	520.28 ug/L	520.28 ppb	12:00:57
1	Cr 267.716†	41184.6	40484.7	490.39 ug/L	490.39 ppb	12:00:57
1	Cu 324.752†	175980.7	167126.2	512.28 ug/L	512.28 ppb	12:00:57
1	Mn 257.610†	436381.5	429356.4	514.79 ug/L	514.79 ppb	12:00:57
1	Mo 202.031†	6996.2	6883.3	538.85 ug/L	538.85 ppb	12:01:17
1	Ni 231.604†	18625.6	18271.9	506.96 ug/L	506.96 ppb	12:00:57
1	P 214.914†	4030.3	3773.5	2426.0 ug/L	2426.0 ppb	12:01:17
1	Pb 220.353†	3712.6	3709.1	504.80 ug/L	504.80 ppb	12:01:17
1	S 181.975 Axial†	1625.9	1570.2	2524.0 ug/L	2524.0 ppb	12:01:17
1	Sb 206.836†	1411.0	1355.0	529.38 ug/L	529.38 ppb	12:01:17
1	Se 196.026†	3642.7	3607.1	2640.6 ug/L	2640.6 ppb	12:01:17
1	Si 251.611†	144605.7	141903.5	4828.0 ug/L	4828.0 ppb	12:00:57
1	Sn 189.927†	2732.2	2677.6	539.76 ug/L	539.76 ppb	12:01:17
1	Ti 334.940†	317680.5	314063.1	498.75 ug/L	498.75 ppb	12:00:57
1	Tl 190.801†	1560.8	1564.9	541.00 ug/L	541.00 ppb	12:01:17
1	U 409.014†	15515.1	17706.6	488.10 ug/L	488.10 ppb	12:00:57
1	V 292.402†	68815.8	69126.3	515.81 ug/L	515.81 ppb	12:00:57
1	Zn 213.857†	49010.4	47682.5	511.39 ug/L	511.39 ppb	12:00:57
1	SiO2†	143278.1	140588.5	10190 ug/L	10190 ppb	12:02:15
2	Sc Radial	4336.2	4336.2	98.6 %		12:00:05
2	Y RADIAL	4711.3	4711.3	97.64 %		12:00:05
2	Al 396.153Radial†	5507.1	5687.0	4946.6 ug/L	4946.6 ppb	12:00:05
2	Ca 317.933Radial†	2506.7	2521.4	5006.9 ug/L	5006.9 ppb	12:00:25
2	Fe 238.204 Radial†	425.0	419.8	5105.9 ug/L	5105.9 ppb	12:00:25
2	K 766.490 Radial†	15236.5	12958.2	2487.8 ug/L	2487.8 ppb	12:00:05
2	Mg 279.077 IEC†	117.1	115.9	5258.1 ug/L	5258.1 ppb	12:00:25
2	Na 589.592 Radial†	7762.4	8563.1	2470.0 ug/L	2470.0 ppb	12:00:05
2	Sr 421.552†	80972.6	82071.2	531.25 ug/L	531.25 ppb	12:00:05
2	Sc 361.383	892695.7	892695.7	101.61 %		12:01:23
2	Y 371.029	744980.8	744980.8	100.76 %		12:01:23
2	Ag 328.068†	55588.7	54263.5	263.07 ug/L	263.07 ppb	12:01:23
2	As 188.979†	971.3	980.3	484.98 ug/L	484.98 ppb	12:01:43
2	B 249.677†	20642.0	20782.5	515.72 ug/L	515.72 ppb	12:01:23
2	Ba 233.527†	62356.0	61373.5	514.28 ug/L	514.28 ppb	12:01:23
2	Be 313.107†	667298.7	660560.1	262.48 ug/L	262.48 ppb	12:01:23
2	Cd 226.502†	39610.4	39159.4	504.43 ug/L	504.43 ppb	12:01:23
2	Co 228.616†	22947.2	22634.1	523.14 ug/L	523.14 ppb	12:01:23
2	Cr 267.716†	41326.6	40591.3	491.68 ug/L	491.68 ppb	12:01:23
2	Cu 324.752†	176573.7	167568.3	513.63 ug/L	513.63 ppb	12:01:23
2	Mn 257.610†	439082.8	431664.2	517.56 ug/L	517.56 ppb	12:01:23
2	Mo 202.031†	6978.2	6859.9	537.03 ug/L	537.03 ppb	12:01:43
2	Ni 231.604†	18697.7	18328.0	508.52 ug/L	508.52 ppb	12:01:23

2	P 214.914†	4034.4	3774.4	2426.3 ug/L	2426.3 ppb	12:01:43
2	Pb 220.353†	3714.9	3708.4	504.69 ug/L	504.69 ppb	12:01:43
2	S 181.975 Axial†	1620.6	1563.7	2513.4 ug/L	2513.4 ppb	12:01:43
2	Sb 206.836†	1390.6	1333.8	521.41 ug/L	521.41 ppb	12:01:43
2	Se 196.026†	3636.2	3597.8	2633.9 ug/L	2633.9 ppb	12:01:43
2	Si 251.611†	145215.5	142387.5	4844.5 ug/L	4844.5 ppb	12:01:23
2	Sn 189.927†	2748.1	2691.0	542.48 ug/L	542.48 ppb	12:01:43
2	Ti 334.940†	319129.1	315233.4	500.63 ug/L	500.63 ppb	12:01:23
2	Tl 190.801†	1545.3	1548.4	535.34 ug/L	535.34 ppb	12:01:43
2	U 409.014†	15483.7	17663.3	486.90 ug/L	486.90 ppb	12:01:23
2	V 292.402†	69179.8	69429.3	518.00 ug/L	518.00 ppb	12:01:23
2	Zn 213.857†	49254.0	47882.8	513.55 ug/L	513.55 ppb	12:01:23
2	SiO2†	144175.2	141356.3	10246 ug/L	10246 ppb	12:02:20
3	Sc Radial	4361.9	4361.9	99.2 %		12:00:30
3	Y RADIAL	4781.3	4781.3	99.09 %		12:00:30
3	Al 396.153Radial†	5569.1	5716.5	4972.5 ug/L	4972.5 ppb	12:00:30
3	Ca 317.933Radial†	2494.4	2493.9	4952.4 ug/L	4952.4 ppb	12:00:50
3	Fe 238.204 Radial†	428.0	420.2	5111.5 ug/L	5111.5 ppb	12:00:50
3	K 766.490 Radial†	15378.4	13010.0	2497.7 ug/L	2497.7 ppb	12:00:30
3	Mg 279.077 IEC†	118.9	116.9	5305.8 ug/L	5305.8 ppb	12:00:50
3	Na 589.592 Radial†	7802.0	8556.6	2468.2 ug/L	2468.2 ppb	12:00:30
3	Sr 421.552†	81949.8	82571.7	534.49 ug/L	534.49 ppb	12:00:30
3	Sc 361.383	892372.7	892372.7	101.58 %		12:01:49
3	Y 371.029	744235.3	744235.3	100.66 %		12:01:49
3	Ag 328.068†	55467.4	54163.9	262.60 ug/L	262.60 ppb	12:01:49
3	As 188.979†	965.2	974.6	482.20 ug/L	482.20 ppb	12:02:10
3	B 249.677†	20626.2	20774.3	515.52 ug/L	515.52 ppb	12:01:49
3	Ba 233.527†	62149.4	61192.3	512.76 ug/L	512.76 ppb	12:01:49
3	Be 313.107†	664698.0	658237.4	261.56 ug/L	261.56 ppb	12:01:49
3	Cd 226.502†	39458.0	39023.4	502.68 ug/L	502.68 ppb	12:01:49
3	Co 228.616†	22857.1	22553.5	521.28 ug/L	521.28 ppb	12:01:49
3	Cr 267.716†	41185.4	40467.0	490.18 ug/L	490.18 ppb	12:01:49
3	Cu 324.752†	175770.2	166840.2	511.40 ug/L	511.40 ppb	12:01:49
3	Mn 257.610†	437606.6	430367.4	516.01 ug/L	516.01 ppb	12:01:49
3	Mo 202.031†	6964.6	6849.0	536.18 ug/L	536.18 ppb	12:02:10
3	Ni 231.604†	18653.1	18290.7	507.48 ug/L	507.48 ppb	12:01:49
3	P 214.914†	4015.3	3757.0	2415.1 ug/L	2415.1 ppb	12:02:10
3	Pb 220.353†	3693.8	3689.0	502.06 ug/L	502.06 ppb	12:02:10
3	S 181.975 Axial†	1629.3	1572.8	2528.1 ug/L	2528.1 ppb	12:02:10
3	Sb 206.836†	1408.1	1351.5	527.98 ug/L	527.98 ppb	12:02:10
3	Se 196.026†	3633.8	3596.7	2633.1 ug/L	2633.1 ppb	12:02:10
3	Si 251.611†	144698.7	141930.4	4829.0 ug/L	4829.0 ppb	12:01:49
3	Sn 189.927†	2715.1	2659.5	536.11 ug/L	536.11 ppb	12:02:10
3	Ti 334.940†	318276.7	314507.9	499.46 ug/L	499.46 ppb	12:01:49
3	Tl 190.801†	1545.1	1548.7	535.44 ug/L	535.44 ppb	12:02:10
3	U 409.014†	15429.9	17615.8	485.59 ug/L	485.59 ppb	12:01:49
3	V 292.402†	69085.8	69361.4	517.49 ug/L	517.49 ppb	12:01:49
3	Zn 213.857†	49169.8	47817.5	512.85 ug/L	512.85 ppb	12:01:49
3	SiO2†	146324.1	143523.2	10403 ug/L	10403 ppb	12:02:25

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892345.4	101.57 %	0.042			0.04%
Sc Radial	4358.6	99.2 %	0.48			0.48%
Y 371.029	744692.3	100.72 %	0.054			0.05%
Y RADIAL	4754.9	98.54 %	0.789			0.80%
Ag 328.068†	54269.0	263.10 ug/L	0.508	263.10 ppb	0.508	0.19%
QC value within limits for Ag 328.068 Recovery = 105.24%						
Al 396.153Radial†	5705.6	4962.8 ug/L	14.14	4962.8 ppb	14.14	0.28%
QC value within limits for Al 396.153Radial Recovery = 99.26%						
As 188.979†	980.3	484.97 ug/L	2.767	484.97 ppb	2.767	0.57%
QC value within limits for As 188.979 Recovery = 96.99%						
B 249.677†	20755.4	515.05 ug/L	0.990	515.05 ppb	0.990	0.19%
QC value within limits for B 249.677 Recovery = 103.01%						
Ba 233.527†	61181.7	512.67 ug/L	1.652	512.67 ppb	1.652	0.32%
QC value within limits for Ba 233.527 Recovery = 102.53%						
Be 313.107†	658968.7	261.85 ug/L	0.548	261.85 ppb	0.548	0.21%
QC value within limits for Be 313.107 Recovery = 104.74%						
Ca 317.933Radial†	2503.0	4970.5 ug/L	31.56	4970.5 ppb	31.56	0.64%

QC value within limits for Ca 317.933 Radial Recovery = 99.41%							
Cd 226.502†	39028.3	502.74 ug/L	1.658	502.74 ppb	1.658	0.33%	
QC value within limits for Cd 226.502 Recovery = 100.55%							
Co 228.616†	22565.9	521.57 ug/L	1.449	521.57 ppb	1.449	0.28%	
QC value within limits for Co 228.616 Recovery = 104.31%							
Cr 267.716†	40514.3	490.75 ug/L	0.814	490.75 ppb	0.814	0.17%	
QC value within limits for Cr 267.716 Recovery = 98.15%							
Cu 324.752†	167178.2	512.44 ug/L	1.124	512.44 ppb	1.124	0.22%	
QC value within limits for Cu 324.752 Recovery = 102.49%							
Fe 238.204 Radial†	419.3	5100.3 ug/L	14.82	5100.3 ppb	14.82	0.29%	
QC value within limits for Fe 238.204 Radial Recovery = 102.01%							
K 766.490 Radial†	13004.6	2496.7 ug/L	8.46	2496.7 ppb	8.46	0.34%	
QC value within limits for K 766.490 Radial Recovery = 99.87%							
Mg 279.077 IEC†	117.1	5314.0 ug/L	60.38	5314.0 ppb	60.38	1.14%	
QC value within limits for Mg 279.077 IEC Recovery = 106.28%							
Mn 257.610†	430462.7	516.12 ug/L	1.390	516.12 ppb	1.390	0.27%	
QC value within limits for Mn 257.610 Recovery = 103.22%							
Mo 202.031†	6864.1	537.36 ug/L	1.366	537.36 ppb	1.366	0.25%	
QC value within limits for Mo 202.031 Recovery = 107.47%							
Na 589.592 Radial†	8574.6	2473.4 ug/L	7.45	2473.4 ppb	7.45	0.30%	
QC value within limits for Na 589.592 Radial Recovery = 98.93%							
Ni 231.604†	18296.9	507.66 ug/L	0.791	507.66 ppb	0.791	0.16%	
QC value within limits for Ni 231.604 Recovery = 101.53%							
P 214.914†	3768.3	2422.5 ug/L	6.41	2422.5 ppb	6.41	0.26%	
QC value within limits for P 214.914 Recovery = 96.90%							
Pb 220.353†	3702.2	503.85 ug/L	1.551	503.85 ppb	1.551	0.31%	
QC value within limits for Pb 220.353 Recovery = 100.77%							
S 181.975 Axial†	1568.9	2521.9 ug/L	7.58	2521.9 ppb	7.58	0.30%	
QC value within limits for S 181.975 Axial Recovery = 100.87%							
Sb 206.836†	1346.8	526.25 ug/L	4.256	526.25 ppb	4.256	0.81%	
QC value within limits for Sb 206.836 Recovery = 105.25%							
Se 196.026†	3600.6	2635.9 ug/L	4.12	2635.9 ppb	4.12	0.16%	
QC value within limits for Se 196.026 Recovery = 105.43%							
Si 251.611†	142073.8	4833.9 ug/L	9.27	4833.9 ppb	9.27	0.19%	
QC value within limits for Si 251.611 Recovery = 96.68%							
Sn 189.927†	2676.0	539.45 ug/L	3.192	539.45 ppb	3.192	0.59%	
QC value within limits for Sn 189.927 Recovery = 107.89%							
Sr 421.552†	82422.7	533.52 ug/L	1.979	533.52 ppb	1.979	0.37%	
QC value within limits for Sr 421.552 Recovery = 106.70%							
Ti 334.940†	314601.5	499.61 ug/L	0.947	499.61 ppb	0.947	0.19%	
QC value within limits for Ti 334.940 Recovery = 99.92%							
Tl 190.801†	1554.0	537.26 ug/L	3.240	537.26 ppb	3.240	0.60%	
QC value within limits for Tl 190.801 Recovery = 107.45%							
U 409.014†	17661.9	486.87 ug/L	1.257	486.87 ppb	1.257	0.26%	
QC value within limits for U 409.014 Recovery = 97.37%							
V 292.402†	69305.7	517.10 ug/L	1.147	517.10 ppb	1.147	0.22%	
QC value within limits for V 292.402 Recovery = 103.42%							
Zn 213.857†	47794.2	512.60 ug/L	1.099	512.60 ppb	1.099	0.21%	
QC value within limits for Zn 213.857 Recovery = 102.52%							
SiO2†	141822.7	10279 ug/L	110.5	10279 ppb	110.5	1.07%	
QC value within limits for SiO2 Recovery = 96.11%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/22/2010 12:04:36

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	4387.2	4387.2	99.8 %		12:06:29
1	Y RADIAL	4766.2	4766.2	98.78 %		12:06:29
1	Al 396.153Radial†	-101.2	2.9	2.5005 ug/L	2.5005 ppb	12:06:49
1	Ca 317.933Radial†	13.4	-6.4	-12.659 ug/L	-12.659 ppb	12:06:49
1	Fe 238.204 Radial†	9.6	-1.5	-18.467 ug/L	-18.467 ppb	12:06:49
1	K 766.490 Radial†	2406.0	-76.9	-14.790 ug/L	-14.790 ppb	12:06:29
1	Mg 279.077 IEC†	0.1	-2.8	-126.57 ug/L	-126.57 ppb	12:06:49
1	Na 589.592 Radial†	-603.0	89.9	25.918 ug/L	25.918 ppb	12:06:29
1	Sr 421.552†	23.6	10.2	0.0659 ug/L	0.0659 ppb	12:06:29
1	Sc 361.383	874292.7	874292.7	99.518 %		12:07:46
1	Y 371.029	750282.1	750282.1	101.48 %		12:07:46
1	Ag 328.068†	266.5	-175.1	-0.8465 ug/L	-0.8465 ppb	12:07:46
1	As 188.979†	-15.4	9.0	4.4163 ug/L	4.4163 ppb	12:08:06
1	B 249.677†	-329.2	137.3	3.4251 ug/L	3.4251 ppb	12:08:06
1	Ba 233.527†	5.2	12.3	0.1024 ug/L	0.1024 ppb	12:08:06
1	Be 313.107†	-3829.1	4.6	0.0019 ug/L	0.0019 ppb	12:07:46
1	Cd 226.502†	-162.1	14.8	0.1927 ug/L	0.1927 ppb	12:08:06
1	Co 228.616†	-62.4	-11.7	-0.2693 ug/L	-0.2693 ppb	12:08:06
1	Cr 267.716†	43.8	-35.3	-0.4300 ug/L	-0.4300 ppb	12:08:06
1	Cu 324.752†	6061.7	-111.8	-0.3452 ug/L	-0.3452 ppb	12:07:46
1	Mn 257.610†	425.8	-21.9	-0.0229 ug/L	-0.0229 ppb	12:08:06
1	Mo 202.031†	5.9	-1.7	-0.1308 ug/L	-0.1308 ppb	12:08:06
1	Ni 231.604†	68.7	-4.0	-0.1103 ug/L	-0.1103 ppb	12:08:06
1	P 214.914†	188.8	-6.3	-4.1247 ug/L	-4.1247 ppb	12:08:06
1	Pb 220.353†	-43.1	9.2	1.2546 ug/L	1.2546 ppb	12:08:06
1	S 181.975 Axial†	32.0	1.0	1.6295 ug/L	1.6295 ppb	12:08:06
1	Sb 206.836†	44.8	10.3	3.8554 ug/L	3.8554 ppb	12:08:06
1	Se 196.026†	-27.1	-7.9	-5.8321 ug/L	-5.8321 ppb	12:08:06
1	Si 251.611†	525.2	4.5	0.1536 ug/L	0.1536 ppb	12:08:06
1	Sn 189.927†	7.9	-5.5	-1.1131 ug/L	-1.1131 ppb	12:08:06
1	Ti 334.940†	-1135.7	28.1	0.0523 ug/L	0.0523 ppb	12:07:46
1	Tl 190.801†	-26.4	1.1	0.3633 ug/L	0.3633 ppb	12:08:06
1	U 409.014†	-2320.4	93.7	2.5944 ug/L	2.5944 ppb	12:07:46
1	V 292.402†	-1342.9	-1.9	-0.0107 ug/L	-0.0107 ppb	12:07:46
1	Zn 213.857†	515.3	-71.7	-0.7718 ug/L	-0.7718 ppb	12:08:06
1	SiO2†	522.7	-5.4	-0.3917 ug/L	-0.3917 ppb	12:09:17
2	Sc Radial	4337.2	4337.2	98.7 %		12:06:54
2	Y RADIAL	4778.3	4778.3	99.03 %		12:06:54
2	Al 396.153Radial†	-104.7	-1.9	-1.6574 ug/L	-1.6574 ppb	12:07:14
2	Ca 317.933Radial†	14.0	-5.6	-11.090 ug/L	-11.090 ppb	12:07:14
2	Fe 238.204 Radial†	11.9	0.9	10.927 ug/L	10.927 ppb	12:07:14
2	K 766.490 Radial†	2308.7	-147.7	-28.395 ug/L	-28.395 ppb	12:06:54
2	Mg 279.077 IEC†	0.9	-2.0	-90.212 ug/L	-90.212 ppb	12:07:14
2	Na 589.592 Radial†	-717.3	-32.9	-9.4920 ug/L	-9.4920 ppb	12:06:54
2	Sr 421.552†	32.8	19.7	0.1278 ug/L	0.1278 ppb	12:06:54
2	Sc 361.383	873252.1	873252.1	99.400 %		12:08:11
2	Y 371.029	749371.9	749371.9	101.35 %		12:08:11
2	Ag 328.068†	306.9	-134.2	-0.6386 ug/L	-0.6386 ppb	12:08:11
2	As 188.979†	-24.3	-0.0	-0.0168 ug/L	-0.0168 ppb	12:08:31
2	B 249.677†	-336.9	129.1	3.2172 ug/L	3.2172 ppb	12:08:31
2	Ba 233.527†	-9.9	-2.8	-0.0231 ug/L	-0.0231 ppb	12:08:31
2	Be 313.107†	-3879.7	-50.9	-0.0203 ug/L	-0.0203 ppb	12:08:11
2	Cd 226.502†	-163.7	13.0	0.1655 ug/L	0.1655 ppb	12:08:31
2	Co 228.616†	-54.0	-3.2	-0.0746 ug/L	-0.0746 ppb	12:08:31
2	Cr 267.716†	65.2	-13.7	-0.1646 ug/L	-0.1646 ppb	12:08:31
2	Cu 324.752†	6014.3	-152.2	-0.4653 ug/L	-0.4653 ppb	12:08:11
2	Mn 257.610†	409.3	-37.9	-0.0407 ug/L	-0.0407 ppb	12:08:31
2	Mo 202.031†	9.8	2.3	0.1830 ug/L	0.1830 ppb	12:08:31
2	Ni 231.604†	51.3	-21.5	-0.5956 ug/L	-0.5956 ppb	12:08:31

2	P 214.914†	198.1	3.3	2.3324 ug/L	2.3324 ppb	12:08:31
2	Pb 220.353†	-38.1	14.2	1.9244 ug/L	1.9244 ppb	12:08:31
2	S 181.975 Axial†	34.5	3.5	5.6910 ug/L	5.6910 ppb	12:08:31
2	Sb 206.836†	47.0	12.5	4.7645 ug/L	4.7645 ppb	12:08:31
2	Se 196.026†	-27.1	-7.9	-5.7404 ug/L	-5.7404 ppb	12:08:31
2	Si 251.611†	509.1	-11.1	-0.3790 ug/L	-0.3790 ppb	12:08:31
2	Sn 189.927†	27.0	13.7	2.7545 ug/L	2.7545 ppb	12:08:31
2	Ti 334.940†	-1205.3	-43.2	-0.0622 ug/L	-0.0622 ppb	12:08:11
2	Tl 190.801†	-18.3	9.2	3.1616 ug/L	3.1616 ppb	12:08:31
2	U 409.014†	-2458.6	-48.1	-1.3321 ug/L	-1.3321 ppb	12:08:11
2	V 292.402†	-1348.3	-9.0	-0.0695 ug/L	-0.0695 ppb	12:08:11
2	Zn 213.857†	526.7	-59.6	-0.6421 ug/L	-0.6421 ppb	12:08:31
2	SiO2†	535.5	8.0	0.5771 ug/L	0.5771 ppb	12:09:37
3	Sc Radial	4284.8	4284.8	97.5 %		12:07:19
3	Y RADIAL	4702.6	4702.6	97.46 %		12:07:19
3	Al 396.153Radial†	-100.2	1.4	1.2003 ug/L	1.2003 ppb	12:07:39
3	Ca 317.933Radial†	16.5	-2.8	-5.5823 ug/L	-5.5823 ppb	12:07:39
3	Fe 238.204 Radial†	10.4	-0.5	-5.6409 ug/L	-5.6409 ppb	12:07:39
3	K 766.490 Radial†	2371.9	-54.2	-10.417 ug/L	-10.417 ppb	12:07:19
3	Mg 279.077 IEC†	0.9	-1.9	-86.236 ug/L	-86.236 ppb	12:07:39
3	Na 589.592 Radial†	-740.8	-66.0	-19.030 ug/L	-19.030 ppb	12:07:19
3	Sr 421.552†	18.8	5.8	0.0378 ug/L	0.0378 ppb	12:07:19
3	Sc 361.383	864481.3	864481.3	98.401 %		12:08:36
3	Y 371.029	735970.9	735970.9	99.542 %		12:08:36
3	Ag 328.068†	299.6	-138.5	-0.6679 ug/L	-0.6679 ppb	12:08:36
3	As 188.979†	-23.0	1.1	0.5360 ug/L	0.5360 ppb	12:08:56
3	B 249.677†	-391.8	70.0	1.7458 ug/L	1.7458 ppb	12:08:56
3	Ba 233.527†	-6.9	0.1	-0.0002 ug/L	-0.0002 ppb	12:08:56
3	Be 313.107†	-3911.4	-122.8	-0.0486 ug/L	-0.0486 ppb	12:08:36
3	Cd 226.502†	-180.0	-5.3	-0.0670 ug/L	-0.0670 ppb	12:08:56
3	Co 228.616†	-63.1	-13.0	-0.2989 ug/L	-0.2989 ppb	12:08:56
3	Cr 267.716†	67.3	-10.9	-0.1339 ug/L	-0.1339 ppb	12:08:56
3	Cu 324.752†	6062.6	-41.8	-0.1295 ug/L	-0.1295 ppb	12:08:36
3	Mn 257.610†	413.5	-29.5	-0.0324 ug/L	-0.0324 ppb	12:08:56
3	Mo 202.031†	18.9	11.7	0.9114 ug/L	0.9114 ppb	12:08:56
3	Ni 231.604†	86.4	14.7	0.4095 ug/L	0.4095 ppb	12:08:56
3	P 214.914†	202.7	10.0	6.7293 ug/L	6.7293 ppb	12:08:56
3	Pb 220.353†	-46.2	5.6	0.7595 ug/L	0.7595 ppb	12:08:56
3	S 181.975 Axial†	31.1	0.4	0.7227 ug/L	0.7227 ppb	12:08:56
3	Sb 206.836†	46.3	12.3	4.6469 ug/L	4.6469 ppb	12:08:56
3	Se 196.026†	-18.6	0.4	0.2883 ug/L	0.2883 ppb	12:08:56
3	Si 251.611†	512.0	-3.0	-0.1122 ug/L	-0.1122 ppb	12:08:56
3	Sn 189.927†	13.2	-0.1	-0.0138 ug/L	-0.0138 ppb	12:08:56
3	Ti 334.940†	-1154.1	-3.5	-0.0002 ug/L	-0.0002 ppb	12:08:36
3	Tl 190.801†	-38.5	-11.5	-3.9444 ug/L	-3.9444 ppb	12:08:56
3	U 409.014†	-2311.8	75.9	2.1001 ug/L	2.1001 ppb	12:08:36
3	V 292.402†	-1372.1	-46.9	-0.3293 ug/L	-0.3293 ppb	12:08:36
3	Zn 213.857†	524.7	-56.2	-0.6099 ug/L	-0.6099 ppb	12:08:56
3	SiO2†	538.3	16.3	1.1608 ug/L	1.1608 ppb	12:09:57

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	870675.4	99.106 %	0.6135			0.62%
Sc Radial	4336.4	98.6 %	1.17			1.18%
Y 371.029	745208.3	100.79 %	1.084			1.08%
Y RADIAL	4749.1	98.42 %	0.843			0.86%
Ag 328.068†	-149.3	-0.7177 ug/L	0.11255	-0.7177 ppb	0.11255	15.68%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.8	0.6811 ug/L	2.12700	0.6811 ppb	2.12700	312.27%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.4	1.6452 ug/L	2.41571	1.6452 ppb	2.41571	146.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	112.1	2.7960 ug/L	0.91542	2.7960 ppb	0.91542	32.74%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.2	0.0264 ug/L	0.06684	0.0264 ppb	0.06684	253.22%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-56.4	-0.0223 ug/L	0.02531	-0.0223 ppb	0.02531	113.35%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-4.9	-9.7770 ug/L	3.71648	-9.7770 ppb	3.71648	38.01%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	7.5	0.0971 ug/L	0.14273	0.0971 ppb	0.14273	147.04%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-9.3	-0.2143 ug/L	0.12186	-0.2143 ppb	0.12186	56.87%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-20.0	-0.2428 ug/L	0.16282	-0.2428 ppb	0.16282	67.05%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-101.9	-0.3133 ug/L	0.17017	-0.3133 ppb	0.17017	54.31%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-0.4	-4.3937 ug/L	14.73695	-4.3937 ppb	14.73695	335.41%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-93.0	-17.867 ug/L	9.3760	-17.867 ppb	9.3760	52.48%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-2.2	-101.01 ug/L	22.230	-101.01 ppb	22.230	22.01%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-29.8	-0.0320 ug/L	0.00888	-0.0320 ppb	0.00888	27.78%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	4.1	0.3212 ug/L	0.53465	0.3212 ppb	0.53465	166.45%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-3.0	-0.8679 ug/L	23.68270	-0.8679 ppb	23.68270	>999.9%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-3.6	-0.0988 ug/L	0.50265	-0.0988 ppb	0.50265	508.80%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	2.4	1.6457 ug/L	5.45946	1.6457 ppb	5.45946	331.75%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	9.7	1.3128 ug/L	0.58462	1.3128 ppb	0.58462	44.53%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	1.7	2.6811 ug/L	2.64579	2.6811 ppb	2.64579	98.68%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	11.7	4.4222 ug/L	0.49443	4.4222 ppb	0.49443	11.18%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-5.2	-3.7614 ug/L	3.50743	-3.7614 ppb	3.50743	93.25%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-3.2	-0.1125 ug/L	0.26629	-0.1125 ppb	0.26629	236.70%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	2.7	0.5425 ug/L	1.99288	0.5425 ppb	1.99288	367.34%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	11.9	0.0772 ug/L	0.04604	0.0772 ppb	0.04604	59.67%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-6.2	-0.0034 ug/L	0.05727	-0.0034 ppb	0.05727	>999.9%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-0.4	-0.1398 ug/L	3.57964	-0.1398 ppb	3.57964	>999.9%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	40.5	1.1208 ug/L	2.13859	1.1208 ppb	2.13859	190.81%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-19.3	-0.1365 ug/L	0.16953	-0.1365 ppb	0.16953	124.18%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-62.5	-0.6746 ug/L	0.08567	-0.6746 ppb	0.08567	12.70%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		6.3	0.4487 ug/L	0.78419	0.4487 ppb	0.78419	174.76%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 2/22/2010 12:12:08

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	4342.8	4342.8	98.8 %		12:14:01
1	Y RADIAL	4777.0	4777.0	99.00 %		12:14:01
1	Al 396.153Radial†	134.1	239.9	209.30 ug/L	209.30 ppb	12:14:21
1	Ca 317.933Radial†	116.3	98.0	194.54 ug/L	194.54 ppb	12:14:21
1	Fe 238.204 Radial†	18.4	7.5	91.079 ug/L	91.079 ppb	12:14:21
1	K 766.490 Radial†	3182.4	733.6	140.84 ug/L	140.84 ppb	12:14:01
1	Mg 279.077 IEC†	7.0	4.2	191.25 ug/L	191.25 ppb	12:14:21
1	Na 589.592 Radial†	363.2	1061.7	306.24 ug/L	306.24 ppb	12:14:01
1	Sr 421.552†	789.8	785.9	5.0861 ug/L	5.0861 ppb	12:14:01
1	Sc 361.383	892891.5	892891.5	101.64 %		12:15:18
1	Y 371.029	752692.5	752692.5	101.80 %		12:15:18
1	Ag 328.068†	1359.1	894.3	4.2801 ug/L	4.2801 ppb	12:15:18
1	As 188.979†	35.6	59.5	29.206 ug/L	29.206 ppb	12:15:38
1	B 249.677†	1540.7	1984.0	49.426 ug/L	49.426 ppb	12:15:18
1	Ba 233.527†	614.5	611.8	5.1274 ug/L	5.1274 ppb	12:15:38
1	Be 313.107†	8928.3	12636.8	5.0114 ug/L	5.0114 ppb	12:15:18
1	Cd 226.502†	217.9	392.0	5.0559 ug/L	5.0559 ppb	12:15:38
1	Co 228.616†	175.0	223.2	5.1688 ug/L	5.1688 ppb	12:15:38
1	Cr 267.716†	484.0	396.8	4.7889 ug/L	4.7889 ppb	12:15:38
1	Cu 324.752†	9381.7	3027.9	9.2525 ug/L	9.2525 ppb	12:15:18
1	Mn 257.610†	9246.8	8648.3	10.365 ug/L	10.365 ppb	12:15:18
1	Mo 202.031†	136.7	127.0	9.9422 ug/L	9.9422 ppb	12:15:38
1	Ni 231.604†	254.5	177.3	4.9204 ug/L	4.9204 ppb	12:15:38
1	P 214.914†	405.8	203.3	134.26 ug/L	134.26 ppb	12:15:38
1	Pb 220.353†	31.4	83.4	11.366 ug/L	11.366 ppb	12:15:38
1	S 181.975 Axial†	94.2	61.5	98.833 ug/L	98.833 ppb	12:15:38
1	Sb 206.836†	49.6	14.0	5.6326 ug/L	5.6326 ppb	12:15:38
1	Se 196.026†	24.2	43.2	31.721 ug/L	31.721 ppb	12:15:38
1	Si 251.611†	3334.3	2757.4	93.822 ug/L	93.822 ppb	12:15:38
1	Sn 189.927†	62.0	47.5	9.5977 ug/L	9.5977 ppb	12:15:38
1	Ti 334.940†	2128.4	3263.5	5.1666 ug/L	5.1666 ppb	12:15:18
1	Tl 190.801†	35.8	62.8	21.650 ug/L	21.650 ppb	12:15:38
1	U 409.014†	-250.8	2178.5	60.239 ug/L	60.239 ppb	12:15:18
1	V 292.402†	-669.3	688.9	5.3075 ug/L	5.3075 ppb	12:15:18
1	Zn 213.857†	1519.2	905.2	9.7400 ug/L	9.7400 ppb	12:15:38
1	SiO2†	3381.8	2796.7	202.73 ug/L	202.73 ppb	12:16:34
2	Sc Radial	4343.0	4343.0	98.8 %		12:14:26
2	Y RADIAL	4765.0	4765.0	98.75 %		12:14:26
2	Al 396.153Radial†	125.0	230.7	201.25 ug/L	201.25 ppb	12:14:46
2	Ca 317.933Radial†	118.6	100.3	199.20 ug/L	199.20 ppb	12:14:46
2	Fe 238.204 Radial†	18.5	7.6	92.027 ug/L	92.027 ppb	12:14:46
2	K 766.490 Radial†	3094.6	644.6	123.72 ug/L	123.72 ppb	12:14:26
2	Mg 279.077 IEC†	8.3	5.5	249.41 ug/L	249.41 ppb	12:14:46
2	Na 589.592 Radial†	382.6	1081.3	311.89 ug/L	311.89 ppb	12:14:26
2	Sr 421.552†	754.2	749.8	4.8525 ug/L	4.8525 ppb	12:14:26
2	Sc 361.383	876200.6	876200.6	99.735 %		12:15:44
2	Y 371.029	739058.4	739058.4	99.959 %		12:15:44
2	Ag 328.068†	1304.5	865.0	4.1424 ug/L	4.1424 ppb	12:15:44
2	As 188.979†	30.9	55.4	27.228 ug/L	27.228 ppb	12:16:04
2	B 249.677†	1468.3	1940.2	48.336 ug/L	48.336 ppb	12:15:44
2	Ba 233.527†	594.8	603.6	5.0577 ug/L	5.0577 ppb	12:16:04
2	Be 313.107†	8655.4	12530.6	4.9688 ug/L	4.9688 ppb	12:15:44
2	Cd 226.502†	217.9	396.1	5.1080 ug/L	5.1080 ppb	12:16:04
2	Co 228.616†	153.0	204.5	4.7372 ug/L	4.7372 ppb	12:16:04
2	Cr 267.716†	461.0	382.9	4.6214 ug/L	4.6214 ppb	12:16:04
2	Cu 324.752†	9242.1	3063.7	9.3657 ug/L	9.3657 ppb	12:15:44
2	Mn 257.610†	9125.6	8700.1	10.424 ug/L	10.424 ppb	12:15:44
2	Mo 202.031†	138.4	131.2	10.274 ug/L	10.274 ppb	12:16:04
2	Ni 231.604†	266.7	194.4	5.3940 ug/L	5.3940 ppb	12:16:04

2	P 214.914†	398.0	203.1	134.09 ug/L	134.09 ppb	12:16:04
2	Pb 220.353†	27.9	80.5	10.971 ug/L	10.971 ppb	12:16:04
2	S 181.975 Axial†	91.4	60.5	97.191 ug/L	97.191 ppb	12:16:04
2	Sb 206.836†	60.4	25.8	10.066 ug/L	10.066 ppb	12:16:04
2	Se 196.026†	20.4	39.8	29.277 ug/L	29.277 ppb	12:16:04
2	Si 251.611†	3330.4	2816.0	95.814 ug/L	95.814 ppb	12:16:04
2	Sn 189.927†	57.1	43.8	8.8417 ug/L	8.8417 ppb	12:16:04
2	Ti 334.940†	1952.0	3126.5	4.9474 ug/L	4.9474 ppb	12:15:44
2	Tl 190.801†	27.2	54.9	18.913 ug/L	18.913 ppb	12:16:04
2	U 409.014†	-450.1	1974.0	54.581 ug/L	54.581 ppb	12:15:44
2	V 292.402†	-730.8	614.7	4.7567 ug/L	4.7567 ppb	12:15:44
2	Zn 213.857†	1523.0	937.6	10.087 ug/L	10.087 ppb	12:16:04
2	SiO2†	3416.5	2894.9	209.84 ug/L	209.84 ppb	12:16:39
3	Sc Radial	4393.6	4393.6	100.0 %		12:14:51
3	Y RADIAL	4780.9	4780.9	99.08 %		12:14:51
3	Al 396.153Radial†	125.4	229.7	200.35 ug/L	200.35 ppb	12:15:12
3	Ca 317.933Radial†	123.9	104.2	206.89 ug/L	206.89 ppb	12:15:12
3	Fe 238.204 Radial†	19.0	7.9	96.242 ug/L	96.242 ppb	12:15:12
3	K 766.490 Radial†	3093.9	607.9	116.66 ug/L	116.66 ppb	12:14:51
3	Mg 279.077 IEC†	6.8	3.9	178.57 ug/L	178.57 ppb	12:15:12
3	Na 589.592 Radial†	377.8	1072.0	309.21 ug/L	309.21 ppb	12:14:51
3	Sr 421.552†	787.7	774.6	5.0127 ug/L	5.0127 ppb	12:14:51
3	Sc 361.383	882741.1	882741.1	100.48 %		12:16:09
3	Y 371.029	744092.5	744092.5	100.64 %		12:16:09
3	Ag 328.068†	1337.6	888.2	4.2573 ug/L	4.2573 ppb	12:16:09
3	As 188.979†	36.4	60.7	29.792 ug/L	29.792 ppb	12:16:29
3	B 249.677†	1456.9	1918.0	47.782 ug/L	47.782 ppb	12:16:09
3	Ba 233.527†	593.3	597.6	5.0098 ug/L	5.0098 ppb	12:16:29
3	Be 313.107†	8783.1	12593.4	4.9938 ug/L	4.9938 ppb	12:16:09
3	Cd 226.502†	214.0	390.6	5.0372 ug/L	5.0372 ppb	12:16:29
3	Co 228.616†	154.7	205.0	4.7497 ug/L	4.7497 ppb	12:16:29
3	Cr 267.716†	472.1	390.5	4.7151 ug/L	4.7151 ppb	12:16:29
3	Cu 324.752†	9368.1	3120.5	9.5394 ug/L	9.5394 ppb	12:16:09
3	Mn 257.610†	9182.2	8688.6	10.414 ug/L	10.414 ppb	12:16:09
3	Mo 202.031†	138.0	129.8	10.161 ug/L	10.161 ppb	12:16:29
3	Ni 231.604†	258.6	184.4	5.1156 ug/L	5.1156 ppb	12:16:29
3	P 214.914†	408.1	210.2	138.82 ug/L	138.82 ppb	12:16:29
3	Pb 220.353†	25.0	77.3	10.546 ug/L	10.546 ppb	12:16:29
3	S 181.975 Axial†	88.1	56.5	90.762 ug/L	90.762 ppb	12:16:29
3	Sb 206.836†	56.3	21.3	8.3649 ug/L	8.3649 ppb	12:16:29
3	Se 196.026†	28.1	47.3	34.741 ug/L	34.741 ppb	12:16:29
3	Si 251.611†	3349.2	2809.9	95.610 ug/L	95.610 ppb	12:16:29
3	Sn 189.927†	61.0	47.3	9.5481 ug/L	9.5481 ppb	12:16:29
3	Ti 334.940†	1999.5	3159.2	5.0057 ug/L	5.0057 ppb	12:16:09
3	Tl 190.801†	35.1	62.6	21.558 ug/L	21.558 ppb	12:16:29
3	U 409.014†	-412.4	2014.8	55.710 ug/L	55.710 ppb	12:16:09
3	V 292.402†	-624.4	726.0	5.5744 ug/L	5.5744 ppb	12:16:09
3	Zn 213.857†	1519.5	922.8	9.9277 ug/L	9.9277 ppb	12:16:29
3	SiO2†	3469.3	2922.0	211.82 ug/L	211.82 ppb	12:16:44

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	883944.4	100.62 %	0.957			0.95%
Sc Radial	4359.8	99.2 %	0.67			0.67%
Y 371.029	745281.1	100.80 %	0.932			0.93%
Y RADIAL	4774.3	98.95 %	0.172			0.17%
Ag 328.068†	882.5	4.2266 ug/L	0.07380	4.2266 ppb	0.07380	1.75%
QC value within limits for Ag 328.068 Recovery = 84.53%						
Al 396.153Radial†	233.4	203.63 ug/L	4.927	203.63 ppb	4.927	2.42%
QC value within limits for Al 396.153Radial Recovery = 101.82%						
As 188.979†	58.5	28.742 ug/L	1.3438	28.742 ppb	1.3438	4.68%
QC value within limits for As 188.979 Recovery = 95.81%						
B 249.677†	1947.4	48.514 ug/L	0.8365	48.514 ppb	0.8365	1.72%
QC value within limits for B 249.677 Recovery = 97.03%						
Ba 233.527†	604.3	5.0650 ug/L	0.05910	5.0650 ppb	0.05910	1.17%
QC value within limits for Ba 233.527 Recovery = 101.30%						
Be 313.107†	12586.9	4.9913 ug/L	0.02137	4.9913 ppb	0.02137	0.43%
QC value within limits for Be 313.107 Recovery = 99.83%						
Ca 317.933Radial†	100.8	200.21 ug/L	6.237	200.21 ppb	6.237	3.12%

QC value within limits for Ca 317.933 Radial Recovery = 100.10%							
Cd 226.502†	392.9	5.0670 ug/L	0.03665	5.0670 ppb	0.03665	0.72%	
QC value within limits for Cd 226.502 Recovery = 101.34%							
Co 228.616†	210.9	4.8852 ug/L	0.24568	4.8852 ppb	0.24568	5.03%	
QC value within limits for Co 228.616 Recovery = 97.70%							
Cr 267.716†	390.1	4.7085 ug/L	0.08394	4.7085 ppb	0.08394	1.78%	
QC value within limits for Cr 267.716 Recovery = 94.17%							
Cu 324.752†	3070.7	9.3859 ug/L	0.14449	9.3859 ppb	0.14449	1.54%	
QC value within limits for Cu 324.752 Recovery = 93.86%							
Fe 238.204 Radial†	7.7	93.116 ug/L	2.7484	93.116 ppb	2.7484	2.95%	
QC value within limits for Fe 238.204 Radial Recovery = 93.12%							
K 766.490 Radial†	662.0	127.07 ug/L	12.431	127.07 ppb	12.431	9.78%	
QC value within limits for K 766.490 Radial Recovery = 84.71%							
Mg 279.077 IEC†	4.5	206.41 ug/L	37.777	206.41 ppb	37.777	18.30%	
QC value less than the lower limit for Mg 279.077 IEC Recovery = 68.80%							
Mn 257.610†	8679.0	10.401 ug/L	0.0319	10.401 ppb	0.0319	0.31%	
QC value within limits for Mn 257.610 Recovery = 104.01%							
Mo 202.031†	129.3	10.126 ug/L	0.1688	10.126 ppb	0.1688	1.67%	
QC value within limits for Mo 202.031 Recovery = 101.26%							
Na 589.592 Radial†	1071.6	309.11 ug/L	2.826	309.11 ppb	2.826	0.91%	
QC value within limits for Na 589.592 Radial Recovery = 103.04%							
Ni 231.604†	185.4	5.1433 ug/L	0.23803	5.1433 ppb	0.23803	4.63%	
QC value within limits for Ni 231.604 Recovery = 102.87%							
P 214.914†	205.5	135.73 ug/L	2.683	135.73 ppb	2.683	1.98%	
QC value within limits for P 214.914 Recovery = 90.48%							
Pb 220.353†	80.4	10.961 ug/L	0.4102	10.961 ppb	0.4102	3.74%	
QC value within limits for Pb 220.353 Recovery = 109.61%							
S 181.975 Axial†	59.5	95.595 ug/L	4.2653	95.595 ppb	4.2653	4.46%	
QC value within limits for S 181.975 Axial Recovery = 95.60%							
Sb 206.836†	20.4	8.0212 ug/L	2.23670	8.0212 ppb	2.23670	27.88%	
QC value within limits for Sb 206.836 Recovery = 80.21%							
Se 196.026†	43.4	31.913 ug/L	2.7370	31.913 ppb	2.7370	8.58%	
QC value within limits for Se 196.026 Recovery = 106.38%							
Si 251.611†	2794.4	95.082 ug/L	1.0958	95.082 ppb	1.0958	1.15%	
QC value within limits for Si 251.611 Recovery = 95.08%							
Sn 189.927†	46.2	9.3292 ug/L	0.42291	9.3292 ppb	0.42291	4.53%	
QC value within limits for Sn 189.927 Recovery = 93.29%							
Sr 421.552†	770.1	4.9838 ug/L	0.11948	4.9838 ppb	0.11948	2.40%	
QC value within limits for Sr 421.552 Recovery = 99.68%							
Ti 334.940†	3183.1	5.0399 ug/L	0.11351	5.0399 ppb	0.11351	2.25%	
QC value within limits for Ti 334.940 Recovery = 100.80%							
Tl 190.801†	60.1	20.707 ug/L	1.5544	20.707 ppb	1.5544	7.51%	
QC value within limits for Tl 190.801 Recovery = 103.53%							
U 409.014†	2055.8	56.843 ug/L	2.9943	56.843 ppb	2.9943	5.27%	
QC value within limits for U 409.014 Recovery = 113.69%							
V 292.402†	676.5	5.2128 ug/L	0.41697	5.2128 ppb	0.41697	8.00%	
QC value within limits for V 292.402 Recovery = 104.26%							
Zn 213.857†	921.9	9.9181 ug/L	0.17350	9.9181 ppb	0.17350	1.75%	
QC value within limits for Zn 213.857 Recovery = 99.18%							
SiO2†	2871.2	208.13 ug/L	4.781	208.13 ppb	4.781	2.30%	
QC value within limits for SiO2 Recovery = 97.71%							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 2/22/2010 12:18:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3834.7	3834.7	87.2 %			12:21:09
1	Y RADIAL	4184.6	4184.6	86.73 %			12:21:09
1	Al 396.153Radial†	506704.4	580942.0	507970 ug/L	507970	ppb	12:20:49
1	Ca 317.933Radial†	210046.4	240757.5	478090 ug/L	478090	ppb	12:20:49
1	Fe 238.204 Radial†	13833.0	15845.7	192150 ug/L	192150	ppb	12:21:09
1	K 766.490 Radial†	2129.1	-47.0	-168.95 ug/L	-168.95	ppb	12:20:49
1	Mg 279.077 IEC†	9706.8	11124.1	504460 ug/L	504460	ppb	12:21:09
1	Na 589.592 Radial†	-501.1	119.6	34.509 ug/L	34.509	ppb	12:21:09
1	Sr 421.552†	536.1	601.0	0.3209 ug/L	0.3209	ppb	12:21:09
1	Sc 361.383	747841.1	747841.1	85.124 %			12:22:07
1	Y 371.029	616407.1	616407.1	83.371 %			12:22:07
1	Ag 328.068†	-9042.5	-11065.6	-0.4084 ug/L	-0.4084	ppb	12:22:07
1	As 188.979†	-92.8	-84.6	3.3749 ug/L	3.3749	ppb	12:22:27
1	B 249.677†	304.3	825.6	-10.629 ug/L	-10.629	ppb	12:22:07
1	Ba 233.527†	-487.5	-565.5	1.1558 ug/L	1.1558	ppb	12:22:27
1	Be 313.107†	-4110.9	-977.1	-0.4432 ug/L	-0.4432	ppb	12:22:07
1	Cd 226.502†	1155.6	1535.2	-0.0583 ug/L	-0.0583	ppb	12:22:27
1	Co 228.616†	-4.1	46.3	-1.6990 ug/L	-1.6990	ppb	12:22:27
1	Cr 267.716†	-936.1	-1179.0	4.0278 ug/L	4.0278	ppb	12:22:27
1	Cu 324.752†	3729.9	-1821.1	4.5640 ug/L	4.5640	ppb	12:22:07
1	Mn 257.610†	578.1	229.4	-1.3810 ug/L	-1.3810	ppb	12:22:07
1	Mo 202.031†	-223.5	-270.1	-0.5227 ug/L	-0.5227	ppb	12:22:27
1	Ni 231.604†	155.7	109.9	3.0503 ug/L	3.0503	ppb	12:22:27
1	P 214.914†	146.0	-24.4	-44.101 ug/L	-44.101	ppb	12:22:27
1	Pb 220.353†	-660.0	-722.8	-6.3943 ug/L	-6.3943	ppb	12:22:27
1	S 181.975 Axial†	43.6	20.0	-63.014 ug/L	-63.014	ppb	12:22:27
1	Sb 206.836†	75.5	54.0	2.9682 ug/L	2.9682	ppb	12:22:27
1	Se 196.026†	-760.3	-873.9	47.361 ug/L	47.361	ppb	12:22:27
1	Si 251.611†	514.5	81.1	3.0245 ug/L	3.0245	ppb	12:22:27
1	Sn 189.927†	-320.1	-389.5	-4.5351 ug/L	-4.5351	ppb	12:22:27
1	Ti 334.940†	-14358.7	-15698.6	-2.0480 ug/L	-2.0480	ppb	12:22:07
1	Tl 190.801†	-91.8	-80.2	-27.807 ug/L	-27.807	ppb	12:22:27
1	U 409.014†	-701.4	1601.3	22.421 ug/L	22.421	ppb	12:22:07
1	V 292.402†	766.6	2248.0	-1.8813 ug/L	-1.8813	ppb	12:22:27
1	Zn 213.857†	2608.1	2474.4	-1.9866 ug/L	-1.9866	ppb	12:22:27
1	SiO2†	581.5	152.4	11.640 ug/L	11.640	ppb	12:23:23
2	Sc Radial	3840.7	3840.7	87.4 %			12:21:35
2	Y RADIAL	4183.1	4183.1	86.69 %			12:21:35
2	Al 396.153Radial†	513459.3	587773.8	513940 ug/L	513940	ppb	12:21:15
2	Ca 317.933Radial†	212677.4	243395.9	483330 ug/L	483330	ppb	12:21:15
2	Fe 238.204 Radial†	13846.4	15836.5	192040 ug/L	192040	ppb	12:21:35
2	K 766.490 Radial†	2054.0	-136.7	-187.95 ug/L	-187.95	ppb	12:21:15
2	Mg 279.077 IEC†	9724.8	11127.5	504610 ug/L	504610	ppb	12:21:35
2	Na 589.592 Radial†	-522.3	96.3	27.765 ug/L	27.765	ppb	12:21:35
2	Sr 421.552†	529.8	592.9	0.2288 ug/L	0.2288	ppb	12:21:35
2	Sc 361.383	745516.4	745516.4	84.860 %			12:22:32
2	Y 371.029	613441.7	613441.7	82.969 %			12:22:32
2	Ag 328.068†	-9045.6	-11102.4	-0.6856 ug/L	-0.6856	ppb	12:22:32
2	As 188.979†	-85.1	-75.8	7.6388 ug/L	7.6388	ppb	12:22:52
2	B 249.677†	282.3	800.8	-11.230 ug/L	-11.230	ppb	12:22:32
2	Ba 233.527†	-494.6	-575.8	1.0679 ug/L	1.0679	ppb	12:22:52
2	Be 313.107†	-4142.3	-1029.1	-0.4624 ug/L	-0.4624	ppb	12:22:32
2	Cd 226.502†	1178.1	1566.0	0.3500 ug/L	0.3500	ppb	12:22:52
2	Co 228.616†	8.6	61.1	-1.3563 ug/L	-1.3563	ppb	12:22:52
2	Cr 267.716†	-983.5	-1238.3	3.3025 ug/L	3.3025	ppb	12:22:52
2	Cu 324.752†	3652.4	-1898.9	4.3215 ug/L	4.3215	ppb	12:22:32
2	Mn 257.610†	672.6	342.8	-1.2623 ug/L	-1.2623	ppb	12:22:32
2	Mo 202.031†	-228.4	-276.7	-0.9865 ug/L	-0.9865	ppb	12:22:52
2	Ni 231.604†	175.9	134.3	3.7276 ug/L	3.7276	ppb	12:22:52

2	P 214.914†	158.4	-9.3	-32.394 ug/L	-32.394 ppb	12:22:52
2	Pb 220.353†	-671.7	-739.1	-7.2682 ug/L	-7.2682 ppb	12:22:52
2	S 181.975 Axial†	53.2	31.5	-45.631 ug/L	-45.631 ppb	12:22:52
2	Sb 206.836†	52.3	26.9	-7.4464 ug/L	-7.4464 ppb	12:22:52
2	Se 196.026†	-770.7	-888.9	36.487 ug/L	36.487 ppb	12:22:52
2	Si 251.611†	517.4	86.4	3.2113 ug/L	3.2113 ppb	12:22:52
2	Sn 189.927†	-331.5	-404.1	-6.5349 ug/L	-6.5349 ppb	12:22:52
2	Ti 334.940†	-13995.0	-15322.6	-0.7586 ug/L	-0.7586 ppb	12:22:32
2	Tl 190.801†	-81.8	-68.8	-23.867 ug/L	-23.867 ppb	12:22:52
2	U 409.014†	-789.4	1495.0	19.494 ug/L	19.494 ppb	12:22:32
2	V 292.402†	823.3	2317.7	-1.3628 ug/L	-1.3628 ppb	12:22:52
2	Zn 213.857†	2593.6	2466.9	-2.0553 ug/L	-2.0553 ppb	12:22:52
2	SiO2†	539.9	105.5	8.2451 ug/L	8.2451 ppb	12:23:28
3	Sc Radial	3885.9	3885.9	88.4 %		12:22:00
3	Y RADIAL	4235.2	4235.2	87.77 %		12:22:00
3	Al 396.153Radial†	515633.5	583394.4	510110 ug/L	510110 ppb	12:21:40
3	Ca 317.933Radial†	213441.2	241427.2	479420 ug/L	479420 ppb	12:21:40
3	Fe 238.204 Radial†	13974.6	15797.1	191560 ug/L	191560 ppb	12:22:00
3	K 766.490 Radial†	2067.2	-149.2	-189.04 ug/L	-189.04 ppb	12:21:40
3	Mg 279.077 IEC†	9800.2	11083.3	502610 ug/L	502610 ppb	12:22:00
3	Na 589.592 Radial†	-501.7	126.5	36.501 ug/L	36.501 ppb	12:22:00
3	Sr 421.552†	542.3	600.0	0.3039 ug/L	0.3039 ppb	12:22:00
3	Sc 361.383	744219.4	744219.4	84.712 %		12:22:57
3	Y 371.029	612530.6	612530.6	82.846 %		12:22:57
3	Ag 328.068†	-8920.5	-10973.3	-0.1624 ug/L	-0.1624 ppb	12:22:57
3	As 188.979†	-79.3	-69.2	10.799 ug/L	10.799 ppb	12:23:18
3	B 249.677†	319.2	844.9	-10.053 ug/L	-10.053 ppb	12:22:57
3	Ba 233.527†	-483.4	-563.5	1.1551 ug/L	1.1551 ppb	12:23:18
3	Be 313.107†	-4212.0	-1120.0	-0.4983 ug/L	-0.4983 ppb	12:22:57
3	Cd 226.502†	1171.5	1560.5	0.3289 ug/L	0.3289 ppb	12:23:18
3	Co 228.616†	0.5	51.6	-1.5715 ug/L	-1.5715 ppb	12:23:18
3	Cr 267.716†	-937.1	-1185.6	3.8944 ug/L	3.8944 ppb	12:23:18
3	Cu 324.752†	3753.1	-1772.5	4.6834 ug/L	4.6834 ppb	12:22:57
3	Mn 257.610†	642.7	308.9	-1.2681 ug/L	-1.2681 ppb	12:22:57
3	Mo 202.031†	-240.4	-291.4	-2.2162 ug/L	-2.2162 ppb	12:23:18
3	Ni 231.604†	170.1	127.7	3.5459 ug/L	3.5459 ppb	12:23:18
3	P 214.914†	170.9	5.8	-22.878 ug/L	-22.878 ppb	12:23:18
3	Pb 220.353†	-659.5	-726.0	-6.3012 ug/L	-6.3012 ppb	12:23:18
3	S 181.975 Axial†	48.7	26.4	-53.219 ug/L	-53.219 ppb	12:23:18
3	Sb 206.836†	79.7	59.3	4.9039 ug/L	4.9039 ppb	12:23:18
3	Se 196.026†	-768.2	-887.5	35.664 ug/L	35.664 ppb	12:23:18
3	Si 251.611†	511.9	81.0	3.0414 ug/L	3.0414 ppb	12:23:18
3	Sn 189.927†	-312.9	-382.9	-2.9258 ug/L	-2.9258 ppb	12:23:18
3	Ti 334.940†	-13950.6	-15299.0	-1.0820 ug/L	-1.0820 ppb	12:22:57
3	Tl 190.801†	-83.4	-70.8	-24.563 ug/L	-24.563 ppb	12:23:18
3	U 409.014†	-781.5	1502.7	19.759 ug/L	19.759 ppb	12:22:57
3	V 292.402†	786.6	2276.0	-1.6545 ug/L	-1.6545 ppb	12:23:18
3	Zn 213.857†	2667.1	2558.9	-0.9869 ug/L	-0.9869 ppb	12:23:18
3	SiO2†	482.8	39.2	3.4697 ug/L	3.4697 ppb	12:23:33

Mean Data: ICSSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	745859.0	84.899 %	0.2089			0.25%
Sc Radial	3853.7	87.7 %	0.64			0.73%
Y 371.029	614126.5	83.062 %	0.2742			0.33%
Y RADIAL	4201.0	87.06 %	0.614			0.71%
Ag 328.068†	-11047.1	-0.4188 ug/L	0.26177	-0.4188 ppb	0.26177	62.51%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	584036.7	510680 ug/L	3026.2	510680 ppb	3026.2	0.59%
QC value within limits for Al 396.153Radial Recovery = 102.14%						
As 188.979†	-76.5	7.2710 ug/L	3.72590	7.2710 ppb	3.72590	51.24%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	823.7	-10.637 ug/L	0.5886	-10.637 ppb	0.5886	5.53%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-568.3	1.1263 ug/L	0.05056	1.1263 ppb	0.05056	4.49%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-1042.1	-0.4680 ug/L	0.02795	-0.4680 ppb	0.02795	5.97%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	241860.2	480280 ug/L	2723.4	480280 ppb	2723.4	0.57%

QC value within limits for Ca 317.933 Radial Recovery = 96.06%

Cd	226.502†	1553.9	0.2069 ug/L	0.22990	0.2069 ppb	0.22990	111.12%
	QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	53.0	-1.5423 ug/L	0.17320	-1.5423 ppb	0.17320	11.23%
	QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-1201.0	3.7416 ug/L	0.38604	3.7416 ppb	0.38604	10.32%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-1830.8	4.5229 ug/L	0.18441	4.5229 ppb	0.18441	4.08%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	15826.4	191920 ug/L	312.8	191920 ppb	312.8	0.16%
	QC value within limits for Fe 238.204 Radial Recovery = 95.96%						
K	766.490 Radial†	-111.0	-181.98 ug/L	11.297	-181.98 ppb	11.297	6.21%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	11111.6	503890 ug/L	1116.3	503890 ppb	1116.3	0.22%
	QC value within limits for Mg 279.077 IEC Recovery = 100.78%						
Mn	257.610†	293.7	-1.3038 ug/L	0.06691	-1.3038 ppb	0.06691	5.13%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	-279.4	-1.2418 ug/L	0.87513	-1.2418 ppb	0.87513	70.48%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	114.1	32.925 ug/L	4.5784	32.925 ppb	4.5784	13.91%
	QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	124.0	3.4413 ug/L	0.35056	3.4413 ppb	0.35056	10.19%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-9.3	-33.125 ug/L	10.6301	-33.125 ppb	10.6301	32.09%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-729.3	-6.6545 ug/L	0.53344	-6.6545 ppb	0.53344	8.02%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	26.0	-53.954 ug/L	8.7146	-53.954 ppb	8.7146	16.15%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	46.7	0.1419 ug/L	6.64253	0.1419 ppb	6.64253	>999.9%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-883.4	39.838 ug/L	6.5286	39.838 ppb	6.5286	16.39%
	QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	82.9	3.0924 ug/L	0.10331	3.0924 ppb	0.10331	3.34%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-392.2	-4.6653 ug/L	1.80807	-4.6653 ppb	1.80807	38.76%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	598.0	0.2845 ug/L	0.04901	0.2845 ppb	0.04901	17.22%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	-15440.1	-1.2962 ug/L	0.67082	-1.2962 ppb	0.67082	51.75%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-73.3	-25.412 ug/L	2.1031	-25.412 ppb	2.1031	8.28%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	1533.0	20.558 ug/L	1.6186	20.558 ppb	1.6186	7.87%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	2280.6	-1.6329 ug/L	0.25990	-1.6329 ppb	0.25990	15.92%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	2500.1	-1.6762 ug/L	0.59798	-1.6762 ppb	0.59798	35.67%
	QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	99.1	7.7848 ug/L	4.10438	7.7848 ppb	4.10438	52.72%	
	QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 2/22/2010 12:25:45

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	3826.8	3826.8	87.1 %		12:27:43
1	Y RADIAL	4140.8	4140.8	85.82 %		12:27:43
1	Al 396.153Radial†	512011.0	588240.1	514330 ug/L	514330 ppb	12:27:38
1	Ca 317.933Radial†	211297.5	242693.1	481940 ug/L	481940 ppb	12:27:38
1	Fe 238.204 Radial†	13630.1	15645.4	189740 ug/L	189740 ppb	12:27:43
1	K 766.490 Radial†	28675.6	30451.5	5690.3 ug/L	5690.3 ppb	12:27:38
1	Mg 279.077 IEC†	9609.9	11035.8	500460 ug/L	500460 ppb	12:27:43
1	Na 589.592 Radial†	15723.3	18755.0	5409.9 ug/L	5409.9 ppb	12:27:43
1	Sr 421.552†	68842.2	79064.0	508.22 ug/L	508.22 ppb	12:27:38
1	Sc 361.383	753724.2	753724.2	85.794 %		12:28:11
1	Y 371.029	619232.7	619232.7	83.753 %		12:28:11
1	Ag 328.068†	39364.1	45439.1	271.07 ug/L	271.07 ppb	12:28:11
1	As 188.979†	828.1	989.7	532.82 ug/L	532.82 ppb	12:28:31
1	B 249.677†	18179.7	21658.0	507.78 ug/L	507.78 ppb	12:28:11
1	Ba 233.527†	49531.3	57740.0	489.54 ug/L	489.54 ppb	12:28:11
1	Be 313.107†	526753.6	617826.9	245.53 ug/L	245.53 ppb	12:28:11
1	Cd 226.502†	31960.0	37429.6	463.04 ug/L	463.04 ppb	12:28:31
1	Co 228.616†	16616.2	19418.6	446.06 ug/L	446.06 ppb	12:28:31
1	Cr 267.716†	33103.6	38505.6	484.02 ug/L	484.02 ppb	12:28:11
1	Cu 324.752†	154867.2	174307.6	544.05 ug/L	544.05 ppb	12:28:11
1	Mn 257.610†	341610.9	397725.9	474.88 ug/L	474.88 ppb	12:28:11
1	Mo 202.031†	5172.5	6021.4	491.45 ug/L	491.45 ppb	12:28:31
1	Ni 231.604†	13819.0	16034.2	444.88 ug/L	444.88 ppb	12:28:31
1	P 214.914†	3420.8	3791.3	2410.6 ug/L	2410.6 ppb	12:28:31
1	Pb 220.353†	2202.6	2619.8	449.63 ug/L	449.63 ppb	12:28:31
1	S 181.975 Axial†	1485.5	1700.3	2637.6 ug/L	2637.6 ppb	12:28:31
1	Sb 206.836†	1297.6	1477.8	556.53 ug/L	556.53 ppb	12:28:31
1	Se 196.026†	2241.9	2632.4	2589.5 ug/L	2589.5 ppb	12:28:31
1	Si 251.611†	131814.1	153116.9	5210.9 ug/L	5210.9 ppb	12:28:11
1	Sn 189.927†	1781.4	2062.8	490.11 ug/L	490.11 ppb	12:28:31
1	Ti 334.940†	258198.7	302121.1	503.30 ug/L	503.30 ppb	12:28:11
1	Tl 190.801†	1077.3	1283.3	444.20 ug/L	444.20 ppb	12:28:31
1	U 409.014†	14087.0	18844.9	498.59 ug/L	498.59 ppb	12:28:11
1	V 292.402†	59149.8	70291.4	506.19 ug/L	506.19 ppb	12:28:11
1	Zn 213.857†	41811.6	48145.4	489.14 ug/L	489.14 ppb	12:28:11
1	SiO2†	133871.3	155507.4	11275 ug/L	11275 ppb	12:29:29
2	Sc Radial	3826.5	3826.5	87.1 %		12:27:53
2	Y RADIAL	4144.0	4144.0	85.88 %		12:27:53
2	Al 396.153Radial†	512756.0	589132.3	515110 ug/L	515110 ppb	12:27:48
2	Ca 317.933Radial†	211378.0	242800.6	482150 ug/L	482150 ppb	12:27:48
2	Fe 238.204 Radial†	13604.4	15617.0	189390 ug/L	189390 ppb	12:27:53
2	K 766.490 Radial†	28588.6	30353.5	5671.4 ug/L	5671.4 ppb	12:27:48
2	Mg 279.077 IEC†	9565.7	10985.7	498190 ug/L	498190 ppb	12:27:53
2	Na 589.592 Radial†	15919.0	18981.0	5475.1 ug/L	5475.1 ppb	12:27:53
2	Sr 421.552†	69063.1	79322.7	509.89 ug/L	509.89 ppb	12:27:48
2	Sc 361.383	754020.4	754020.4	85.828 %		12:28:37
2	Y 371.029	619980.5	619980.5	83.854 %		12:28:37
2	Ag 328.068†	39045.1	45049.5	269.10 ug/L	269.10 ppb	12:28:37
2	As 188.979†	821.9	982.0	528.98 ug/L	528.98 ppb	12:28:57
2	B 249.677†	18224.8	21702.2	508.94 ug/L	508.94 ppb	12:28:37
2	Ba 233.527†	49544.5	57732.7	489.47 ug/L	489.47 ppb	12:28:37
2	Be 313.107†	525693.5	616350.4	244.94 ug/L	244.94 ppb	12:28:37
2	Cd 226.502†	31836.0	37270.5	461.02 ug/L	461.02 ppb	12:28:57
2	Co 228.616†	16590.1	19380.6	445.19 ug/L	445.19 ppb	12:28:57
2	Cr 267.716†	33044.7	38421.8	482.98 ug/L	482.98 ppb	12:28:37
2	Cu 324.752†	154403.1	173695.9	542.16 ug/L	542.16 ppb	12:28:37
2	Mn 257.610†	340473.7	396244.4	473.16 ug/L	473.16 ppb	12:28:37
2	Mo 202.031†	5159.9	6004.4	490.10 ug/L	490.10 ppb	12:28:57
2	Ni 231.604†	13772.3	15973.4	443.19 ug/L	443.19 ppb	12:28:57

2	P 214.914†	3392.7	3757.0	2388.5 ug/L	2388.5 ppb	12:28:57
2	Pb 220.353†	2230.2	2651.0	454.07 ug/L	454.07 ppb	12:28:57
2	S 181.975 Axial†	1461.3	1671.4	2591.1 ug/L	2591.1 ppb	12:28:57
2	Sb 206.836†	1312.1	1494.1	562.59 ug/L	562.59 ppb	12:28:57
2	Se 196.026†	2240.8	2630.1	2586.7 ug/L	2586.7 ppb	12:28:57
2	Si 251.611†	131503.6	152694.8	5196.5 ug/L	5196.5 ppb	12:28:37
2	Sn 189.927†	1772.9	2052.1	488.01 ug/L	488.01 ppb	12:28:57
2	Ti 334.940†	257946.1	301708.5	502.86 ug/L	502.86 ppb	12:28:37
2	Tl 190.801†	1057.1	1259.3	435.96 ug/L	435.96 ppb	12:28:57
2	U 409.014†	13924.0	18648.5	493.20 ug/L	493.20 ppb	12:28:37
2	V 292.402†	59140.4	70253.4	505.89 ug/L	505.89 ppb	12:28:37
2	Zn 213.857†	41575.7	47851.4	486.02 ug/L	486.02 ppb	12:28:37
2	SiO2†	130996.4	152096.4	11027 ug/L	11027 ppb	12:29:34
3	Sc Radial	3885.7	3885.7	88.4 %		12:28:04
3	Y RADIAL	4191.5	4191.5	86.87 %		12:28:04
3	Al 396.153Radial†	522596.2	591294.7	517000 ug/L	517000 ppb	12:27:59
3	Ca 317.933Radial†	214121.6	242206.7	480970 ug/L	480970 ppb	12:27:59
3	Fe 238.204 Radial†	13629.5	15407.4	186850 ug/L	186850 ppb	12:28:04
3	K 766.490 Radial†	29036.8	30360.5	5673.1 ug/L	5673.1 ppb	12:27:59
3	Mg 279.077 IEC†	9643.2	10906.1	494580 ug/L	494580 ppb	12:28:04
3	Na 589.592 Radial†	15914.3	18697.2	5393.2 ug/L	5393.2 ppb	12:28:04
3	Sr 421.552†	70648.4	79908.0	513.69 ug/L	513.69 ppb	12:27:59
3	Sc 361.383	766321.2	766321.2	87.228 %		12:29:03
3	Y 371.029	629663.0	629663.0	85.163 %		12:29:03
3	Ag 328.068†	39887.7	45285.2	269.46 ug/L	269.46 ppb	12:29:03
3	As 188.979†	833.4	979.8	527.33 ug/L	527.33 ppb	12:29:23
3	B 249.677†	18537.8	21720.2	509.81 ug/L	509.81 ppb	12:29:03
3	Ba 233.527†	50297.3	57669.1	488.86 ug/L	488.86 ppb	12:29:03
3	Be 313.107†	532852.8	614726.4	244.30 ug/L	244.30 ppb	12:29:03
3	Cd 226.502†	31818.7	36655.3	453.35 ug/L	453.35 ppb	12:29:23
3	Co 228.616†	16622.3	19107.2	438.88 ug/L	438.88 ppb	12:29:23
3	Cr 267.716†	33481.0	38304.0	481.31 ug/L	481.31 ppb	12:29:03
3	Cu 324.752†	158174.4	175131.7	546.42 ug/L	546.42 ppb	12:29:03
3	Mn 257.610†	346241.1	396488.7	473.35 ug/L	473.35 ppb	12:29:03
3	Mo 202.031†	5132.9	5877.0	479.92 ug/L	479.92 ppb	12:29:23
3	Ni 231.604†	13742.8	15682.1	435.11 ug/L	435.11 ppb	12:29:23
3	P 214.914†	3394.0	3695.0	2348.6 ug/L	2348.6 ppb	12:29:23
3	Pb 220.353†	2212.1	2588.5	446.21 ug/L	446.21 ppb	12:29:23
3	S 181.975 Axial†	1469.1	1653.0	2561.2 ug/L	2561.2 ppb	12:29:23
3	Sb 206.836†	1304.8	1461.1	549.79 ug/L	549.79 ppb	12:29:23
3	Se 196.026†	2255.5	2605.0	2560.1 ug/L	2560.1 ppb	12:29:23
3	Si 251.611†	133982.0	153076.6	5209.7 ug/L	5209.7 ppb	12:29:03
3	Sn 189.927†	1754.3	1997.7	476.99 ug/L	476.99 ppb	12:29:23
3	Ti 334.940†	262496.6	302101.3	503.62 ug/L	503.62 ppb	12:29:03
3	Tl 190.801†	1052.3	1234.0	427.28 ug/L	427.28 ppb	12:29:23
3	U 409.014†	14395.0	18928.0	501.23 ug/L	501.23 ppb	12:29:03
3	V 292.402†	60068.6	70211.5	505.75 ug/L	505.75 ppb	12:29:03
3	Zn 213.857†	42329.6	47938.1	487.38 ug/L	487.38 ppb	12:29:03
3	SiO2†	132462.0	151326.7	10971 ug/L	10971 ppb	12:29:39

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	758021.9	86.283 %	0.8183			0.95%
Sc Radial	3846.3	87.5 %	0.78			0.89%
Y 371.029	622958.7	84.257 %	0.7869			0.93%
Y RADIAL	4158.8	86.19 %	0.589			0.68%
Ag 328.068†	45257.9	269.88 ug/L	1.051	269.88 ppb	1.051	0.39%
QC value within limits for Ag 328.068 Recovery = 107.95%						
Al 396.153Radial†	589555.7	515480 ug/L	1373.7	515480 ppb	1373.7	0.27%
QC value within limits for Al 396.153Radial Recovery = 103.10%						
As 188.979†	983.9	529.71 ug/L	2.820	529.71 ppb	2.820	0.53%
QC value within limits for As 188.979 Recovery = 105.94%						
B 249.677†	21693.5	508.84 ug/L	1.023	508.84 ppb	1.023	0.20%
QC value within limits for B 249.677 Recovery = 101.77%						
Ba 233.527†	57713.9	489.29 ug/L	0.374	489.29 ppb	0.374	0.08%
QC value within limits for Ba 233.527 Recovery = 97.86%						
Be 313.107†	616301.2	244.92 ug/L	0.614	244.92 ppb	0.614	0.25%
QC value within limits for Be 313.107 Recovery = 97.97%						
Ca 317.933Radial†	242566.8	481690 ug/L	628.4	481690 ppb	628.4	0.13%

QC value within limits for Ca 317.933 Radial Recovery = 96.34%							
Cd 226.502†	37118.5	459.14 ug/L	5.110	459.14 ppb	5.110	1.11%	
QC value within limits for Cd 226.502 Recovery = 91.83%							
Co 228.616†	19302.1	443.38 ug/L	3.917	443.38 ppb	3.917	0.88%	
QC value within limits for Co 228.616 Recovery = 88.68%							
Cr 267.716†	38410.5	482.77 ug/L	1.368	482.77 ppb	1.368	0.28%	
QC value within limits for Cr 267.716 Recovery = 96.55%							
Cu 324.752†	174378.4	544.21 ug/L	2.136	544.21 ppb	2.136	0.39%	
QC value within limits for Cu 324.752 Recovery = 108.84%							
Fe 238.204 Radial†	15556.6	188660 ug/L	1576.8	188660 ppb	1576.8	0.84%	
QC value within limits for Fe 238.204 Radial Recovery = 94.33%							
K 766.490 Radial†	30388.5	5678.3 ug/L	10.45	5678.3 ppb	10.45	0.18%	
QC value within limits for K 766.490 Radial Recovery = 113.57%							
Mg 279.077 IEC†	10975.9	497740 ug/L	2965.6	497740 ppb	2965.6	0.60%	
QC value within limits for Mg 279.077 IEC Recovery = 99.55%							
Mn 257.610†	396819.7	473.79 ug/L	0.941	473.79 ppb	0.941	0.20%	
QC value within limits for Mn 257.610 Recovery = 94.76%							
Mo 202.031†	5967.6	487.16 ug/L	6.304	487.16 ppb	6.304	1.29%	
QC value within limits for Mo 202.031 Recovery = 97.43%							
Na 589.592 Radial†	18811.1	5426.1 ug/L	43.25	5426.1 ppb	43.25	0.80%	
QC value within limits for Na 589.592 Radial Recovery = 108.52%							
Ni 231.604†	15896.5	441.06 ug/L	5.223	441.06 ppb	5.223	1.18%	
QC value within limits for Ni 231.604 Recovery = 88.21%							
P 214.914†	3747.7	2382.6 ug/L	31.47	2382.6 ppb	31.47	1.32%	
QC value within limits for P 214.914 Recovery = 95.30%							
Pb 220.353†	2619.7	449.97 ug/L	3.939	449.97 ppb	3.939	0.88%	
QC value within limits for Pb 220.353 Recovery = 89.99%							
S 181.975 Axial†	1674.9	2596.6 ug/L	38.52	2596.6 ppb	38.52	1.48%	
QC value within limits for S 181.975 Axial Recovery = 103.87%							
Sb 206.836†	1477.7	556.30 ug/L	6.406	556.30 ppb	6.406	1.15%	
QC value within limits for Sb 206.836 Recovery = 111.26%							
Se 196.026†	2622.5	2578.8 ug/L	16.24	2578.8 ppb	16.24	0.63%	
QC value within limits for Se 196.026 Recovery = 103.15%							
Si 251.611†	152962.8	5205.7 ug/L	7.96	5205.7 ppb	7.96	0.15%	
QC value within limits for Si 251.611 Recovery = 104.11%							
Sn 189.927†	2037.6	485.04 ug/L	7.046	485.04 ppb	7.046	1.45%	
QC value within limits for Sn 189.927 Recovery = 97.01%							
Sr 421.552†	79431.6	510.60 ug/L	2.803	510.60 ppb	2.803	0.55%	
QC value within limits for Sr 421.552 Recovery = 102.12%							
Ti 334.940†	301977.0	503.26 ug/L	0.380	503.26 ppb	0.380	0.08%	
QC value within limits for Ti 334.940 Recovery = 100.65%							
Tl 190.801†	1258.9	435.81 ug/L	8.461	435.81 ppb	8.461	1.94%	
QC value within limits for Tl 190.801 Recovery = 87.16%							
U 409.014†	18807.1	497.67 ug/L	4.091	497.67 ppb	4.091	0.82%	
QC value within limits for U 409.014 Recovery = 99.53%							
V 292.402†	70252.1	505.94 ug/L	0.223	505.94 ppb	0.223	0.04%	
QC value within limits for V 292.402 Recovery = 101.19%							
Zn 213.857†	47978.3	487.51 ug/L	1.562	487.51 ppb	1.562	0.32%	
QC value within limits for Zn 213.857 Recovery = 97.50%							
SiO2†	152976.8	11091 ug/L	161.4	11091 ppb	161.4	1.46%	
QC value within limits for SiO2 Recovery = 103.70%							
All analyte(s) passed QC.							

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

Autosampler Location: 15
 Date Collected: 2/22/2010 12:31:50
 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	3788.6	3788.6	86.2 %		12:34:02
1	Y RADIAL	4146.2	4146.2	85.93 %		12:34:02
1	Al 396.153Radial†	498895.3	578948.1	506230 ug/L	506230 ppb	12:33:42
1	Ca 317.933Radial†	206244.2	239275.4	475150 ug/L	475150 ppb	12:33:42
1	Fe 238.204 Radial†	31520.9	36561.0	443360 ug/L	443360 ppb	12:34:02
1	K 766.490 Radial†	2483.6	394.1	-287.19 ug/L	-287.19 ppb	12:33:42
1	Mg 279.077 IEC†	9460.1	10973.2	497350 ug/L	497350 ppb	12:34:02
1	Na 589.592 Radial†	1562531.0	1813622.8	523140 ug/L	523140 ppb	12:33:42
1	Sr 421.552†	743.7	849.4	1.9507 ug/L	1.9507 ppb	12:34:02
1	Sc 361.383	736736.8	736736.8	83.860 %		12:35:00
1	Y 371.029	608504.1	608504.1	82.302 %		12:35:00
1	Ag 328.068†	-21634.1	-26240.8	-7.0269 ug/L	-7.0269 ppb	12:35:00
1	As 188.979†	-166.3	-173.8	18.582 ug/L	18.582 ppb	12:35:21
1	B 249.677†	1665.1	2453.7	-10.856 ug/L	-10.856 ppb	12:35:00
1	Ba 233.527†	-1330.9	-1580.0	0.3475 ug/L	0.3475 ppb	12:35:21
1	Be 313.107†	-9837.7	-7878.9	-3.1549 ug/L	-3.1549 ppb	12:35:00
1	Cd 226.502†	2963.4	3711.4	4.7153 ug/L	4.7153 ppb	12:35:21
1	Co 228.616†	191.4	279.2	-0.0165 ug/L	-0.0165 ppb	12:35:21
1	Cr 267.716†	-883.4	-1132.8	23.037 ug/L	23.037 ppb	12:35:21
1	Cu 324.752†	1156.9	-4823.4	1.0367 ug/L	1.0367 ppb	12:35:00
1	Mn 257.610†	-19806.0	-24067.6	-5.4064 ug/L	-5.4064 ppb	12:35:00
1	Mo 202.031†	-452.9	-547.5	-2.7577 ug/L	-2.7577 ppb	12:35:21
1	Ni 231.604†	222.2	192.0	5.3263 ug/L	5.3263 ppb	12:35:21
1	P 214.914†	496.0	395.5	35.917 ug/L	35.917 ppb	12:35:21
1	Pb 220.353†	-468.4	-506.0	-4.5857 ug/L	-4.5857 ppb	12:35:21
1	S 181.975 Axial†	58.6	38.7	-32.596 ug/L	-32.596 ppb	12:35:21
1	Sb 206.836†	68.9	47.5	-2.8027 ug/L	-2.8027 ppb	12:35:21
1	Se 196.026†	-1771.7	-2093.3	2.9920 ug/L	2.9920 ppb	12:35:21
1	Si 251.611†	-454.3	-1065.0	-35.759 ug/L	-35.759 ppb	12:35:21
1	Sn 189.927†	-350.7	-431.6	-27.957 ug/L	-27.957 ppb	12:35:21
1	Ti 334.940†	-9751.2	-10458.6	0.3951 ug/L	0.3951 ppb	12:35:00
1	Tl 190.801†	-103.2	-95.5	-33.163 ug/L	-33.163 ppb	12:35:21
1	U 409.014†	416675.0	499292.6	13760 ug/L	13760 ppb	12:35:00
1	V 292.402†	2219.1	3993.7	0.2755 ug/L	0.2755 ppb	12:35:21
1	Zn 213.857†	4942.4	5304.1	-8.9552 ug/L	-8.9552 ppb	12:35:21
1	SiO2†	-539.5	-1174.0	-84.047 ug/L	-84.047 ppb	12:36:17
2	Sc Radial	3779.1	3779.1	86.0 %		12:34:28
2	Y RADIAL	4139.0	4139.0	85.78 %		12:34:28
2	Al 396.153Radial†	499236.4	580806.3	507850 ug/L	507850 ppb	12:34:08
2	Ca 317.933Radial†	206096.2	239707.3	476010 ug/L	476010 ppb	12:34:08
2	Fe 238.204 Radial†	31476.1	36601.2	443850 ug/L	443850 ppb	12:34:28
2	K 766.490 Radial†	2607.5	545.4	-258.05 ug/L	-258.05 ppb	12:34:08
2	Mg 279.077 IEC†	9451.6	10991.0	498160 ug/L	498160 ppb	12:34:28
2	Na 589.592 Radial†	1556064.3	1810677.9	522290 ug/L	522290 ppb	12:34:08
2	Sr 421.552†	746.5	854.8	1.9791 ug/L	1.9791 ppb	12:34:28
2	Sc 361.383	731455.3	731455.3	83.259 %		12:35:26
2	Y 371.029	605417.3	605417.3	81.884 %		12:35:26
2	Ag 328.068†	-21144.5	-25838.9	-4.8280 ug/L	-4.8280 ppb	12:35:26
2	As 188.979†	-174.0	-184.5	13.434 ug/L	13.434 ppb	12:35:46
2	B 249.677†	1460.9	2222.8	-16.692 ug/L	-16.692 ppb	12:35:26
2	Ba 233.527†	-1378.5	-1648.6	-0.2106 ug/L	-0.2106 ppb	12:35:46
2	Be 313.107†	-9681.5	-7776.0	-3.1133 ug/L	-3.1133 ppb	12:35:26
2	Cd 226.502†	3032.5	3819.9	6.0306 ug/L	6.0306 ppb	12:35:46
2	Co 228.616†	212.2	306.0	0.6001 ug/L	0.6001 ppb	12:35:46
2	Cr 267.716†	-905.9	-1167.4	22.731 ug/L	22.731 ppb	12:35:46
2	Cu 324.752†	1078.3	-4907.8	0.8954 ug/L	0.8954 ppb	12:35:26
2	Mn 257.610†	-19430.3	-23786.9	-5.0549 ug/L	-5.0549 ppb	12:35:26
2	Mo 202.031†	-415.6	-506.7	0.4834 ug/L	0.4834 ppb	12:35:46
2	Ni 231.604†	223.1	194.9	5.4072 ug/L	5.4072 ppb	12:35:46

2	P 214.914†	488.8	391.0	33.029 ug/L	33.029 ppb	12:35:46
2	Pb 220.353†	-478.0	-521.6	-6.3920 ug/L	-6.3920 ppb	12:35:46
2	S 181.975 Axial†	61.6	42.9	-26.270 ug/L	-26.270 ppb	12:35:46
2	Sb 206.836†	42.6	16.4	-14.484 ug/L	-14.484 ppb	12:35:46
2	Se 196.026†	-1793.2	-2134.4	-25.139 ug/L	-25.139 ppb	12:35:46
2	Si 251.611†	-404.0	-1008.5	-33.871 ug/L	-33.871 ppb	12:35:46
2	Sn 189.927†	-347.2	-430.6	-27.615 ug/L	-27.615 ppb	12:35:46
2	Ti 334.940†	-9470.2	-10205.1	0.9197 ug/L	0.9197 ppb	12:35:26
2	Tl 190.801†	-98.9	-91.2	-31.693 ug/L	-31.693 ppb	12:35:46
2	U 409.014†	408698.1	493299.5	13594 ug/L	13594 ppb	12:35:26
2	V 292.402†	2219.0	4012.7	0.0872 ug/L	0.0872 ppb	12:35:46
2	Zn 213.857†	5008.7	5426.4	-7.7051 ug/L	-7.7051 ppb	12:35:46
2	SiO2†	-507.7	-1140.5	-81.704 ug/L	-81.704 ppb	12:36:23
3	Sc Radial	3812.8	3812.8	86.7 %		12:34:53
3	Y RADIAL	4170.0	4170.0	86.42 %		12:34:53
3	Al 396.153Radial†	507247.6	584913.1	511440 ug/L	511440 ppb	12:34:33
3	Ca 317.933Radial†	208623.9	240504.0	477590 ug/L	477590 ppb	12:34:33
3	Fe 238.204 Radial†	31683.6	36517.1	442830 ug/L	442830 ppb	12:34:53
3	K 766.490 Radial†	2558.5	462.1	-276.32 ug/L	-276.32 ppb	12:34:33
3	Mg 279.077 IEC†	9515.3	10967.4	497090 ug/L	497090 ppb	12:34:53
3	Na 589.592 Radial†	1583263.1	1826048.0	526730 ug/L	526730 ppb	12:34:33
3	Sr 421.552†	755.2	857.2	1.9828 ug/L	1.9828 ppb	12:34:53
3	Sc 361.383	737406.1	737406.1	83.937 %		12:35:52
3	Y 371.029	610960.6	610960.6	82.634 %		12:35:52
3	Ag 328.068†	-21117.4	-25601.7	-3.9980 ug/L	-3.9980 ppb	12:35:52
3	As 188.979†	-158.9	-164.8	22.845 ug/L	22.845 ppb	12:36:12
3	B 249.677†	1464.0	2212.2	-16.789 ug/L	-16.789 ppb	12:35:52
3	Ba 233.527†	-1386.6	-1644.8	-0.2101 ug/L	-0.2101 ppb	12:36:12
3	Be 313.107†	-9790.2	-7811.6	-3.1277 ug/L	-3.1277 ppb	12:35:52
3	Cd 226.502†	3002.0	3754.1	5.2821 ug/L	5.2821 ppb	12:36:12
3	Co 228.616†	217.2	309.8	0.7003 ug/L	0.7003 ppb	12:36:12
3	Cr 267.716†	-888.2	-1137.6	23.008 ug/L	23.008 ppb	12:36:12
3	Cu 324.752†	1086.9	-4908.0	0.8597 ug/L	0.8597 ppb	12:35:52
3	Mn 257.610†	-19699.1	-23918.7	-5.2698 ug/L	-5.2698 ppb	12:35:52
3	Mo 202.031†	-430.6	-520.6	-0.6592 ug/L	-0.6592 ppb	12:36:12
3	Ni 231.604†	245.7	219.7	6.0957 ug/L	6.0957 ppb	12:36:12
3	P 214.914†	449.7	339.8	0.4677 ug/L	0.4677 ppb	12:36:12
3	Pb 220.353†	-455.0	-489.6	-1.1779 ug/L	-1.1779 ppb	12:36:12
3	S 181.975 Axial†	64.8	46.0	-21.935 ug/L	-21.935 ppb	12:36:12
3	Sb 206.836†	85.4	67.0	4.4799 ug/L	4.4799 ppb	12:36:12
3	Se 196.026†	-1796.6	-2121.1	-18.598 ug/L	-18.598 ppb	12:36:12
3	Si 251.611†	-398.2	-997.7	-33.490 ug/L	-33.490 ppb	12:36:12
3	Sn 189.927†	-341.2	-420.0	-25.149 ug/L	-25.149 ppb	12:36:12
3	Ti 334.940†	-9612.4	-10282.7	1.1111 ug/L	1.1111 ppb	12:35:52
3	Tl 190.801†	-91.1	-81.0	-28.176 ug/L	-28.176 ppb	12:36:12
3	U 409.014†	410986.7	492064.8	13560 ug/L	13560 ppb	12:35:52
3	V 292.402†	2269.0	4050.7	0.4142 ug/L	0.4142 ppb	12:36:12
3	Zn 213.857†	4978.6	5341.8	-8.4716 ug/L	-8.4716 ppb	12:36:12
3	SiO2†	-474.9	-1096.5	-78.482 ug/L	-78.482 ppb	12:36:28

Mean Data: LRI

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	735199.4	83.685 %	0.3710			0.44%
Sc Radial	3793.5	86.3 %	0.39			0.46%
Y 371.029	608294.0	82.273 %	0.3757			0.46%
Y RADIAL	4151.7	86.04 %	0.337			0.39%
Ag 328.068†	-25893.8	-5.2843 ug/L	1.56518	-5.2843 ppb	1.56518	29.62%
Al 396.153Radial†	581555.8	508510 ug/L	2668.9	508510 ppb	2668.9	0.52%
QC value within limits for Al 396.153Radial Recovery = 101.70%						
As 188.979†	-174.4	18.287 ug/L	4.7127	18.287 ppb	4.7127	25.77%
B 249.677†	2296.2	-14.779 ug/L	3.3979	-14.779 ppb	3.3979	22.99%
Ba 233.527†	-1624.5	-0.0244 ug/L	0.32208	-0.0244 ppb	0.32208	>999.9%
Be 313.107†	-7822.2	-3.1319 ug/L	0.02114	-3.1319 ppb	0.02114	0.67%
Ca 317.933Radial†	239828.9	476250 ug/L	1237.7	476250 ppb	1237.7	0.26%
QC value within limits for Ca 317.933Radial Recovery = 95.25%						
Cd 226.502†	3761.8	5.3427 ug/L	0.65973	5.3427 ppb	0.65973	12.35%
Co 228.616†	298.3	0.4280 ug/L	0.38818	0.4280 ppb	0.38818	90.71%
Cr 267.716†	-1145.9	22.926 ug/L	0.1690	22.926 ppb	0.1690	0.74%
Cu 324.752†	-4879.7	0.9306 ug/L	0.09360	0.9306 ppb	0.09360	10.06%

Fe 238.204 Radial†	36559.8	443340 ug/L	510.1	443340 ppb	510.1	0.12%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.67%						
K 766.490 Radial†	467.2	-273.85 ug/L	14.726	-273.85 ppb	14.726	5.38%
Mg 279.077 IEC†	10977.2	497530 ug/L	558.3	497530 ppb	558.3	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 99.51%						
Mn 257.610†	-23924.4	-5.2437 ug/L	0.17719	-5.2437 ppb	0.17719	3.38%
Mo 202.031†	-524.9	-0.9778 ug/L	1.64390	-0.9778 ppb	1.64390	168.12%
Na 589.592 Radial†	1816782.9	524050 ug/L	2353.1	524050 ppb	2353.1	0.45%
QC value within limits for Na 589.592 Radial Recovery = 104.81%						
Ni 231.604†	202.2	5.6098 ug/L	0.42279	5.6098 ppb	0.42279	7.54%
P 214.914†	375.4	23.138 ug/L	19.6860	23.138 ppb	19.6860	85.08%
Pb 220.353†	-505.7	-4.0519 ug/L	2.64776	-4.0519 ppb	2.64776	65.35%
S 181.975 Axial†	42.5	-26.934 ug/L	5.3618	-26.934 ppb	5.3618	19.91%
Sb 206.836†	43.6	-4.2690 ug/L	9.56666	-4.2690 ppb	9.56666	224.10%
Se 196.026†	-2116.3	-13.582 ug/L	14.7211	-13.582 ppb	14.7211	108.39%
Si 251.611†	-1023.7	-34.373 ug/L	1.2153	-34.373 ppb	1.2153	3.54%
Sn 189.927†	-427.4	-26.907 ug/L	1.5321	-26.907 ppb	1.5321	5.69%
Sr 421.552†	853.8	1.9708 ug/L	0.01754	1.9708 ppb	0.01754	0.89%
Ti 334.940†	-10315.5	0.8086 ug/L	0.37074	0.8086 ppb	0.37074	45.85%
Tl 190.801†	-89.2	-31.011 ug/L	2.5623	-31.011 ppb	2.5623	8.26%
U 409.014†	494885.6	13638 ug/L	106.9	13638 ppb	106.9	0.78%
QC value within limits for U 409.014 Recovery = 90.92%						
V 292.402†	4019.0	0.2590 ug/L	0.16411	0.2590 ppb	0.16411	63.37%
Zn 213.857†	5357.4	-8.3773 ug/L	0.63036	-8.3773 ppb	0.63036	7.52%
SiO2†	-1137.0	-81.411 ug/L	2.7942	-81.411 ppb	2.7942	3.43%

QC Failed. Continue with analysis.

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

Autosampler Location: 16
 Date Collected: 2/22/2010 12:38:38
 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	4066.5	4066.5	92.5 %		12:40:56
1	Y RADIAL	4519.3	4519.3	93.66 %		12:40:36
1	Al 396.153Radial†	380.0	515.0	-30.747 ug/L	-30.747 ppb	12:40:36
1	Ca 317.933Radial†	31.6	14.4	28.529 ug/L	28.529 ppb	12:40:56
1	Fe 238.204 Radial†	-10.0	-21.9	29.289 ug/L	29.289 ppb	12:40:56
1	K 766.490 Radial†	1546963.3	1669723.9	320990 ug/L	320990 ppb	12:40:31
1	Mg 279.077 IEC†	-3.0	-6.1	-174.62 ug/L	-174.62 ppb	12:40:56
1	Na 589.592 Radial†	-224.5	451.3	130.19 ug/L	130.19 ppb	12:40:36
1	Sr 421.552†	1428354.2	1543985.8	9994.9 ug/L	9994.9 ppb	12:40:31
1	Sc 361.383	851717.9	851717.9	96.948 %		12:42:13
1	Y 371.029	701155.1	701155.1	94.833 %		12:42:13
1	Ag 328.068†	-7585.0	-8266.7	0.8976 ug/L	0.8976 ppb	12:42:18
1	As 188.979†	19803.9	20451.7	10090 ug/L	10090 ppb	12:42:18
1	B 249.677†	192715.7	199250.0	4938.6 ug/L	4938.6 ppb	12:42:18
1	Ba 233.527†	1597718.9	1648017.7	13797 ug/L	13797 ppb	12:42:13
1	Be 313.107†	7009485.4	7233976.5	2884.2 ug/L	2884.2 ppb	12:42:07
1	Cd 226.502†	752425.5	776287.3	10008 ug/L	10008 ppb	12:42:13
1	Co 228.616†	413545.1	426613.4	9855.8 ug/L	9855.8 ppb	12:42:18
1	Cr 267.716†	1946215.4	2007397.4	24280 ug/L	24280 ppb	12:42:13
1	Cu 324.752†	6191753.1	6380449.1	19558 ug/L	19558 ppb	12:42:07
1	Mn 257.610†	7680834.3	7922155.6	9493.4 ug/L	9493.4 ppb	12:42:07
1	Mo 202.031†	122967.1	126830.2	9920.5 ug/L	9920.5 ppb	12:42:18
1	Ni 231.604†	346010.7	356829.1	9900.6 ug/L	9900.6 ppb	12:42:18
1	P 214.914†	28386.1	29083.7	15684 ug/L	15684 ppb	12:42:18
1	Pb 220.353†	182374.1	188167.2	25541 ug/L	25541 ppb	12:42:18
1	S 181.975 Axial†	33383.9	34403.5	55321 ug/L	55321 ppb	12:42:18
1	Sb 206.836†	28595.4	29460.7	11465 ug/L	11465 ppb	12:42:18
1	Se 196.026†	14111.6	14575.1	10622 ug/L	10622 ppb	12:42:18
1	Si 251.611†	1348502.5	1390426.3	47250 ug/L	47250 ppb	12:42:13
1	Sn 189.927†	52738.4	54384.9	10951 ug/L	10951 ppb	12:42:18
1	Ti 334.940†	5945365.4	6133678.0	9735.1 ug/L	9735.1 ppb	12:42:07
1	Tl 190.801†	27714.8	28614.8	9894.9 ug/L	9894.9 ppb	12:42:18
1	U 409.014†	-1679.5	692.9	-35.106 ug/L	-35.106 ppb	12:42:18
1	V 292.402†	1321281.3	1364219.0	10158 ug/L	10158 ppb	12:42:13
1	Zn 213.857†	1284578.0	1324423.4	14245 ug/L	14245 ppb	12:42:13
1	SiO2†	1374665.7	1417405.6	102610 ug/L	102610 ppb	12:43:05
2	Sc Radial	4090.4	4090.4	93.1 %		12:41:26
2	Y RADIAL	4538.7	4538.7	94.06 %		12:41:06
2	Al 396.153Radial†	383.4	516.2	-24.176 ug/L	-24.176 ppb	12:41:06
2	Ca 317.933Radial†	32.0	14.7	29.125 ug/L	29.125 ppb	12:41:26
2	Fe 238.204 Radial†	-12.1	-24.1	-1.0217 ug/L	-1.0217 ppb	12:41:26
2	K 766.490 Radial†	1565978.1	1680386.8	323040 ug/L	323040 ppb	12:41:01
2	Mg 279.077 IEC†	-3.5	-6.6	-197.68 ug/L	-197.68 ppb	12:41:26
2	Na 589.592 Radial†	-288.1	384.4	110.88 ug/L	110.88 ppb	12:41:06
2	Sr 421.552†	1443622.3	1551371.6	10043 ug/L	10043 ppb	12:41:01
2	Sc 361.383	851224.3	851224.3	96.892 %		12:42:32
2	Y 371.029	701902.1	701902.1	94.934 %		12:42:32
2	Ag 328.068†	-7417.6	-8098.5	1.7418 ug/L	1.7418 ppb	12:42:37
2	As 188.979†	19527.4	20178.2	9956.2 ug/L	9956.2 ppb	12:42:37
2	B 249.677†	190691.0	197275.6	4889.7 ug/L	4889.7 ppb	12:42:37
2	Ba 233.527†	1599080.2	1650378.2	13817 ug/L	13817 ppb	12:42:32
2	Be 313.107†	7028711.3	7258011.3	2893.7 ug/L	2893.7 ppb	12:42:26
2	Cd 226.502†	753750.8	778105.1	10032 ug/L	10032 ppb	12:42:32
2	Co 228.616†	407858.9	420992.2	9725.7 ug/L	9725.7 ppb	12:42:37
2	Cr 267.716†	1947994.0	2010397.0	24316 ug/L	24316 ppb	12:42:32
2	Cu 324.752†	6216102.7	6409282.9	19646 ug/L	19646 ppb	12:42:26
2	Mn 257.610†	7681565.9	7927504.4	9499.8 ug/L	9499.8 ppb	12:42:26
2	Mo 202.031†	121482.8	125371.9	9806.4 ug/L	9806.4 ppb	12:42:37
2	Ni 231.604†	341316.1	352190.9	9771.9 ug/L	9771.9 ppb	12:42:37

2	P 214.914†	27873.4	28571.5	15322 ug/L	15322 ppb	12:42:37
2	Pb 220.353†	180007.1	185833.4	25224 ug/L	25224 ppb	12:42:37
2	S 181.975 Axial†	32927.0	33951.9	54594 ug/L	54594 ppb	12:42:37
2	Sb 206.836†	28242.8	29114.0	11330 ug/L	11330 ppb	12:42:37
2	Se 196.026†	13891.2	14356.1	10463 ug/L	10463 ppb	12:42:37
2	Si 251.611†	1346374.5	1389036.6	47204 ug/L	47204 ppb	12:42:32
2	Sn 189.927†	51981.8	53635.6	10800 ug/L	10800 ppb	12:42:37
2	Ti 334.940†	5953030.4	6145144.7	9753.3 ug/L	9753.3 ppb	12:42:26
2	Tl 190.801†	27313.1	28216.8	9758.9 ug/L	9758.9 ppb	12:42:37
2	U 409.014†	-1442.3	936.7	-28.439 ug/L	-28.439 ppb	12:42:37
2	V 292.402†	1322204.7	1365962.3	10170 ug/L	10170 ppb	12:42:32
2	Zn 213.857†	1284648.4	1325264.4	14255 ug/L	14255 ppb	12:42:32
2	SiO2†	1381570.2	1425353.8	103190 ug/L	103190 ppb	12:43:12
3	Sc Radial	3984.0	3984.0	90.6 %		12:41:57
3	Y RADIAL	4602.3	4602.3	95.38 %		12:41:37
3	Al 396.153Radial†	404.5	550.5	3.0401 ug/L	3.0401 ppb	12:41:37
3	Ca 317.933Radial†	30.3	13.7	27.225 ug/L	27.225 ppb	12:41:57
3	Fe 238.204 Radial†	-11.1	-23.4	9.3047 ug/L	9.3047 ppb	12:41:57
3	K 766.490 Radial†	1525906.1	1681105.9	323180 ug/L	323180 ppb	12:41:32
3	Mg 279.077 IEC†	-4.3	-7.6	-239.98 ug/L	-239.98 ppb	12:41:57
3	Na 589.592 Radial†	-300.5	362.4	104.54 ug/L	104.54 ppb	12:41:37
3	Sr 421.552†	1392480.6	1536366.3	9945.6 ug/L	9945.6 ppb	12:41:32
3	Sc 361.383	856826.0	856826.0	97.530 %		12:42:52
3	Y 371.029	706520.0	706520.0	95.558 %		12:42:52
3	Ag 328.068†	-7492.8	-8125.6	1.6163 ug/L	1.6163 ppb	12:42:57
3	As 188.979†	19839.1	20366.0	10048 ug/L	10048 ppb	12:42:57
3	B 249.677†	193476.3	198844.8	4928.7 ug/L	4928.7 ppb	12:42:57
3	Ba 233.527†	1608264.6	1649005.6	13806 ug/L	13806 ppb	12:42:52
3	Be 313.107†	7107864.0	7291742.9	2907.1 ug/L	2907.1 ppb	12:42:46
3	Cd 226.502†	758688.0	778081.6	10031 ug/L	10031 ppb	12:42:52
3	Co 228.616†	413228.1	423745.3	9789.3 ug/L	9789.3 ppb	12:42:57
3	Cr 267.716†	1960887.9	2010473.5	24317 ug/L	24317 ppb	12:42:52
3	Cu 324.752†	6283118.8	6436053.6	19728 ug/L	19728 ppb	12:42:46
3	Mn 257.610†	7750878.6	7946741.8	9522.8 ug/L	9522.8 ppb	12:42:46
3	Mo 202.031†	122991.5	126099.1	9863.3 ug/L	9863.3 ppb	12:42:57
3	Ni 231.604†	346028.0	354719.1	9842.0 ug/L	9842.0 ppb	12:42:57
3	P 214.914†	28253.0	28772.6	15441 ug/L	15441 ppb	12:42:57
3	Pb 220.353†	182517.9	187193.2	25408 ug/L	25408 ppb	12:42:57
3	S 181.975 Axial†	33399.9	34214.7	55017 ug/L	55017 ppb	12:42:57
3	Sb 206.836†	28657.4	29348.5	11421 ug/L	11421 ppb	12:42:57
3	Se 196.026†	14152.0	14529.8	10589 ug/L	10589 ppb	12:42:57
3	Si 251.611†	1359330.6	1393236.3	47346 ug/L	47346 ppb	12:42:52
3	Sn 189.927†	52780.1	54103.4	10895 ug/L	10895 ppb	12:42:57
3	Ti 334.940†	6009442.3	6162817.7	9781.4 ug/L	9781.4 ppb	12:42:46
3	Tl 190.801†	27750.7	28481.2	9849.8 ug/L	9849.8 ppb	12:42:57
3	U 409.014†	-1501.9	885.4	-29.863 ug/L	-29.863 ppb	12:42:57
3	V 292.402†	1330919.0	1365975.8	10170 ug/L	10170 ppb	12:42:52
3	Zn 213.857†	1292767.2	1324920.7	14251 ug/L	14251 ppb	12:42:52
3	SiO2†	1368451.0	1402580.2	101540 ug/L	101540 ppb	12:43:19

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	853256.1	97.123 %		0.3530			0.36%
Sc Radial	4047.0	92.1 %		1.27			1.38%
Y 371.029	703192.4	95.108 %		0.3930			0.41%
Y RADIAL	4553.4	94.37 %		0.900			0.95%
Ag 328.068†	-8163.6	1.4186 ug/L		0.45549	1.4186 ppb	0.45549	32.11%
Al 396.153Radial†	527.3	-17.295 ug/L		17.9142	-17.295 ppb	17.9142	103.58%
As 188.979†	20332.0	10032 ug/L		68.4	10032 ppb	68.4	0.68%
QC value within limits for As 188.979 Recovery = 100.32%							
B 249.677†	198456.8	4919.0 ug/L		25.82	4919.0 ppb	25.82	0.52%
QC value within limits for B 249.677 Recovery = 98.38%							
Ba 233.527†	1649133.8	13807 ug/L		9.9	13807 ppb	9.9	0.07%
QC value within limits for Ba 233.527 Recovery = 92.04%							
Be 313.107†	7261243.6	2895.0 ug/L		11.53	2895.0 ppb	11.53	0.40%
QC value within limits for Be 313.107 Recovery = 96.50%							
Ca 317.933Radial†	14.2	28.293 ug/L		0.9713	28.293 ppb	0.9713	3.43%
Cd 226.502†	777491.3	10024 ug/L		13.4	10024 ppb	13.4	0.13%
QC value within limits for Cd 226.502 Recovery = 100.24%							

Co 228.616†	423783.6	9790.3 ug/L	65.10	9790.3 ppb	65.10	0.66%
QC value within limits for Co 228.616 Recovery = 97.90%						
Cr 267.716†	2009422.7	24304 ug/L	21.2	24304 ppb	21.2	0.09%
QC value within limits for Cr 267.716 Recovery = 97.22%						
Cu 324.752†	6408595.2	19644 ug/L	85.2	19644 ppb	85.2	0.43%
QC value within limits for Cu 324.752 Recovery = 98.22%						
Fe 238.204 Radial†	-23.1	12.524 ug/L	15.4096	12.524 ppb	15.4096	123.04%
K 766.490 Radial†	1677072.2	322400 ug/L	1225.5	322400 ppb	1225.5	0.38%
QC value within limits for K 766.490 Radial Recovery = 107.47%						
Mg 279.077 IEC†	-6.8	-204.09 ug/L	33.147	-204.09 ppb	33.147	16.24%
Mn 257.610†	7932133.9	9505.3 ug/L	15.50	9505.3 ppb	15.50	0.16%
QC value within limits for Mn 257.610 Recovery = 95.05%						
Mo 202.031†	126100.4	9863.4 ug/L	57.04	9863.4 ppb	57.04	0.58%
QC value within limits for Mo 202.031 Recovery = 98.63%						
Na 589.592 Radial†	399.4	115.20 ug/L	13.357	115.20 ppb	13.357	11.59%
Ni 231.604†	354579.7	9838.2 ug/L	64.43	9838.2 ppb	64.43	0.65%
QC value within limits for Ni 231.604 Recovery = 98.38%						
P 214.914†	28809.2	15482 ug/L	184.3	15482 ppb	184.3	1.19%
QC value within limits for P 214.914 Recovery = 103.21%						
Pb 220.353†	187064.6	25391 ug/L	159.2	25391 ppb	159.2	0.63%
QC value within limits for Pb 220.353 Recovery = 101.56%						
S 181.975 Axial†	34190.1	54977 ug/L	364.7	54977 ppb	364.7	0.66%
QC value within limits for S 181.975 Axial Recovery = 109.95%						
Sb 206.836†	29307.8	11406 ug/L	69.0	11406 ppb	69.0	0.60%
QC value greater than the upper limit for Sb 206.836 Recovery = 114.06%						
Se 196.026†	14487.0	10558 ug/L	84.2	10558 ppb	84.2	0.80%
QC value within limits for Se 196.026 Recovery = 105.58%						
Si 251.611†	1390899.7	47267 ug/L	72.7	47267 ppb	72.7	0.15%
QC value within limits for Si 251.611 Recovery = 94.53%						
Sn 189.927†	54041.3	10882 ug/L	76.2	10882 ppb	76.2	0.70%
QC value within limits for Sn 189.927 Recovery = 108.82%						
Sr 421.552†	1543907.9	9994.4 ug/L	48.57	9994.4 ppb	48.57	0.49%
QC value within limits for Sr 421.552 Recovery = 99.94%						
Ti 334.940†	6147213.5	9756.6 ug/L	23.32	9756.6 ppb	23.32	0.24%
QC value within limits for Ti 334.940 Recovery = 97.57%						
Tl 190.801†	28437.6	9834.6 ug/L	69.27	9834.6 ppb	69.27	0.70%
QC value within limits for Tl 190.801 Recovery = 98.35%						
U 409.014†	838.3	-31.136 ug/L	3.5108	-31.136 ppb	3.5108	11.28%
V 292.402†	1365385.7	10166 ug/L	6.7	10166 ppb	6.7	0.07%
QC value within limits for V 292.402 Recovery = 101.66%						
Zn 213.857†	1324869.5	14250 ug/L	4.9	14250 ppb	4.9	0.03%
QC value within limits for Zn 213.857 Recovery = 95.00%						
SiO2†	1415113.2	102450 ug/L	839.5	102450 ppb	839.5	0.82%
QC value within limits for SiO2 Recovery = 95.74%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 12:45:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4062.9	4062.9	92.4 %		12:47:41
1	Y RADIAL	4595.6	4595.6	95.24 %		12:47:21
1	Al 396.153Radial†	5300.6	5839.1	5081.0 ug/L	5081.0 ppb	12:47:21
1	Ca 317.933Radial†	2502.4	2687.6	5337.0 ug/L	5337.0 ppb	12:47:41
1	Fe 238.204 Radial†	418.9	442.1	5377.5 ug/L	5377.5 ppb	12:47:41
1	K 766.490 Radial†	29707.6	29653.7	5694.3 ug/L	5694.3 ppb	12:47:21
1	Mg 279.077 IEC†	119.1	126.0	5717.9 ug/L	5717.9 ppb	12:47:41
1	Na 589.592 Radial†	32995.4	36392.4	10497 ug/L	10497 ppb	12:47:21
1	Sr 421.552†	74404.4	80486.1	520.98 ug/L	520.98 ppb	12:47:21
1	Sc 361.383	896400.6	896400.6	102.03 %		12:48:39
1	Y 371.029	745307.9	745307.9	100.80 %		12:48:39
1	Ag 328.068†	106547.2	103979.8	501.26 ug/L	501.26 ppb	12:48:44
1	As 188.979†	1140.5	1142.2	564.42 ug/L	564.42 ppb	12:49:04
1	B 249.677†	20959.9	21010.0	521.33 ug/L	521.33 ppb	12:48:44
1	Ba 233.527†	62393.3	61156.3	512.45 ug/L	512.45 ppb	12:48:44
1	Be 313.107†	1300470.1	1278392.7	506.89 ug/L	506.89 ppb	12:48:39
1	Cd 226.502†	41516.5	40866.4	526.40 ug/L	526.40 ppb	12:48:44
1	Co 228.616†	23326.4	22912.4	529.51 ug/L	529.51 ppb	12:48:44
1	Cr 267.716†	43292.1	42349.5	512.95 ug/L	512.95 ppb	12:48:44
1	Cu 324.752†	168649.4	159083.9	487.65 ug/L	487.65 ppb	12:48:44
1	Mn 257.610†	432804.5	423725.2	508.06 ug/L	508.06 ppb	12:48:39
1	Mo 202.031†	6619.9	6480.3	507.36 ug/L	507.36 ppb	12:49:04
1	Ni 231.604†	19149.6	18694.7	518.70 ug/L	518.70 ppb	12:48:44
1	P 214.914†	4172.3	3893.2	2510.6 ug/L	2510.6 ppb	12:49:04
1	Pb 220.353†	3904.4	3879.1	527.78 ug/L	527.78 ppb	12:49:04
1	S 181.975 Axial†	703.2	658.0	1057.2 ug/L	1057.2 ppb	12:49:04
1	Sb 206.836†	1466.2	1402.3	546.22 ug/L	546.22 ppb	12:49:04
1	Se 196.026†	716.9	722.0	544.63 ug/L	544.63 ppb	12:49:04
1	Si 251.611†	76834.3	74779.0	2541.5 ug/L	2541.5 ppb	12:48:44
1	Sn 189.927†	2638.2	2572.1	518.58 ug/L	518.58 ppb	12:49:04
1	Ti 334.940†	312817.9	307750.0	488.74 ug/L	488.74 ppb	12:48:44
1	Tl 190.801†	1493.6	1491.4	515.61 ug/L	515.61 ppb	12:49:04
1	U 409.014†	14992.2	17118.5	471.75 ug/L	471.75 ppb	12:48:44
1	V 292.402†	68187.0	68174.9	508.30 ug/L	508.30 ppb	12:48:44
1	Zn 213.857†	49299.9	47727.4	511.80 ug/L	511.80 ppb	12:48:44
1	SiO2†	76656.0	74596.8	5400.7 ug/L	5400.7 ppb	12:50:11
2	Sc Radial	4099.8	4099.8	93.3 %		12:48:06
2	Y RADIAL	4617.8	4617.8	95.70 %		12:47:46
2	Al 396.153Radial†	5266.0	5750.3	5003.5 ug/L	5003.5 ppb	12:47:46
2	Ca 317.933Radial†	2501.4	2662.2	5286.6 ug/L	5286.6 ppb	12:48:06
2	Fe 238.204 Radial†	417.9	436.9	5313.8 ug/L	5313.8 ppb	12:48:06
2	K 766.490 Radial†	29470.4	29109.9	5589.9 ug/L	5589.9 ppb	12:47:46
2	Mg 279.077 IEC†	116.9	122.5	5555.5 ug/L	5555.5 ppb	12:48:06
2	Na 589.592 Radial†	32484.5	35523.1	10247 ug/L	10247 ppb	12:47:46
2	Sr 421.552†	73697.3	79003.0	511.38 ug/L	511.38 ppb	12:47:46
2	Sc 361.383	903312.3	903312.3	102.82 %		12:49:10
2	Y 371.029	750789.9	750789.9	101.55 %		12:49:10
2	Ag 328.068†	106285.0	102925.9	496.17 ug/L	496.17 ppb	12:49:15
2	As 188.979†	1124.8	1118.4	552.66 ug/L	552.66 ppb	12:49:35
2	B 249.677†	20786.3	20684.1	513.24 ug/L	513.24 ppb	12:49:15
2	Ba 233.527†	61954.3	60261.6	504.96 ug/L	504.96 ppb	12:49:15
2	Be 313.107†	1303189.5	1271285.3	504.06 ug/L	504.06 ppb	12:49:10
2	Cd 226.502†	41238.6	40284.7	518.91 ug/L	518.91 ppb	12:49:15
2	Co 228.616†	23172.2	22587.5	522.01 ug/L	522.01 ppb	12:49:15
2	Cr 267.716†	43047.0	41786.6	506.13 ug/L	506.13 ppb	12:49:15
2	Cu 324.752†	168372.7	157550.1	482.94 ug/L	482.94 ppb	12:49:15
2	Mn 257.610†	433291.1	420952.9	504.74 ug/L	504.74 ppb	12:49:10
2	Mo 202.031†	6640.6	6450.9	505.05 ug/L	505.05 ppb	12:49:35
2	Ni 231.604†	19093.6	18496.7	513.20 ug/L	513.20 ppb	12:49:15

2	P 214.914†	4139.4	3829.8	2469.1 ug/L	2469.1 ppb	12:49:35
2	Pb 220.353†	3901.3	3846.7	523.38 ug/L	523.38 ppb	12:49:35
2	S 181.975 Axial†	700.3	649.9	1044.0 ug/L	1044.0 ppb	12:49:35
2	Sb 206.836†	1457.9	1383.2	538.96 ug/L	538.96 ppb	12:49:35
2	Se 196.026†	709.2	709.1	535.06 ug/L	535.06 ppb	12:49:35
2	Si 251.611†	76365.0	73746.5	2506.3 ug/L	2506.3 ppb	12:49:15
2	Sn 189.927†	2651.0	2564.8	517.09 ug/L	517.09 ppb	12:49:35
2	Ti 334.940†	311046.9	303681.8	482.29 ug/L	482.29 ppb	12:49:15
2	Tl 190.801†	1478.2	1465.2	506.58 ug/L	506.58 ppb	12:49:35
2	U 409.014†	15213.1	17221.0	474.61 ug/L	474.61 ppb	12:49:15
2	V 292.402†	68062.2	67542.2	503.63 ug/L	503.63 ppb	12:49:15
2	Zn 213.857†	49045.5	47110.3	505.17 ug/L	505.17 ppb	12:49:15
2	SiO2†	77879.1	75211.6	5445.4 ug/L	5445.4 ppb	12:50:17
3	Sc Radial	4087.5	4087.5	93.0 %		12:48:32
3	Y RADIAL	4660.1	4660.1	96.58 %		12:48:12
3	Al 396.153Radial†	5388.5	5899.1	5133.9 ug/L	5133.9 ppb	12:48:12
3	Ca 317.933Radial†	2506.4	2675.7	5313.4 ug/L	5313.4 ppb	12:48:32
3	Fe 238.204 Radial†	421.1	441.8	5372.3 ug/L	5372.3 ppb	12:48:32
3	K 766.490 Radial†	29845.2	29608.5	5685.6 ug/L	5685.6 ppb	12:48:12
3	Mg 279.077 IEC†	114.8	120.6	5472.4 ug/L	5472.4 ppb	12:48:32
3	Na 589.592 Radial†	32992.3	36174.5	10435 ug/L	10435 ppb	12:48:12
3	Sr 421.552†	74941.3	80579.7	521.59 ug/L	521.59 ppb	12:48:12
3	Sc 361.383	910627.8	910627.8	103.65 %		12:49:41
3	Y 371.029	757460.8	757460.8	102.45 %		12:49:41
3	Ag 328.068†	105592.5	101427.3	488.99 ug/L	488.99 ppb	12:49:46
3	As 188.979†	1127.5	1112.2	549.60 ug/L	549.60 ppb	12:50:06
3	B 249.677†	20731.2	20468.5	507.88 ug/L	507.88 ppb	12:49:46
3	Ba 233.527†	61645.7	59479.8	498.41 ug/L	498.41 ppb	12:49:46
3	Be 313.107†	1304561.4	1262427.0	500.54 ug/L	500.54 ppb	12:49:41
3	Cd 226.502†	40960.9	39694.7	511.29 ug/L	511.29 ppb	12:49:46
3	Co 228.616†	22958.6	22200.4	513.07 ug/L	513.07 ppb	12:49:46
3	Cr 267.716†	42849.4	41259.5	499.76 ug/L	499.76 ppb	12:49:46
3	Cu 324.752†	167401.7	155297.7	476.05 ug/L	476.05 ppb	12:49:46
3	Mn 257.610†	433525.3	417793.5	500.96 ug/L	500.96 ppb	12:49:41
3	Mo 202.031†	6629.0	6387.8	500.12 ug/L	500.12 ppb	12:50:06
3	Ni 231.604†	18946.3	18205.4	505.12 ug/L	505.12 ppb	12:49:46
3	P 214.914†	4167.5	3824.6	2467.0 ug/L	2467.0 ppb	12:50:06
3	Pb 220.353†	3909.9	3824.6	520.39 ug/L	520.39 ppb	12:50:06
3	S 181.975 Axial†	694.9	639.3	1027.0 ug/L	1027.0 ppb	12:50:06
3	Sb 206.836†	1472.3	1385.7	539.76 ug/L	539.76 ppb	12:50:06
3	Se 196.026†	713.5	707.7	534.22 ug/L	534.22 ppb	12:50:06
3	Si 251.611†	76045.4	72841.5	2475.6 ug/L	2475.6 ppb	12:49:46
3	Sn 189.927†	2661.9	2554.6	515.05 ug/L	515.05 ppb	12:50:06
3	Ti 334.940†	309552.8	299810.2	476.15 ug/L	476.15 ppb	12:49:46
3	Tl 190.801†	1496.0	1470.8	508.49 ug/L	508.49 ppb	12:50:06
3	U 409.014†	14967.5	16865.2	464.78 ug/L	464.78 ppb	12:49:46
3	V 292.402†	67640.4	66603.5	496.63 ug/L	496.63 ppb	12:49:46
3	Zn 213.857†	48691.8	46385.9	497.38 ug/L	497.38 ppb	12:49:46
3	SiO2†	76185.6	72969.3	5282.8 ug/L	5282.8 ppb	12:50:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903446.9	102.84 %	0.810			0.79%
Sc Radial	4083.4	92.9 %	0.43			0.46%
Y 371.029	751186.2	101.60 %	0.823			0.81%
Y RADIAL	4624.5	95.84 %	0.679			0.71%
Ag 328.068†	102777.7	495.47 ug/L	6.164	495.47 ppb	6.164	1.24%
QC value within limits for Ag 328.068 Recovery = 99.09%						
Al 396.153Radial†	5829.5	5072.8 ug/L	65.56	5072.8 ppb	65.56	1.29%
QC value within limits for Al 396.153Radial Recovery = 101.46%						
As 188.979†	1124.3	555.56 ug/L	7.827	555.56 ppb	7.827	1.41%
QC value greater than the upper limit for As 188.979 Recovery = 111.11%						
B 249.677†	20720.9	514.15 ug/L	6.772	514.15 ppb	6.772	1.32%
QC value within limits for B 249.677 Recovery = 102.83%						
Ba 233.527†	60299.2	505.27 ug/L	7.025	505.27 ppb	7.025	1.39%
QC value within limits for Ba 233.527 Recovery = 101.05%						
Be 313.107†	1270701.7	503.83 ug/L	3.179	503.83 ppb	3.179	0.63%
QC value within limits for Be 313.107 Recovery = 100.77%						
Ca 317.933Radial†	2675.2	5312.3 ug/L	25.20	5312.3 ppb	25.20	0.47%

QC value within limits for Ca 317.933 Radial Recovery = 106.25%							
Cd	226.502†	40281.9	518.87 ug/L	7.553	518.87 ppb	7.553	1.46%
QC value within limits for Cd 226.502 Recovery = 103.77%							
Co	228.616†	22566.7	521.53 ug/L	8.232	521.53 ppb	8.232	1.58%
QC value within limits for Co 228.616 Recovery = 104.31%							
Cr	267.716†	41798.6	506.28 ug/L	6.596	506.28 ppb	6.596	1.30%
QC value within limits for Cr 267.716 Recovery = 101.26%							
Cu	324.752†	157310.6	482.21 ug/L	5.835	482.21 ppb	5.835	1.21%
QC value within limits for Cu 324.752 Recovery = 96.44%							
Fe	238.204 Radial†	440.3	5354.5 ug/L	35.39	5354.5 ppb	35.39	0.66%
QC value within limits for Fe 238.204 Radial Recovery = 107.09%							
K	766.490 Radial†	29457.3	5656.6 ug/L	57.95	5656.6 ppb	57.95	1.02%
QC value greater than the upper limit for K 766.490 Radial Recovery = 113.13%							
Mg	279.077 IEC†	123.0	5582.0 ug/L	124.87	5582.0 ppb	124.87	2.24%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 111.64%							
Mn	257.610†	420823.9	504.59 ug/L	3.552	504.59 ppb	3.552	0.70%
QC value within limits for Mn 257.610 Recovery = 100.92%							
Mo	202.031†	6439.6	504.18 ug/L	3.699	504.18 ppb	3.699	0.73%
QC value within limits for Mo 202.031 Recovery = 100.84%							
Na	589.592 Radial†	36030.0	10393 ug/L	130.5	10393 ppb	130.5	1.26%
QC value within limits for Na 589.592 Radial Recovery = 103.93%							
Ni	231.604†	18465.6	512.34 ug/L	6.829	512.34 ppb	6.829	1.33%
QC value within limits for Ni 231.604 Recovery = 102.47%							
P	214.914†	3849.2	2482.2 ug/L	24.59	2482.2 ppb	24.59	0.99%
QC value within limits for P 214.914 Recovery = 99.29%							
Pb	220.353†	3850.1	523.85 ug/L	3.719	523.85 ppb	3.719	0.71%
QC value within limits for Pb 220.353 Recovery = 104.77%							
S	181.975 Axial†	649.1	1042.7 ug/L	15.14	1042.7 ppb	15.14	1.45%
QC value within limits for S 181.975 Axial Recovery = 104.27%							
Sb	206.836†	1390.4	541.65 ug/L	3.982	541.65 ppb	3.982	0.74%
QC value within limits for Sb 206.836 Recovery = 108.33%							
Se	196.026†	712.9	537.97 ug/L	5.780	537.97 ppb	5.780	1.07%
QC value within limits for Se 196.026 Recovery = 107.59%							
Si	251.611†	73789.0	2507.8 ug/L	32.99	2507.8 ppb	32.99	1.32%
QC value within limits for Si 251.611 Recovery = 100.31%							
Sn	189.927†	2563.8	516.91 ug/L	1.774	516.91 ppb	1.774	0.34%
QC value within limits for Sn 189.927 Recovery = 103.38%							
Sr	421.552†	80022.9	517.99 ug/L	5.726	517.99 ppb	5.726	1.11%
QC value within limits for Sr 421.552 Recovery = 103.60%							
Ti	334.940†	303747.3	482.40 ug/L	6.295	482.40 ppb	6.295	1.30%
QC value within limits for Ti 334.940 Recovery = 96.48%							
Tl	190.801†	1475.8	510.23 ug/L	4.757	510.23 ppb	4.757	0.93%
QC value within limits for Tl 190.801 Recovery = 102.05%							
U	409.014†	17068.2	470.38 ug/L	5.059	470.38 ppb	5.059	1.08%
QC value within limits for U 409.014 Recovery = 94.08%							
V	292.402†	67440.2	502.85 ug/L	5.870	502.85 ppb	5.870	1.17%
QC value within limits for V 292.402 Recovery = 100.57%							
Zn	213.857†	47074.5	504.78 ug/L	7.216	504.78 ppb	7.216	1.43%
QC value within limits for Zn 213.857 Recovery = 100.96%							
SiO2†		74259.3	5376.3 ug/L	84.01	5376.3 ppb	84.01	1.56%
QC value within limits for SiO2 Recovery = 100.54%							
QC Failed. Continue with analysis.							

Sequence No.: 14
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/22/2010 12:52:31
 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	4362.5	4362.5	99.2 %		12:54:24
1	Y RADIAL	4797.7	4797.7	99.43 %		12:54:24
1	Al 396.153Radial†	-112.7	-9.3	-8.2031 ug/L	-8.2031 ppb	12:54:44
1	Ca 317.933Radial†	23.2	3.6	7.1343 ug/L	7.1343 ppb	12:54:44
1	Fe 238.204 Radial†	10.6	-0.4	-5.3683 ug/L	-5.3683 ppb	12:54:44
1	K 766.490 Radial†	3147.9	684.3	131.54 ug/L	131.54 ppb	12:54:24
1	Mg 279.077 IEC†	0.7	-2.2	-99.143 ug/L	-99.143 ppb	12:54:44
1	Na 589.592 Radial†	-602.4	87.1	25.122 ug/L	25.122 ppb	12:54:24
1	Sr 421.552†	17.8	4.4	0.0285 ug/L	0.0285 ppb	12:54:24
1	Sc 361.383	886640.0	886640.0	100.92 %		12:55:41
1	Y 371.029	747507.1	747507.1	101.10 %		12:55:41
1	Ag 328.068†	218.0	-227.0	-1.0823 ug/L	-1.0823 ppb	12:55:41
1	As 188.979†	20.6	44.9	21.993 ug/L	21.993 ppb	12:56:01
1	B 249.677†	555.6	1018.6	25.392 ug/L	25.392 ppb	12:55:41
1	Ba 233.527†	-2.4	4.7	0.0378 ug/L	0.0378 ppb	12:56:01
1	Be 313.107†	-3666.7	219.1	0.0862 ug/L	0.0862 ppb	12:55:41
1	Cd 226.502†	-158.8	20.2	0.2595 ug/L	0.2595 ppb	12:56:01
1	Co 228.616†	-59.5	-7.9	-0.1802 ug/L	-0.1802 ppb	12:56:01
1	Cr 267.716†	85.7	5.5	0.0702 ug/L	0.0702 ppb	12:56:01
1	Cu 324.752†	6193.3	-66.2	-0.1969 ug/L	-0.1969 ppb	12:55:41
1	Mn 257.610†	449.1	-4.8	-0.0022 ug/L	-0.0022 ppb	12:56:01
1	Mo 202.031†	15.1	7.4	0.5787 ug/L	0.5787 ppb	12:56:01
1	Ni 231.604†	92.9	19.1	0.5292 ug/L	0.5292 ppb	12:56:01
1	P 214.914†	203.3	5.4	3.6886 ug/L	3.6886 ppb	12:56:01
1	Pb 220.353†	-8.9	43.6	5.9209 ug/L	5.9209 ppb	12:56:01
1	S 181.975 Axial†	43.5	11.9	19.149 ug/L	19.149 ppb	12:56:01
1	Sb 206.836†	72.5	37.1	14.035 ug/L	14.035 ppb	12:56:01
1	Se 196.026†	-23.7	-4.2	-3.0599 ug/L	-3.0599 ppb	12:56:01
1	Si 251.611†	705.3	175.6	5.9763 ug/L	5.9763 ppb	12:56:01
1	Sn 189.927†	27.3	13.5	2.7248 ug/L	2.7248 ppb	12:56:01
1	Ti 334.940†	-1301.9	-120.7	-0.1775 ug/L	-0.1775 ppb	12:55:41
1	Tl 190.801†	-22.2	5.6	1.9296 ug/L	1.9296 ppb	12:56:01
1	U 409.014†	-2873.6	-422.0	-11.673 ug/L	-11.673 ppb	12:55:41
1	V 292.402†	-1457.3	-96.5	-0.7248 ug/L	-0.7248 ppb	12:55:41
1	Zn 213.857†	635.3	40.0	0.4306 ug/L	0.4306 ppb	12:56:01
1	SiO2†	681.3	144.4	10.465 ug/L	10.465 ppb	12:56:57
2	Sc Radial	4406.2	4406.2	100 %		12:54:49
2	Y RADIAL	4817.3	4817.3	99.84 %		12:54:49
2	Al 396.153Radial†	-106.6	-2.1	-1.8732 ug/L	-1.8732 ppb	12:55:09
2	Ca 317.933Radial†	20.8	1.0	1.9044 ug/L	1.9044 ppb	12:55:09
2	Fe 238.204 Radial†	11.4	0.3	3.3518 ug/L	3.3518 ppb	12:55:09
2	K 766.490 Radial†	3140.4	645.4	124.08 ug/L	124.08 ppb	12:54:49
2	Mg 279.077 IEC†	3.5	0.7	29.871 ug/L	29.871 ppb	12:55:09
2	Na 589.592 Radial†	-647.6	48.0	13.837 ug/L	13.837 ppb	12:54:49
2	Sr 421.552†	36.7	23.1	0.1496 ug/L	0.1496 ppb	12:54:49
2	Sc 361.383	900608.3	900608.3	102.51 %		12:56:06
2	Y 371.029	758622.8	758622.8	102.61 %		12:56:06
2	Ag 328.068†	242.0	-206.9	-0.9893 ug/L	-0.9893 ppb	12:56:06
2	As 188.979†	23.5	47.4	23.236 ug/L	23.236 ppb	12:56:26
2	B 249.677†	587.1	1040.8	25.945 ug/L	25.945 ppb	12:56:06
2	Ba 233.527†	20.9	27.5	0.2286 ug/L	0.2286 ppb	12:56:26
2	Be 313.107†	-3875.0	72.2	0.0283 ug/L	0.0283 ppb	12:56:06
2	Cd 226.502†	-165.6	16.1	0.2061 ug/L	0.2061 ppb	12:56:26
2	Co 228.616†	-65.1	-12.4	-0.2853 ug/L	-0.2853 ppb	12:56:26
2	Cr 267.716†	54.9	-25.8	-0.3110 ug/L	-0.3110 ppb	12:56:26
2	Cu 324.752†	6185.3	-169.2	-0.5160 ug/L	-0.5160 ppb	12:56:06
2	Mn 257.610†	440.8	-19.7	-0.0246 ug/L	-0.0246 ppb	12:56:26
2	Mo 202.031†	14.4	6.5	0.5103 ug/L	0.5103 ppb	12:56:26
2	Ni 231.604†	77.8	2.9	0.0794 ug/L	0.0794 ppb	12:56:26

2	P 214.914†	198.0	-2.9	-1.8283 ug/L	-1.8283 ppb	12:56:26
2	Pb 220.353†	-8.3	44.4	6.0218 ug/L	6.0218 ppb	12:56:26
2	S 181.975 Axial†	42.0	9.8	15.740 ug/L	15.740 ppb	12:56:26
2	Sb 206.836†	63.9	27.6	10.391 ug/L	10.391 ppb	12:56:26
2	Se 196.026†	-19.1	0.7	0.5022 ug/L	0.5022 ppb	12:56:26
2	Si 251.611†	669.7	130.0	4.4221 ug/L	4.4221 ppb	12:56:26
2	Sn 189.927†	16.3	2.4	0.4815 ug/L	0.4815 ppb	12:56:26
2	Ti 334.940†	-1271.7	-71.2	-0.1132 ug/L	-0.1132 ppb	12:56:06
2	Tl 190.801†	-27.1	1.2	0.4107 ug/L	0.4107 ppb	12:56:26
2	U 409.014†	-2654.5	-164.1	-4.5383 ug/L	-4.5383 ppb	12:56:06
2	V 292.402†	-1480.9	-97.1	-0.7155 ug/L	-0.7155 ppb	12:56:06
2	Zn 213.857†	627.0	22.2	0.2397 ug/L	0.2397 ppb	12:56:26
2	SiO2†	688.7	141.1	10.226 ug/L	10.226 ppb	12:57:02
3	Sc Radial	4336.2	4336.2	98.6 %		12:55:14
3	Y RADIAL	4757.4	4757.4	98.60 %		12:55:14
3	Al 396.153Radial†	-101.5	1.3	1.1440 ug/L	1.1440 ppb	12:55:34
3	Ca 317.933Radial†	30.3	11.0	21.770 ug/L	21.770 ppb	12:55:34
3	Fe 238.204 Radial†	12.2	1.2	14.913 ug/L	14.913 ppb	12:55:34
3	K 766.490 Radial†	3225.4	782.1	150.35 ug/L	150.35 ppb	12:55:14
3	Mg 279.077 IEC†	1.7	-1.1	-49.991 ug/L	-49.991 ppb	12:55:34
3	Na 589.592 Radial†	-696.8	-12.3	-3.5442 ug/L	-3.5442 ppb	12:55:14
3	Sr 421.552†	28.5	15.4	0.0997 ug/L	0.0997 ppb	12:55:14
3	Sc 361.383	891960.5	891960.5	101.53 %		12:56:32
3	Y 371.029	752050.6	752050.6	101.72 %		12:56:32
3	Ag 328.068†	284.3	-162.9	-0.7715 ug/L	-0.7715 ppb	12:56:32
3	As 188.979†	14.6	38.8	19.047 ug/L	19.047 ppb	12:56:52
3	B 249.677†	493.0	953.7	23.772 ug/L	23.772 ppb	12:56:32
3	Ba 233.527†	15.5	22.4	0.1867 ug/L	0.1867 ppb	12:56:52
3	Be 313.107†	-3749.9	158.7	0.0623 ug/L	0.0623 ppb	12:56:32
3	Cd 226.502†	-143.5	36.3	0.4645 ug/L	0.4645 ppb	12:56:52
3	Co 228.616†	-66.5	-14.4	-0.3325 ug/L	-0.3325 ppb	12:56:52
3	Cr 267.716†	93.7	13.0	0.1606 ug/L	0.1606 ppb	12:56:52
3	Cu 324.752†	6155.7	-139.9	-0.4237 ug/L	-0.4237 ppb	12:56:32
3	Mn 257.610†	449.5	-7.0	-0.0048 ug/L	-0.0048 ppb	12:56:52
3	Mo 202.031†	10.9	3.2	0.2528 ug/L	0.2528 ppb	12:56:52
3	Ni 231.604†	71.8	-2.3	-0.0629 ug/L	-0.0629 ppb	12:56:52
3	P 214.914†	199.1	0.1	0.1969 ug/L	0.1969 ppb	12:56:52
3	Pb 220.353†	-32.5	20.5	2.7803 ug/L	2.7803 ppb	12:56:52
3	S 181.975 Axial†	36.1	4.4	7.0618 ug/L	7.0618 ppb	12:56:52
3	Sb 206.836†	68.9	33.2	12.524 ug/L	12.524 ppb	12:56:52
3	Se 196.026†	-21.3	-1.6	-1.1365 ug/L	-1.1365 ppb	12:56:52
3	Si 251.611†	678.2	144.7	4.9273 ug/L	4.9273 ppb	12:56:52
3	Sn 189.927†	27.5	13.6	2.7446 ug/L	2.7446 ppb	12:56:52
3	Ti 334.940†	-1326.4	-137.1	-0.2075 ug/L	-0.2075 ppb	12:56:32
3	Tl 190.801†	-28.0	-0.0	-0.0032 ug/L	-0.0032 ppb	12:56:52
3	U 409.014†	-2745.8	-279.1	-7.7231 ug/L	-7.7231 ppb	12:56:32
3	V 292.402†	-1425.4	-56.5	-0.4299 ug/L	-0.4299 ppb	12:56:32
3	Zn 213.857†	632.1	33.1	0.3565 ug/L	0.3565 ppb	12:56:52
3	SiO2†	718.3	176.8	12.823 ug/L	12.823 ppb	12:57:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893069.6	101.66 %		0.802			0.79%
Sc Radial	4368.3	99.4 %		0.80			0.81%
Y 371.029	752726.8	101.81 %		0.756			0.74%
Y RADIAL	4790.8	99.29 %		0.633			0.64%
Ag 328.068†	-198.9	-0.9477 ug/L		0.15950	-0.9477 ppb	0.15950	16.83%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-3.4	-2.9774 ug/L		4.77036	-2.9774 ppb	4.77036	160.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	43.7	21.426 ug/L		2.1513	21.426 ppb	2.1513	10.04%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	1004.4	25.036 ug/L		1.1295	25.036 ppb	1.1295	4.51%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	18.2	0.1510 ug/L		0.10030	0.1510 ppb	0.10030	66.41%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	150.0	0.0589 ug/L		0.02912	0.0589 ppb	0.02912	49.39%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	5.2	10.269 ug/L		10.2971	10.269 ppb	10.2971	100.27%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	24.2	0.3100 ug/L	0.13643	0.3100 ppb	0.13643	44.01%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-11.6	-0.2660 ug/L	0.07795	-0.2660 ppb	0.07795	29.30%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-2.4	-0.0267 ug/L	0.25032	-0.0267 ppb	0.25032	936.21%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-125.1	-0.3788 ug/L	0.16422	-0.3788 ppb	0.16422	43.35%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	0.4	4.2989 ug/L	10.17385	4.2989 ppb	10.17385	236.66%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	703.9	135.32 ug/L	13.536	135.32 ppb	13.536	10.00%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-0.9	-39.755 ug/L	65.1134	-39.755 ppb	65.1134	163.79%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-10.5	-0.0105 ug/L	0.01220	-0.0105 ppb	0.01220	115.72%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	5.7	0.4473 ug/L	0.17185	0.4473 ppb	0.17185	38.42%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	40.9	11.805 ug/L	14.4408	11.805 ppb	14.4408	122.33%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	6.5	0.1819 ug/L	0.30907	0.1819 ppb	0.30907	169.91%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	0.9	0.6857 ug/L	2.79078	0.6857 ppb	2.79078	406.97%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	36.2	4.9077 ug/L	1.84305	4.9077 ppb	1.84305	37.55%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	8.7	13.983 ug/L	6.2320	13.983 ppb	6.2320	44.57%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	32.6	12.317 ug/L	1.8306	12.317 ppb	1.8306	14.86%		
QC value greater than the upper limit for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-1.7	-1.2314 ug/L	1.78294	-1.2314 ppb	1.78294	144.79%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	150.1	5.1086 ug/L	0.79278	5.1086 ppb	0.79278	15.52%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	9.8	1.9836 ug/L	1.30089	1.9836 ppb	1.30089	65.58%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	14.3	0.0926 ug/L	0.06084	0.0926 ppb	0.06084	65.70%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-109.7	-0.1661 ug/L	0.04816	-0.1661 ppb	0.04816	29.00%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	2.3	0.7790 ug/L	1.01768	0.7790 ppb	1.01768	130.64%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-288.4	-7.9780 ug/L	3.57399	-7.9780 ppb	3.57399	44.80%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-83.4	-0.6234 ug/L	0.16763	-0.6234 ppb	0.16763	26.89%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	31.7	0.3423 ug/L	0.09625	0.3423 ppb	0.09625	28.12%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	154.1	11.171 ug/L	1.4356	11.171 ppb	1.4356	12.85%			
QC value within limits for SiO2 Recovery = Not calculated									
QC Failed. Continue with analysis.									

=====
Analysis Begun

Start Time: 2/22/2010 13:02:19

Plasma On Time: 2/22/2010 05:55:10

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022210.sif

Batch ID:

Results Data Set: 022210

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

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/22/2010 11:29:53

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 13:02:20

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	4165.8	4165.8	94.8 %		13:04:13
1	Y RADIAL	4530.8	4530.8	93.90 %		13:04:13
1	Al 396.153Radial†	5219.3	5611.5	4881.7 ug/L	4881.7 ppb	13:04:13

1	Ca 317.933Radial†	2537.5	2657.8	5277.8 ug/L	5277.8 ppb	13:04:33
1	Fe 238.204 Radial†	430.7	443.4	5392.7 ug/L	5392.7 ppb	13:04:33
1	K 766.490 Radial†	28081.5	27143.7	5211.8 ug/L	5211.8 ppb	13:04:13
1	Mg 279.077 IEC†	118.1	121.8	5524.7 ug/L	5524.7 ppb	13:04:33
1	Na 589.592 Radial†	33332.6	35866.3	10346 ug/L	10346 ppb	13:04:13
1	Sr 421.552†	74353.0	78443.1	507.76 ug/L	507.76 ppb	13:04:13
1	Sc 361.383	878861.1	878861.1	100.04 %		13:05:30
1	Y 371.029	730802.1	730802.1	98.843 %		13:05:30
1	Ag 328.068†	104565.9	104083.3	501.76 ug/L	501.76 ppb	13:05:35
1	As 188.979†	1065.2	1089.3	538.43 ug/L	538.43 ppb	13:05:55
1	B 249.677†	20136.3	20596.8	511.03 ug/L	511.03 ppb	13:05:35
1	Ba 233.527†	61004.7	60988.6	511.05 ug/L	511.05 ppb	13:05:35
1	Be 313.107†	1283333.9	1286699.0	510.18 ug/L	510.18 ppb	13:05:30
1	Cd 226.502†	40366.6	40528.9	522.05 ug/L	522.05 ppb	13:05:35
1	Co 228.616†	22773.2	22815.6	527.29 ug/L	527.29 ppb	13:05:35
1	Cr 267.716†	42327.6	42232.1	511.54 ug/L	511.54 ppb	13:05:35
1	Cu 324.752†	166233.1	159967.1	490.36 ug/L	490.36 ppb	13:05:35
1	Mn 257.610†	426823.9	426212.2	511.05 ug/L	511.05 ppb	13:05:30
1	Mo 202.031†	6597.9	6587.8	515.77 ug/L	515.77 ppb	13:05:55
1	Ni 231.604†	18711.5	18631.3	516.94 ug/L	516.94 ppb	13:05:35
1	P 214.914†	4132.6	3935.1	2538.1 ug/L	2538.1 ppb	13:05:55
1	Pb 220.353†	3819.2	3870.2	526.56 ug/L	526.56 ppb	13:05:55
1	S 181.975 Axial†	683.5	652.1	1047.6 ug/L	1047.6 ppb	13:05:55
1	Sb 206.836†	1425.1	1389.9	541.85 ug/L	541.85 ppb	13:05:55
1	Se 196.026†	715.4	734.5	553.78 ug/L	553.78 ppb	13:05:55
1	Si 251.611†	74716.2	74164.6	2520.5 ug/L	2520.5 ppb	13:05:35
1	Sn 189.927†	2625.9	2611.4	526.48 ug/L	526.48 ppb	13:05:55
1	Ti 334.940†	307717.0	308769.5	490.37 ug/L	490.37 ppb	13:05:35
1	Tl 190.801†	1469.8	1496.9	517.51 ug/L	517.51 ppb	13:05:55
1	U 409.014†	14835.4	17255.0	475.53 ug/L	475.53 ppb	13:05:35
1	V 292.402†	67044.9	68366.9	509.83 ug/L	509.83 ppb	13:05:35
1	Zn 213.857†	48106.1	47498.4	509.32 ug/L	509.32 ppb	13:05:35
1	SiO2†	75198.5	74639.3	5403.6 ug/L	5403.6 ppb	13:07:03
2	Sc Radial	4202.3	4202.3	95.6 %		13:04:38
2	Y RADIAL	4584.1	4584.1	95.01 %		13:04:38
2	Al 396.153Radial†	5302.5	5650.7	4916.0 ug/L	4916.0 ppb	13:04:38
2	Ca 317.933Radial†	2509.9	2605.6	5174.3 ug/L	5174.3 ppb	13:04:58
2	Fe 238.204 Radial†	424.6	433.0	5267.0 ug/L	5267.0 ppb	13:04:58
2	K 766.490 Radial†	28354.5	27171.9	5217.3 ug/L	5217.3 ppb	13:04:38
2	Mg 279.077 IEC†	114.9	117.3	5321.9 ug/L	5321.9 ppb	13:04:58
2	Na 589.592 Radial†	33572.0	35811.2	10330 ug/L	10330 ppb	13:04:38
2	Sr 421.552†	75122.9	78566.9	508.56 ug/L	508.56 ppb	13:04:38
2	Sc 361.383	880393.0	880393.0	100.21 %		13:06:01
2	Y 371.029	730992.3	730992.3	98.868 %		13:06:01
2	Ag 328.068†	105163.4	104497.6	503.71 ug/L	503.71 ppb	13:06:06
2	As 188.979†	1056.1	1078.3	533.05 ug/L	533.05 ppb	13:06:26
2	B 249.677†	20212.7	20638.0	512.08 ug/L	512.08 ppb	13:06:06
2	Ba 233.527†	61304.9	61182.1	512.67 ug/L	512.67 ppb	13:06:06
2	Be 313.107†	1276283.5	1277431.5	506.52 ug/L	506.52 ppb	13:06:01
2	Cd 226.502†	40602.5	40694.1	524.19 ug/L	524.19 ppb	13:06:06
2	Co 228.616†	22883.9	22886.4	528.92 ug/L	528.92 ppb	13:06:06
2	Cr 267.716†	42488.2	42318.8	512.57 ug/L	512.57 ppb	13:06:06
2	Cu 324.752†	166733.0	160176.8	490.99 ug/L	490.99 ppb	13:06:06
2	Mn 257.610†	426055.5	424703.0	509.24 ug/L	509.24 ppb	13:06:01
2	Mo 202.031†	6586.0	6564.6	513.94 ug/L	513.94 ppb	13:06:26
2	Ni 231.604†	18797.2	18684.3	518.41 ug/L	518.41 ppb	13:06:06
2	P 214.914†	4122.3	3917.6	2526.4 ug/L	2526.4 ppb	13:06:26
2	Pb 220.353†	3821.6	3866.0	526.00 ug/L	526.00 ppb	13:06:26
2	S 181.975 Axial†	698.8	666.1	1070.1 ug/L	1070.1 ppb	13:06:26
2	Sb 206.836†	1422.5	1384.7	539.85 ug/L	539.85 ppb	13:06:26
2	Se 196.026†	702.3	720.2	542.96 ug/L	542.96 ppb	13:06:26
2	Si 251.611†	75188.6	74506.0	2532.1 ug/L	2532.1 ppb	13:06:06
2	Sn 189.927†	2622.9	2603.8	524.94 ug/L	524.94 ppb	13:06:26
2	Ti 334.940†	309151.9	309666.2	491.79 ug/L	491.79 ppb	13:06:06
2	Tl 190.801†	1470.0	1494.5	516.70 ug/L	516.70 ppb	13:06:26
2	U 409.014†	15024.3	17417.8	480.05 ug/L	480.05 ppb	13:06:06
2	V 292.402†	67305.0	68509.9	510.88 ug/L	510.88 ppb	13:06:06
2	Zn 213.857†	48256.9	47565.2	510.05 ug/L	510.05 ppb	13:06:06
2	SiO2†	74790.4	74101.2	5364.6 ug/L	5364.6 ppb	13:07:08
3	Sc Radial	4241.0	4241.0	96.5 %		13:05:03
3	Y RADIAL	4613.8	4613.8	95.62 %		13:05:03

3	Al 396.153Radial†	5327.2	5625.9	4894.4 ug/L	4894.4 ppb	13:05:03
3	Ca 317.933Radial†	2488.1	2559.1	5081.9 ug/L	5081.9 ppb	13:05:23
3	Fe 238.204 Radial†	427.9	432.4	5259.6 ug/L	5259.6 ppb	13:05:23
3	K 766.490 Radial†	28514.1	27067.0	5197.2 ug/L	5197.2 ppb	13:05:03
3	Mg 279.077 IEC†	115.1	116.4	5281.1 ug/L	5281.1 ppb	13:05:23
3	Na 589.592 Radial†	33707.2	35631.3	10278 ug/L	10278 ppb	13:05:03
3	Sr 421.552†	75487.6	78228.8	506.37 ug/L	506.37 ppb	13:05:03
3	Sc 361.383	873558.3	873558.3	99.434 %		13:06:32
3	Y 371.029	726145.5	726145.5	98.213 %		13:06:32
3	Ag 328.068†	104386.1	104536.9	503.89 ug/L	503.89 ppb	13:06:37
3	As 188.979†	1043.2	1073.6	530.73 ug/L	530.73 ppb	13:06:57
3	B 249.677†	20111.5	20694.0	513.48 ug/L	513.48 ppb	13:06:37
3	Ba 233.527†	60658.7	61010.9	511.24 ug/L	511.24 ppb	13:06:37
3	Be 313.107†	1265079.3	1276127.9	506.00 ug/L	506.00 ppb	13:06:32
3	Cd 226.502†	40160.0	40566.1	522.55 ug/L	522.55 ppb	13:06:37
3	Co 228.616†	22632.1	22811.9	527.19 ug/L	527.19 ppb	13:06:37
3	Cr 267.716†	42147.0	42307.3	512.43 ug/L	512.43 ppb	13:06:37
3	Cu 324.752†	166039.3	160781.0	492.84 ug/L	492.84 ppb	13:06:37
3	Mn 257.610†	421878.8	423829.0	508.19 ug/L	508.19 ppb	13:06:32
3	Mo 202.031†	6517.2	6546.7	512.54 ug/L	512.54 ppb	13:06:57
3	Ni 231.604†	18620.6	18653.5	517.55 ug/L	517.55 ppb	13:06:37
3	P 214.914†	4068.5	3895.7	2511.4 ug/L	2511.4 ppb	13:06:57
3	Pb 220.353†	3788.6	3862.7	525.54 ug/L	525.54 ppb	13:06:57
3	S 181.975 Axial†	676.8	649.5	1043.4 ug/L	1043.4 ppb	13:06:57
3	Sb 206.836†	1411.8	1385.1	539.97 ug/L	539.97 ppb	13:06:57
3	Se 196.026†	695.6	718.9	541.97 ug/L	541.97 ppb	13:06:57
3	Si 251.611†	74543.3	74444.1	2530.0 ug/L	2530.0 ppb	13:06:37
3	Sn 189.927†	2605.6	2606.9	525.54 ug/L	525.54 ppb	13:06:57
3	Ti 334.940†	306815.9	309730.6	491.88 ug/L	491.88 ppb	13:06:37
3	Tl 190.801†	1466.1	1502.1	519.30 ug/L	519.30 ppb	13:06:57
3	U 409.014†	15182.8	17694.5	487.70 ug/L	487.70 ppb	13:06:37
3	V 292.402†	66823.7	68551.3	511.18 ug/L	511.18 ppb	13:06:37
3	Zn 213.857†	47914.6	47597.7	510.41 ug/L	510.41 ppb	13:06:37
3	SiO2†	74195.9	74087.3	5363.6 ug/L	5363.6 ppb	13:07:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	877604.1	99.895 %	0.4082			0.41%
Sc Radial	4203.0	95.6 %	0.85			0.89%
Y 371.029	729313.3	98.641 %	0.3713			0.38%
Y RADIAL	4576.3	94.84 %	0.872			0.92%
Ag 328.068†	104372.6	503.12 ug/L	1.181	503.12 ppb	1.181	0.23%
QC value within limits for Ag 328.068 Recovery = 100.62%						
Al 396.153Radial†	5629.4	4897.4 ug/L	17.37	4897.4 ppb	17.37	0.35%
QC value within limits for Al 396.153Radial Recovery = 97.95%						
As 188.979†	1080.4	534.07 ug/L	3.953	534.07 ppb	3.953	0.74%
QC value within limits for As 188.979 Recovery = 106.81%						
B 249.677†	20642.9	512.20 ug/L	1.228	512.20 ppb	1.228	0.24%
QC value within limits for B 249.677 Recovery = 102.44%						
Ba 233.527†	61060.6	511.65 ug/L	0.884	511.65 ppb	0.884	0.17%
QC value within limits for Ba 233.527 Recovery = 102.33%						
Be 313.107†	1280086.1	507.57 ug/L	2.278	507.57 ppb	2.278	0.45%
QC value within limits for Be 313.107 Recovery = 101.51%						
Ca 317.933Radial†	2607.5	5178.0 ug/L	98.02	5178.0 ppb	98.02	1.89%
QC value within limits for Ca 317.933Radial Recovery = 103.56%						
Cd 226.502†	40596.4	522.93 ug/L	1.122	522.93 ppb	1.122	0.21%
QC value within limits for Cd 226.502 Recovery = 104.59%						
Co 228.616†	22838.0	527.80 ug/L	0.971	527.80 ppb	0.971	0.18%
QC value within limits for Co 228.616 Recovery = 105.56%						
Cr 267.716†	42286.1	512.18 ug/L	0.561	512.18 ppb	0.561	0.11%
QC value within limits for Cr 267.716 Recovery = 102.44%						
Cu 324.752†	160308.3	491.39 ug/L	1.289	491.39 ppb	1.289	0.26%
QC value within limits for Cu 324.752 Recovery = 98.28%						
Fe 238.204 Radial†	436.3	5306.5 ug/L	74.78	5306.5 ppb	74.78	1.41%
QC value within limits for Fe 238.204 Radial Recovery = 106.13%						
K 766.490 Radial†	27127.5	5208.7 ug/L	10.39	5208.7 ppb	10.39	0.20%
QC value within limits for K 766.490 Radial Recovery = 104.17%						
Mg 279.077 IEC†	118.5	5375.9 ug/L	130.48	5375.9 ppb	130.48	2.43%
QC value within limits for Mg 279.077 IEC Recovery = 107.52%						

Mn 257.610†	424914.7	509.49 ug/L	1.447	509.49 ppb	1.447	0.28%
QC value within limits for Mn 257.610 Recovery = 101.90%						
Mo 202.031†	6566.4	514.09 ug/L	1.620	514.09 ppb	1.620	0.32%
QC value within limits for Mo 202.031 Recovery = 102.82%						
Na 589.592 Radial†	35769.6	10318 ug/L	35.4	10318 ppb	35.4	0.34%
QC value within limits for Na 589.592 Radial Recovery = 103.18%						
Ni 231.604†	18656.4	517.63 ug/L	0.738	517.63 ppb	0.738	0.14%
QC value within limits for Ni 231.604 Recovery = 103.53%						
P 214.914†	3916.1	2525.3 ug/L	13.41	2525.3 ppb	13.41	0.53%
QC value within limits for P 214.914 Recovery = 101.01%						
Pb 220.353†	3866.3	526.03 ug/L	0.512	526.03 ppb	0.512	0.10%
QC value within limits for Pb 220.353 Recovery = 105.21%						
S 181.975 Axial†	655.9	1053.7 ug/L	14.38	1053.7 ppb	14.38	1.36%
QC value within limits for S 181.975 Axial Recovery = 105.37%						
Sb 206.836†	1386.6	540.56 ug/L	1.121	540.56 ppb	1.121	0.21%
QC value within limits for Sb 206.836 Recovery = 108.11%						
Se 196.026†	724.5	546.24 ug/L	6.554	546.24 ppb	6.554	1.20%
QC value within limits for Se 196.026 Recovery = 109.25%						
Si 251.611†	74371.6	2527.5 ug/L	6.21	2527.5 ppb	6.21	0.25%
QC value within limits for Si 251.611 Recovery = 101.10%						
Sn 189.927†	2607.4	525.65 ug/L	0.774	525.65 ppb	0.774	0.15%
QC value within limits for Sn 189.927 Recovery = 105.13%						
Sr 421.552†	78412.9	507.57 ug/L	1.107	507.57 ppb	1.107	0.22%
QC value within limits for Sr 421.552 Recovery = 101.51%						
Ti 334.940†	309388.7	491.35 ug/L	0.850	491.35 ppb	0.850	0.17%
QC value within limits for Ti 334.940 Recovery = 98.27%						
Tl 190.801†	1497.8	517.84 ug/L	1.328	517.84 ppb	1.328	0.26%
QC value within limits for Tl 190.801 Recovery = 103.57%						
U 409.014†	17455.8	481.09 ug/L	6.151	481.09 ppb	6.151	1.28%
QC value within limits for U 409.014 Recovery = 96.22%						
V 292.402†	68476.0	510.63 ug/L	0.707	510.63 ppb	0.707	0.14%
QC value within limits for V 292.402 Recovery = 102.13%						
Zn 213.857†	47553.8	509.93 ug/L	0.555	509.93 ppb	0.555	0.11%
QC value within limits for Zn 213.857 Recovery = 101.99%						
SiO2†	74275.9	5377.3 ug/L	22.81	5377.3 ppb	22.81	0.42%
QC value within limits for SiO2 Recovery = 100.56%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 13:09:23

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	4237.9	4237.9	96.4 %		13:11:16
1	Y RADIAL	4669.1	4669.1	96.77 %		13:11:16
1	Al 396.153Radial†	-117.1	-17.3	-15.165 ug/L	-15.165 ppb	13:11:36
1	Ca 317.933Radial†	19.2	0.1	0.2334 ug/L	0.2334 ppb	13:11:36
1	Fe 238.204 Radial†	11.6	0.9	10.864 ug/L	10.864 ppb	13:11:36
1	K 766.490 Radial†	2708.2	321.5	61.811 ug/L	61.811 ppb	13:11:16
1	Mg 279.077 IEC†	0.9	-1.9	-85.485 ug/L	-85.485 ppb	13:11:36
1	Na 589.592 Radial†	-632.9	37.6	10.845 ug/L	10.845 ppb	13:11:16
1	Sr 421.552†	44.6	32.8	0.2122 ug/L	0.2122 ppb	13:11:16
1	Sc 361.383	872035.0	872035.0	99.261 %		13:12:33
1	Y 371.029	746893.5	746893.5	101.02 %		13:12:33
1	Ag 328.068†	281.5	-159.3	-0.7544 ug/L	-0.7544 ppb	13:12:33
1	As 188.979†	-6.0	18.4	9.0268 ug/L	9.0268 ppb	13:12:53
1	B 249.677†	238.7	708.5	17.660 ug/L	17.660 ppb	13:12:53
1	Ba 233.527†	14.0	21.2	0.1759 ug/L	0.1759 ppb	13:12:53
1	Be 313.107†	-3902.6	-79.5	-0.0318 ug/L	-0.0318 ppb	13:12:33
1	Cd 226.502†	-171.6	4.8	0.0580 ug/L	0.0580 ppb	13:12:53
1	Co 228.616†	-55.0	-4.4	-0.0985 ug/L	-0.0985 ppb	13:12:53
1	Cr 267.716†	73.8	-5.1	-0.0572 ug/L	-0.0572 ppb	13:12:53
1	Cu 324.752†	6053.0	-104.8	-0.3150 ug/L	-0.3150 ppb	13:12:33
1	Mn 257.610†	406.3	-40.4	-0.0439 ug/L	-0.0439 ppb	13:12:53
1	Mo 202.031†	24.6	17.2	1.3472 ug/L	1.3472 ppb	13:12:53
1	Ni 231.604†	63.4	-9.2	-0.2542 ug/L	-0.2542 ppb	13:12:53
1	P 214.914†	194.7	0.2	0.1978 ug/L	0.1978 ppb	13:12:53
1	Pb 220.353†	-33.7	18.5	2.5112 ug/L	2.5112 ppb	13:12:53
1	S 181.975 Axial†	36.4	5.4	8.7425 ug/L	8.7425 ppb	13:12:53
1	Sb 206.836†	59.6	25.4	9.5971 ug/L	9.5971 ppb	13:12:53
1	Se 196.026†	-17.2	2.0	1.4756 ug/L	1.4756 ppb	13:12:53
1	Si 251.611†	558.8	39.7	1.3346 ug/L	1.3346 ppb	13:12:53
1	Sn 189.927†	21.9	8.6	1.7337 ug/L	1.7337 ppb	13:12:53
1	Ti 334.940†	-1265.9	-106.0	-0.1569 ug/L	-0.1569 ppb	13:12:33
1	Tl 190.801†	-34.0	-6.6	-2.2796 ug/L	-2.2796 ppb	13:12:53
1	U 409.014†	-2774.0	-369.4	-10.218 ug/L	-10.218 ppb	13:12:33
1	V 292.402†	-1438.6	-101.9	-0.7532 ug/L	-0.7532 ppb	13:12:33
1	Zn 213.857†	557.1	-28.3	-0.3056 ug/L	-0.3056 ppb	13:12:53
1	SiO2†	601.0	74.8	5.3935 ug/L	5.3935 ppb	13:13:49
2	Sc Radial	4268.2	4268.2	97.1 %		13:11:41
2	Y RADIAL	4650.5	4650.5	96.38 %		13:11:41
2	Al 396.153Radial†	-97.0	4.3	3.8012 ug/L	3.8012 ppb	13:12:01
2	Ca 317.933Radial†	14.6	-4.7	-9.3140 ug/L	-9.3140 ppb	13:12:01
2	Fe 238.204 Radial†	7.9	-2.9	-35.615 ug/L	-35.615 ppb	13:12:01
2	K 766.490 Radial†	2794.5	390.5	75.072 ug/L	75.072 ppb	13:11:41
2	Mg 279.077 IEC†	0.6	-2.3	-102.55 ug/L	-102.55 ppb	13:12:01
2	Na 589.592 Radial†	-663.1	11.2	3.2163 ug/L	3.2163 ppb	13:11:41
2	Sr 421.552†	42.2	30.0	0.1940 ug/L	0.1940 ppb	13:11:41
2	Sc 361.383	869099.4	869099.4	98.927 %		13:12:58
2	Y 371.029	743674.3	743674.3	100.58 %		13:12:58
2	Ag 328.068†	283.8	-156.1	-0.7528 ug/L	-0.7528 ppb	13:12:58
2	As 188.979†	-12.0	12.4	6.0485 ug/L	6.0485 ppb	13:13:18
2	B 249.677†	256.8	727.6	18.144 ug/L	18.144 ppb	13:13:18
2	Ba 233.527†	-9.0	-2.0	-0.0188 ug/L	-0.0188 ppb	13:13:18
2	Be 313.107†	-3821.9	-11.1	-0.0050 ug/L	-0.0050 ppb	13:12:58
2	Cd 226.502†	-164.1	11.8	0.1534 ug/L	0.1534 ppb	13:13:18
2	Co 228.616†	-60.2	-9.8	-0.2262 ug/L	-0.2262 ppb	13:13:18
2	Cr 267.716†	70.3	-8.3	-0.1004 ug/L	-0.1004 ppb	13:13:18
2	Cu 324.752†	6086.6	-50.3	-0.1504 ug/L	-0.1504 ppb	13:12:58
2	Mn 257.610†	434.0	-11.0	-0.0125 ug/L	-0.0125 ppb	13:13:18
2	Mo 202.031†	7.8	0.4	0.0272 ug/L	0.0272 ppb	13:13:18
2	Ni 231.604†	64.6	-7.7	-0.2132 ug/L	-0.2132 ppb	13:13:18

2	P 214.914†	189.3	-4.6	-3.0334 ug/L	-3.0334 ppb	13:13:18
2	Pb 220.353†	-29.5	22.7	3.0828 ug/L	3.0828 ppb	13:13:18
2	S 181.975 Axial†	40.0	9.2	14.855 ug/L	14.855 ppb	13:13:18
2	Sb 206.836†	54.7	20.5	7.7427 ug/L	7.7427 ppb	13:13:18
2	Se 196.026†	-18.6	0.5	0.2712 ug/L	0.2712 ppb	13:13:18
2	Si 251.611†	562.1	44.9	1.5290 ug/L	1.5290 ppb	13:13:18
2	Sn 189.927†	19.3	6.0	1.2130 ug/L	1.2130 ppb	13:13:18
2	Ti 334.940†	-1320.8	-165.8	-0.2517 ug/L	-0.2517 ppb	13:12:58
2	Tl 190.801†	-42.1	-14.9	-5.1213 ug/L	-5.1213 ppb	13:13:18
2	U 409.014†	-2767.3	-372.0	-10.286 ug/L	-10.286 ppb	13:12:58
2	V 292.402†	-1421.1	-89.1	-0.6710 ug/L	-0.6710 ppb	13:12:58
2	Zn 213.857†	545.7	-37.9	-0.4030 ug/L	-0.4030 ppb	13:13:18
2	SiO2†	562.9	38.3	2.7780 ug/L	2.7780 ppb	13:13:54
3	Sc Radial	4320.5	4320.5	98.3 %		13:12:06
3	Y RADIAL	4708.2	4708.2	97.58 %		13:12:06
3	Al 396.153Radial†	-106.1	-3.8	-3.3155 ug/L	-3.3155 ppb	13:12:26
3	Ca 317.933Radial†	17.6	-1.9	-3.6944 ug/L	-3.6944 ppb	13:12:26
3	Fe 238.204 Radial†	12.3	1.4	16.807 ug/L	16.807 ppb	13:12:26
3	K 766.490 Radial†	2631.7	189.9	36.507 ug/L	36.507 ppb	13:12:06
3	Mg 279.077 IEC†	3.3	0.5	24.164 ug/L	24.164 ppb	13:12:26
3	Na 589.592 Radial†	-665.8	16.7	4.8030 ug/L	4.8030 ppb	13:12:06
3	Sr 421.552†	53.4	40.9	0.2645 ug/L	0.2645 ppb	13:12:06
3	Sc 361.383	874501.9	874501.9	99.542 %		13:13:23
3	Y 371.029	745619.7	745619.7	100.85 %		13:13:23
3	Ag 328.068†	233.3	-208.6	-0.9893 ug/L	-0.9893 ppb	13:13:23
3	As 188.979†	-9.2	15.2	7.4789 ug/L	7.4789 ppb	13:13:44
3	B 249.677†	241.0	710.2	17.702 ug/L	17.702 ppb	13:13:44
3	Ba 233.527†	5.7	12.9	0.1078 ug/L	0.1078 ppb	13:13:44
3	Be 313.107†	-3887.2	-52.9	-0.0214 ug/L	-0.0214 ppb	13:13:23
3	Cd 226.502†	-177.3	-0.5	-0.0092 ug/L	-0.0092 ppb	13:13:44
3	Co 228.616†	-67.1	-16.4	-0.3770 ug/L	-0.3770 ppb	13:13:44
3	Cr 267.716†	95.4	16.5	0.2030 ug/L	0.2030 ppb	13:13:44
3	Cu 324.752†	6121.4	-53.3	-0.1586 ug/L	-0.1586 ppb	13:13:23
3	Mn 257.610†	425.5	-22.2	-0.0260 ug/L	-0.0260 ppb	13:13:44
3	Mo 202.031†	14.2	6.7	0.5262 ug/L	0.5262 ppb	13:13:44
3	Ni 231.604†	65.1	-7.6	-0.2109 ug/L	-0.2109 ppb	13:13:44
3	P 214.914†	199.5	4.5	3.0212 ug/L	3.0212 ppb	13:13:44
3	Pb 220.353†	-28.2	24.2	3.2771 ug/L	3.2771 ppb	13:13:44
3	S 181.975 Axial†	33.3	2.2	3.5809 ug/L	3.5809 ppb	13:13:44
3	Sb 206.836†	59.0	24.5	9.2667 ug/L	9.2667 ppb	13:13:44
3	Se 196.026†	-20.3	-1.0	-0.6880 ug/L	-0.6880 ppb	13:13:44
3	Si 251.611†	542.8	22.0	0.7427 ug/L	0.7427 ppb	13:13:44
3	Sn 189.927†	24.3	10.9	2.1993 ug/L	2.1993 ppb	13:13:44
3	Ti 334.940†	-1290.8	-127.5	-0.2019 ug/L	-0.2019 ppb	13:13:23
3	Tl 190.801†	-38.0	-10.6	-3.6425 ug/L	-3.6425 ppb	13:13:44
3	U 409.014†	-2666.7	-253.7	-7.0204 ug/L	-7.0204 ppb	13:13:23
3	V 292.402†	-1375.1	-34.0	-0.2578 ug/L	-0.2578 ppb	13:13:23
3	Zn 213.857†	550.0	-36.9	-0.4008 ug/L	-0.4008 ppb	13:13:44
3	SiO2†	604.2	76.3	5.5261 ug/L	5.5261 ppb	13:13:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	871878.7	99.243 %	0.3079			0.31%
Sc Radial	4275.5	97.3 %	0.95			0.98%
Y 371.029	745395.8	100.82 %	0.219			0.22%
Y RADIAL	4675.9	96.91 %	0.610			0.63%
Ag 328.068†	-174.7	-0.8322 ug/L	0.13609	-0.8322 ppb	0.13609	16.35%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.6	-4.8930 ug/L	9.58094	-4.8930 ppb	9.58094	195.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	15.3	7.5181 ug/L	1.48954	7.5181 ppb	1.48954	19.81%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	715.5	17.835 ug/L	0.2683	17.835 ppb	0.2683	1.50%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.7	0.0883 ug/L	0.09883	0.0883 ppb	0.09883	111.92%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-47.8	-0.0194 ug/L	0.01352	-0.0194 ppb	0.01352	69.65%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.1	-4.2583 ug/L	4.79859	-4.2583 ppb	4.79859	112.69%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	5.4	0.0674 ug/L	0.08168	0.0674 ppb	0.08168	121.17%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	-10.2	-0.2339 ug/L	0.13939	-0.2339 ppb	0.13939	59.59%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	1.0	0.0151 ug/L	0.16414	0.0151 ppb	0.16414	>999.9%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-69.5	-0.2080 ug/L	0.09279	-0.2080 ppb	0.09279	44.61%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	-0.2	-2.6480 ug/L	28.70446	-2.6480 ppb	28.70446	>999.9%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	300.6	57.797 ug/L	19.5932	57.797 ppb	19.5932	33.90%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-1.2	-54.625 ug/L	68.7641	-54.625 ppb	68.7641	125.88%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	-24.6	-0.0275 ug/L	0.01573	-0.0275 ppb	0.01573	57.31%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	8.1	0.6335 ug/L	0.66648	0.6335 ppb	0.66648	105.20%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	21.8	6.2881 ug/L	4.02540	6.2881 ppb	4.02540	64.02%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-8.1	-0.2261 ug/L	0.02434	-0.2261 ppb	0.02434	10.77%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	0.0	0.0618 ug/L	3.02959	0.0618 ppb	3.02959	>999.9%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	21.8	2.9570 ug/L	0.39814	2.9570 ppb	0.39814	13.46%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	5.6	9.0594 ug/L	5.64362	9.0594 ppb	5.64362	62.30%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	23.5	8.8688 ug/L	0.98918	8.8688 ppb	0.98918	11.15%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	0.5	0.3529 ug/L	1.08415	0.3529 ppb	1.08415	307.19%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	35.5	1.2021 ug/L	0.40957	1.2021 ppb	0.40957	34.07%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	8.5	1.7153 ug/L	0.49340	1.7153 ppb	0.49340	28.76%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	34.5	0.2236 ug/L	0.03660	0.2236 ppb	0.03660	16.37%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	-133.1	-0.2035 ug/L	0.04744	-0.2035 ppb	0.04744	23.31%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	-10.7	-3.6811 ug/L	1.42128	-3.6811 ppb	1.42128	38.61%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	-331.7	-9.1750 ug/L	1.86621	-9.1750 ppb	1.86621	20.34%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	-75.0	-0.5607 ug/L	0.26549	-0.5607 ppb	0.26549	47.35%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-34.4	-0.3698 ug/L	0.05562	-0.3698 ppb	0.05562	15.04%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	63.1	4.5659 ug/L	1.54976	4.5659 ppb	1.54976	33.94%			
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 3

Sample ID: LR1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 2/22/2010 13:16:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4165.1	4165.1	94.8 %		13:18:03
1	Y RADIAL	4555.5	4555.5	94.41 %		13:18:03
1	Al 396.153Radial†	-127.8	-30.6	-25.524 ug/L	-25.524 ppb	13:18:23
1	Ca 317.933Radial†	17.5	-1.3	-2.5509 ug/L	-2.5509 ppb	13:18:23
1	Fe 238.204 Radial†	31083.9	32793.7	397670 ug/L	397670 ppb	13:18:03
1	K 766.490 Radial†	2456.9	105.3	20.298 ug/L	20.298 ppb	13:18:03
1	Mg 279.077 IEC†	10.8	8.5	-30.571 ug/L	-30.571 ppb	13:18:23
1	Na 589.592 Radial†	-656.4	1.3	0.3690 ug/L	0.3690 ppb	13:18:03
1	Sr 421.552†	98.8	90.8	0.5875 ug/L	0.5875 ppb	13:18:03
1	Sc 361.383	895484.2	895484.2	101.93 %		13:19:21
1	Y 371.029	749782.1	749782.1	101.41 %		13:19:21
1	Ag 328.068†	-24704.8	-24679.9	4.2023 ug/L	4.2023 ppb	13:19:21
1	As 188.979†	-187.8	-159.8	14.834 ug/L	14.834 ppb	13:19:41
1	B 249.677†	2305.7	2730.1	3.4248 ug/L	3.4248 ppb	13:19:21
1	Ba 233.527†	-1665.5	-1626.9	-1.3729 ug/L	-1.3729 ppb	13:19:21
1	Be 313.107†	-3798.5	125.6	0.0494 ug/L	0.0494 ppb	13:19:21
1	Cd 226.502†	2995.2	3116.1	-0.9152 ug/L	-0.9152 ppb	13:19:21
1	Co 228.616†	696.3	734.2	11.157 ug/L	11.157 ppb	13:19:41
1	Cr 267.716†	-561.3	-630.0	30.259 ug/L	30.259 ppb	13:19:21
1	Cu 324.752†	-245.4	-6443.6	1.2624 ug/L	1.2624 ppb	13:19:21
1	Mn 257.610†	-31735.4	-31584.2	1.4127 ug/L	1.4127 ppb	13:19:21
1	Mo 202.031†	-327.9	-329.2	5.1207 ug/L	5.1207 ppb	13:19:21
1	Ni 231.604†	130.9	55.4	1.5274 ug/L	1.5274 ppb	13:19:41
1	P 214.914†	647.1	438.9	-22.691 ug/L	-22.691 ppb	13:19:41
1	Pb 220.353†	223.0	271.3	-6.2446 ug/L	-6.2446 ppb	13:19:41
1	S 181.975 Axial†	46.0	14.0	22.470 ug/L	22.470 ppb	13:19:41
1	Sb 206.836†	37.5	2.1	-4.0755 ug/L	-4.0755 ppb	13:19:41
1	Se 196.026†	-1597.2	-1547.7	208.20 ug/L	208.20 ppb	13:19:41
1	Si 251.611†	-530.1	-1043.3	-35.229 ug/L	-35.229 ppb	13:19:21
1	Sn 189.927†	-5.1	-18.5	-26.550 ug/L	-26.550 ppb	13:19:41
1	Ti 334.940†	-1266.8	-73.5	-0.1740 ug/L	-0.1740 ppb	13:19:21
1	Tl 190.801†	-33.2	-4.9	-2.0632 ug/L	-2.0632 ppb	13:19:41
1	U 409.014†	-110.9	2316.5	18.756 ug/L	18.756 ppb	13:19:21
1	V 292.402†	6566.9	7790.0	-0.8333 ug/L	-0.8333 ppb	13:19:21
1	Zn 213.857†	3976.6	3311.8	-23.650 ug/L	-23.650 ppb	13:19:41
1	SiO2†	-513.3	-1034.3	-74.370 ug/L	-74.370 ppb	13:20:38
2	Sc Radial	4341.0	4341.0	98.8 %		13:18:28
2	Y RADIAL	4733.1	4733.1	98.09 %		13:18:28
2	Al 396.153Radial†	-125.1	-22.5	-18.458 ug/L	-18.458 ppb	13:18:48
2	Ca 317.933Radial†	20.0	0.5	0.9532 ug/L	0.9532 ppb	13:18:48
2	Fe 238.204 Radial†	31446.0	31831.6	386010 ug/L	386010 ppb	13:18:28
2	K 766.490 Radial†	2498.8	42.8	8.2580 ug/L	8.2580 ppb	13:18:28
2	Mg 279.077 IEC†	10.5	7.7	-53.457 ug/L	-53.457 ppb	13:18:48
2	Na 589.592 Radial†	-597.7	88.8	25.603 ug/L	25.603 ppb	13:18:28
2	Sr 421.552†	96.6	84.3	0.5458 ug/L	0.5458 ppb	13:18:28
2	Sc 361.383	902492.9	902492.9	102.73 %		13:19:47
2	Y 371.029	755522.0	755522.0	102.19 %		13:19:47
2	Ag 328.068†	-24351.1	-24147.4	3.1626 ug/L	3.1626 ppb	13:19:47
2	As 188.979†	-187.8	-158.4	12.801 ug/L	12.801 ppb	13:20:07
2	B 249.677†	2442.6	2845.9	8.2048 ug/L	8.2048 ppb	13:19:47
2	Ba 233.527†	-1659.6	-1608.4	-1.5760 ug/L	-1.5760 ppb	13:19:47
2	Be 313.107†	-3822.5	131.2	0.0514 ug/L	0.0514 ppb	13:19:47
2	Cd 226.502†	2989.5	3087.7	-0.0753 ug/L	-0.0753 ppb	13:19:47
2	Co 228.616†	692.8	725.5	11.127 ug/L	11.127 ppb	13:20:07
2	Cr 267.716†	-540.5	-605.5	29.445 ug/L	29.445 ppb	13:19:47
2	Cu 324.752†	-362.8	-6556.0	0.3009 ug/L	0.3009 ppb	13:19:47
2	Mn 257.610†	-31481.0	-31094.7	0.8484 ug/L	0.8484 ppb	13:19:47
2	Mo 202.031†	-319.6	-318.6	5.0439 ug/L	5.0439 ppb	13:19:47
2	Ni 231.604†	138.2	61.5	1.6983 ug/L	1.6983 ppb	13:20:07

2	P 214.914†	642.9	429.9	-19.253 ug/L	-19.253 ppb	13:20:07
2	Pb 220.353†	230.4	276.8	-4.2306 ug/L	-4.2306 ppb	13:20:07
2	S 181.975 Axial†	42.8	10.4	16.801 ug/L	16.801 ppb	13:20:07
2	Sb 206.836†	36.0	0.4	-4.5748 ug/L	-4.5748 ppb	13:20:07
2	Se 196.026†	-1582.0	-1520.6	188.72 ug/L	188.72 ppb	13:20:07
2	Si 251.611†	-440.5	-952.0	-32.129 ug/L	-32.129 ppb	13:19:47
2	Sn 189.927†	-5.9	-19.2	-26.024 ug/L	-26.024 ppb	13:20:07
2	Ti 334.940†	-1337.5	-132.7	-0.2642 ug/L	-0.2642 ppb	13:19:47
2	Tl 190.801†	-41.2	-12.5	-4.6452 ug/L	-4.6452 ppb	13:20:07
2	U 409.014†	-155.6	2273.9	18.907 ug/L	18.907 ppb	13:19:47
2	V 292.402†	6440.4	7616.9	-0.3988 ug/L	-0.3988 ppb	13:19:47
2	Zn 213.857†	3982.6	3287.3	-22.170 ug/L	-22.170 ppb	13:20:07
2	SiO2†	-442.3	-961.2	-69.091 ug/L	-69.091 ppb	13:20:43
3	Sc Radial	4286.2	4286.2	97.5 %		13:18:53
3	Y RADIAL	4651.8	4651.8	96.41 %		13:18:53
3	Al 396.153Radial†	-126.7	-25.7	-21.219 ug/L	-21.219 ppb	13:19:13
3	Ca 317.933Radial†	17.0	-2.4	-4.6887 ug/L	-4.6887 ppb	13:19:13
3	Fe 238.204 Radial†	31321.1	32110.2	389390 ug/L	389390 ppb	13:18:53
3	K 766.490 Radial†	2428.9	3.3	0.6865 ug/L	0.6865 ppb	13:18:53
3	Mg 279.077 IEC†	7.4	4.7	-194.24 ug/L	-194.24 ppb	13:19:13
3	Na 589.592 Radial†	-675.7	1.0	0.2949 ug/L	0.2949 ppb	13:18:53
3	Sr 421.552†	83.7	72.4	0.4686 ug/L	0.4686 ppb	13:18:53
3	Sc 361.383	883450.8	883450.8	100.56 %		13:20:13
3	Y 371.029	739129.0	739129.0	99.969 %		13:20:13
3	Ag 328.068†	-24503.3	-24809.7	1.0391 ug/L	1.0391 ppb	13:20:13
3	As 188.979†	-184.4	-158.9	13.357 ug/L	13.357 ppb	13:20:33
3	B 249.677†	2428.5	2883.0	8.5821 ug/L	8.5821 ppb	13:20:13
3	Ba 233.527†	-1678.4	-1661.9	-1.9158 ug/L	-1.9158 ppb	13:20:13
3	Be 313.107†	-3764.4	108.8	0.0422 ug/L	0.0422 ppb	13:20:13
3	Cd 226.502†	2981.9	3142.9	0.2868 ug/L	0.2868 ppb	13:20:13
3	Co 228.616†	693.7	740.8	11.430 ug/L	11.430 ppb	13:20:33
3	Cr 267.716†	-562.0	-638.2	29.375 ug/L	29.375 ppb	13:20:13
3	Cu 324.752†	-273.4	-6474.8	0.7300 ug/L	0.7300 ppb	13:20:13
3	Mn 257.610†	-31347.2	-31622.2	0.5555 ug/L	0.5555 ppb	13:20:13
3	Mo 202.031†	-333.4	-339.0	3.7090 ug/L	3.7090 ppb	13:20:13
3	Ni 231.604†	147.1	73.2	2.0221 ug/L	2.0221 ppb	13:20:33
3	P 214.914†	642.1	442.5	-13.573 ug/L	-13.573 ppb	13:20:33
3	Pb 220.353†	221.0	272.3	-5.2118 ug/L	-5.2118 ppb	13:20:33
3	S 181.975 Axial†	44.6	13.2	21.209 ug/L	21.209 ppb	13:20:33
3	Sb 206.836†	26.4	-8.5	-7.9767 ug/L	-7.9767 ppb	13:20:33
3	Se 196.026†	-1597.0	-1568.7	165.10 ug/L	165.10 ppb	13:20:33
3	Si 251.611†	-480.6	-1001.2	-33.783 ug/L	-33.783 ppb	13:20:13
3	Sn 189.927†	-10.1	-23.6	-27.100 ug/L	-27.100 ppb	13:20:33
3	Ti 334.940†	-1417.5	-240.3	-0.4236 ug/L	-0.4236 ppb	13:20:13
3	Tl 190.801†	-34.5	-6.7	-2.6715 ug/L	-2.6715 ppb	13:20:33
3	U 409.014†	-233.8	2192.8	16.281 ug/L	16.281 ppb	13:20:13
3	V 292.402†	6599.0	7909.7	1.2343 ug/L	1.2343 ppb	13:20:13
3	Zn 213.857†	4030.3	3418.3	-21.260 ug/L	-21.260 ppb	13:20:33
3	SiO2†	-490.8	-1018.7	-73.221 ug/L	-73.221 ppb	13:20:48

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893809.3	101.74 %	1.096			1.08%
Sc Radial	4264.1	97.0 %	2.05			2.11%
Y 371.029	748144.4	101.19 %	1.125			1.11%
Y RADIAL	4646.8	96.30 %	1.843			1.91%
Ag 328.068†	-24545.7	2.8013 ug/L	1.61227	2.8013 ppb	1.61227	57.55%
Al 396.153Radial†	-26.3	-21.733 ug/L	3.5607	-21.733 ppb	3.5607	16.38%
As 188.979†	-159.0	13.664 ug/L	1.0511	13.664 ppb	1.0511	7.69%
B 249.677†	2819.7	6.7372 ug/L	2.87484	6.7372 ppb	2.87484	42.67%
Ba 233.527†	-1632.4	-1.6216 ug/L	0.27430	-1.6216 ppb	0.27430	16.92%
Be 313.107†	121.9	0.0477 ug/L	0.00488	0.0477 ppb	0.00488	10.23%
Ca 317.933Radial†	-1.1	-2.0955 ug/L	2.84836	-2.0955 ppb	2.84836	135.93%
Cd 226.502†	3115.6	-0.2346 ug/L	0.61667	-0.2346 ppb	0.61667	262.91%
Co 228.616†	733.5	11.238 ug/L	0.1668	11.238 ppb	0.1668	1.48%
Cr 267.716†	-624.6	29.693 ug/L	0.4917	29.693 ppb	0.4917	1.66%
Cu 324.752†	-6491.5	0.7644 ug/L	0.48163	0.7644 ppb	0.48163	63.00%
Fe 238.204 Radial†	32245.2	391020 ug/L	6003.4	391020 ppb	6003.4	1.54%
K 766.490 Radial†	50.5	9.7476 ug/L	9.89036	9.7476 ppb	9.89036	101.46%

Mg 279.077 IEC†	7.0	-92.756 ug/L	88.6298	-92.756 ppb	88.6298	95.55%
Mn 257.610†	-31433.7	0.9389 ug/L	0.43574	0.9389 ppb	0.43574	46.41%
Mo 202.031†	-329.0	4.6245 ug/L	0.79380	4.6245 ppb	0.79380	17.17%
Na 589.592 Radial†	30.4	8.7558 ug/L	14.59058	8.7558 ppb	14.59058	166.64%
Ni 231.604†	63.4	1.7493 ug/L	0.25127	1.7493 ppb	0.25127	14.36%
P 214.914†	437.1	-18.506 ug/L	4.6049	-18.506 ppb	4.6049	24.88%
Pb 220.353†	273.4	-5.2290 ug/L	1.00713	-5.2290 ppb	1.00713	19.26%
S 181.975 Axial†	12.5	20.160 ug/L	2.9766	20.160 ppb	2.9766	14.76%
Sb 206.836†	-2.0	-5.5423 ug/L	2.12297	-5.5423 ppb	2.12297	38.30%
Se 196.026†	-1545.7	187.34 ug/L	21.583	187.34 ppb	21.583	11.52%
Si 251.611†	-998.8	-33.714 ug/L	1.5509	-33.714 ppb	1.5509	4.60%
Sn 189.927†	-20.4	-26.558 ug/L	0.5380	-26.558 ppb	0.5380	2.03%
Sr 421.552†	82.5	0.5340 ug/L	0.06031	0.5340 ppb	0.06031	11.29%
Ti 334.940†	-148.8	-0.2873 ug/L	0.12639	-0.2873 ppb	0.12639	44.00%
Tl 190.801†	-8.0	-3.1266 ug/L	1.34979	-3.1266 ppb	1.34979	43.17%
U 409.014†	2261.0	17.982 ug/L	1.4749	17.982 ppb	1.4749	8.20%
V 292.402†	7772.2	0.0008 ug/L	1.09018	0.0008 ppb	1.09018	>999.9%
Zn 213.857†	3339.2	-22.360 ug/L	1.2064	-22.360 ppb	1.2064	5.40%
SiO2†	-1004.7	-72.227 ug/L	2.7764	-72.227 ppb	2.7764	3.84%

Sequence No.: 4

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 2/22/2010 13:23:00

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	4411.6	4411.6	100 %		13:24:53
1	Y RADIAL	4775.6	4775.6	98.97 %		13:24:53
1	Al 396.153Radial†	-99.8	4.8	4.1688 ug/L	4.1688 ppb	13:25:13
1	Ca 317.933Radial†	29.7	9.8	19.504 ug/L	19.504 ppb	13:25:13
1	Fe 238.204 Radial†	14.0	2.8	34.087 ug/L	34.087 ppb	13:25:13
1	K 766.490 Radial†	2719.0	221.7	42.608 ug/L	42.608 ppb	13:24:53
1	Mg 279.077 IEC†	1.6	-1.2	-55.730 ug/L	-55.730 ppb	13:25:13
1	Na 589.592 Radial†	-674.0	22.4	6.4653 ug/L	6.4653 ppb	13:24:53
1	Sr 421.552†	27.6	14.0	0.0905 ug/L	0.0905 ppb	13:24:53
1	Sc 361.383	893221.6	893221.6	101.67 %		13:26:10
1	Y 371.029	751944.1	751944.1	101.70 %		13:26:10
1	Ag 328.068†	270.2	-177.2	-0.8346 ug/L	-0.8346 ppb	13:26:10
1	As 188.979†	-10.8	13.8	6.7772 ug/L	6.7772 ppb	13:26:30
1	B 249.677†	-13.2	455.2	11.341 ug/L	11.341 ppb	13:26:30
1	Ba 233.527†	-6.3	0.9	0.0090 ug/L	0.0090 ppb	13:26:30
1	Be 313.107†	-3813.2	101.7	0.0401 ug/L	0.0401 ppb	13:26:10
1	Cd 226.502†	-177.7	2.9	0.0330 ug/L	0.0330 ppb	13:26:30
1	Co 228.616†	-64.9	-12.8	-0.2945 ug/L	-0.2945 ppb	13:26:30
1	Cr 267.716†	58.9	-21.4	-0.2535 ug/L	-0.2535 ppb	13:26:30
1	Cu 324.752†	6127.6	-176.1	-0.5355 ug/L	-0.5355 ppb	13:26:10
1	Mn 257.610†	421.0	-35.7	-0.0371 ug/L	-0.0371 ppb	13:26:30
1	Mo 202.031†	13.7	6.0	0.4702 ug/L	0.4702 ppb	13:26:30
1	Ni 231.604†	102.9	28.1	0.7813 ug/L	0.7813 ppb	13:26:30
1	P 214.914†	213.1	13.6	9.2096 ug/L	9.2096 ppb	13:26:30
1	Pb 220.353†	-42.5	10.7	1.4507 ug/L	1.4507 ppb	13:26:30
1	S 181.975 Axial†	31.9	0.2	0.2765 ug/L	0.2765 ppb	13:26:30
1	Sb 206.836†	28909.2	28398.9	10688 ug/L	10688 ppb	13:26:10
1	Se 196.026†	-38.1	-18.1	-13.033 ug/L	-13.033 ppb	13:26:30
1	Si 251.611†	1272.7	728.5	24.813 ug/L	24.813 ppb	13:26:30
1	Sn 189.927†	13.2	-0.5	-0.0908 ug/L	-0.0908 ppb	13:26:30
1	Ti 334.940†	-1237.5	-47.9	-0.0668 ug/L	-0.0668 ppb	13:26:10
1	Tl 190.801†	-33.0	-4.9	-1.6763 ug/L	-1.6763 ppb	13:26:30
1	U 409.014†	-2635.0	-166.4	-4.6062 ug/L	-4.6062 ppb	13:26:10
1	V 292.402†	-1369.5	0.5	-0.0047 ug/L	-0.0047 ppb	13:26:10
1	Zn 213.857†	542.5	-55.9	-0.6146 ug/L	-0.6146 ppb	13:26:30
1	SiO2†	1355.9	802.9	58.262 ug/L	58.262 ppb	13:27:26
2	Sc Radial	4405.4	4405.4	100 %		13:25:18
2	Y RADIAL	4813.8	4813.8	99.77 %		13:25:18
2	Al 396.153Radial†	-108.8	-4.3	-3.7927 ug/L	-3.7927 ppb	13:25:38
2	Ca 317.933Radial†	31.2	11.4	22.573 ug/L	22.573 ppb	13:25:38
2	Fe 238.204 Radial†	13.1	2.0	23.937 ug/L	23.937 ppb	13:25:38
2	K 766.490 Radial†	2692.8	199.3	38.304 ug/L	38.304 ppb	13:25:18
2	Mg 279.077 IEC†	3.6	0.7	32.829 ug/L	32.829 ppb	13:25:38
2	Na 589.592 Radial†	-631.7	63.7	18.378 ug/L	18.378 ppb	13:25:18
2	Sr 421.552†	46.3	32.7	0.2116 ug/L	0.2116 ppb	13:25:18
2	Sc 361.383	899658.2	899658.2	102.41 %		13:26:35
2	Y 371.029	757118.9	757118.9	102.40 %		13:26:35
2	Ag 328.068†	238.8	-209.8	-0.9925 ug/L	-0.9925 ppb	13:26:35
2	As 188.979†	-17.3	7.6	3.7317 ug/L	3.7317 ppb	13:26:55
2	B 249.677†	-37.1	431.8	10.761 ug/L	10.761 ppb	13:26:55
2	Ba 233.527†	-6.5	0.8	0.0071 ug/L	0.0071 ppb	13:26:55
2	Be 313.107†	-3870.4	72.7	0.0286 ug/L	0.0286 ppb	13:26:35
2	Cd 226.502†	-168.9	12.7	0.1602 ug/L	0.1602 ppb	13:26:55
2	Co 228.616†	-62.2	-9.7	-0.2228 ug/L	-0.2228 ppb	13:26:55
2	Cr 267.716†	102.6	20.8	0.2566 ug/L	0.2566 ppb	13:26:55
2	Cu 324.752†	6125.8	-221.0	-0.6726 ug/L	-0.6726 ppb	13:26:35
2	Mn 257.610†	402.2	-57.0	-0.0673 ug/L	-0.0673 ppb	13:26:55
2	Mo 202.031†	13.4	5.6	0.4364 ug/L	0.4364 ppb	13:26:55
2	Ni 231.604†	90.1	14.9	0.4150 ug/L	0.4150 ppb	13:26:55

2	P 214.914†	218.3	17.2	11.615 ug/L	11.615 ppb	13:26:55
2	Pb 220.353†	-56.1	-2.3	-0.3089 ug/L	-0.3089 ppb	13:26:55
2	S 181.975 Axial†	38.7	6.7	10.698 ug/L	10.698 ppb	13:26:55
2	Sb 206.836†	29209.7	28488.9	10722 ug/L	10722 ppb	13:26:35
2	Se 196.026†	-49.9	-29.4	-21.284 ug/L	-21.284 ppb	13:26:55
2	Si 251.611†	1274.6	721.4	24.571 ug/L	24.571 ppb	13:26:55
2	Sn 189.927†	21.5	7.5	1.5148 ug/L	1.5148 ppb	13:26:55
2	Ti 334.940†	-1235.3	-37.0	-0.0558 ug/L	-0.0558 ppb	13:26:35
2	Tl 190.801†	-30.6	-2.3	-0.7796 ug/L	-0.7796 ppb	13:26:55
2	U 409.014†	-2720.1	-230.9	-6.3907 ug/L	-6.3907 ppb	13:26:35
2	V 292.402†	-1376.6	3.2	0.0145 ug/L	0.0145 ppb	13:26:35
2	Zn 213.857†	578.7	-24.4	-0.2696 ug/L	-0.2696 ppb	13:26:55
2	SiO2†	1367.9	805.1	58.424 ug/L	58.424 ppb	13:27:31
3	Sc Radial	4347.8	4347.8	98.9 %		13:25:43
3	Y RADIAL	4764.2	4764.2	98.74 %		13:25:43
3	Al 396.153Radial†	-98.6	4.5	3.9187 ug/L	3.9187 ppb	13:26:03
3	Ca 317.933Radial†	26.7	7.2	14.392 ug/L	14.392 ppb	13:26:03
3	Fe 238.204 Radial†	11.9	1.0	11.542 ug/L	11.542 ppb	13:26:03
3	K 766.490 Radial†	2726.5	269.0	51.703 ug/L	51.703 ppb	13:25:43
3	Mg 279.077 IEC†	5.4	2.6	116.28 ug/L	116.28 ppb	13:26:03
3	Na 589.592 Radial†	-655.4	31.4	9.0705 ug/L	9.0705 ppb	13:25:43
3	Sr 421.552†	40.2	27.2	0.1757 ug/L	0.1757 ppb	13:25:43
3	Sc 361.383	884354.9	884354.9	100.66 %		13:27:01
3	Y 371.029	744135.2	744135.2	100.65 %		13:27:01
3	Ag 328.068†	222.1	-222.3	-1.0596 ug/L	-1.0596 ppb	13:27:01
3	As 188.979†	-17.7	6.9	3.3729 ug/L	3.3729 ppb	13:27:21
3	B 249.677†	-38.7	429.7	10.709 ug/L	10.709 ppb	13:27:21
3	Ba 233.527†	-7.0	0.1	-0.0012 ug/L	-0.0012 ppb	13:27:21
3	Be 313.107†	-3807.3	69.9	0.0276 ug/L	0.0276 ppb	13:27:01
3	Cd 226.502†	-173.8	5.0	0.0620 ug/L	0.0620 ppb	13:27:21
3	Co 228.616†	-68.3	-16.8	-0.3881 ug/L	-0.3881 ppb	13:27:21
3	Cr 267.716†	70.8	-9.1	-0.1068 ug/L	-0.1068 ppb	13:27:21
3	Cu 324.752†	6545.2	299.2	0.9223 ug/L	0.9223 ppb	13:27:01
3	Mn 257.610†	396.8	-55.6	-0.0702 ug/L	-0.0702 ppb	13:27:21
3	Mo 202.031†	8.8	1.2	0.0940 ug/L	0.0940 ppb	13:27:21
3	Ni 231.604†	95.4	21.8	0.6042 ug/L	0.6042 ppb	13:27:21
3	P 214.914†	219.7	22.2	14.696 ug/L	14.696 ppb	13:27:21
3	Pb 220.353†	-38.9	13.9	1.8848 ug/L	1.8848 ppb	13:27:21
3	S 181.975 Axial†	33.6	2.2	3.4566 ug/L	3.4566 ppb	13:27:21
3	Sb 206.836†	28546.7	28323.9	10660 ug/L	10660 ppb	13:27:01
3	Se 196.026†	-41.2	-21.6	-15.652 ug/L	-15.652 ppb	13:27:21
3	Si 251.611†	1269.1	737.4	25.123 ug/L	25.123 ppb	13:27:21
3	Sn 189.927†	27.7	14.1	2.8361 ug/L	2.8361 ppb	13:27:21
3	Ti 334.940†	-1199.4	-22.2	-0.0390 ug/L	-0.0390 ppb	13:27:01
3	Tl 190.801†	-30.2	-2.4	-0.8138 ug/L	-0.8138 ppb	13:27:21
3	U 409.014†	-2752.4	-308.9	-8.5467 ug/L	-8.5467 ppb	13:27:01
3	V 292.402†	-1531.5	-174.0	-1.2944 ug/L	-1.2944 ppb	13:27:01
3	Zn 213.857†	538.6	-54.4	-0.5959 ug/L	-0.5959 ppb	13:27:21
3	SiO2†	1361.9	822.2	59.677 ug/L	59.677 ppb	13:27:36

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892411.6	101.58 %		0.875			0.86%
Sc Radial	4388.3	99.8 %		0.80			0.80%
Y 371.029	751066.1	101.58 %		0.884			0.87%
Y RADIAL	4784.5	99.16 %		0.538			0.54%
Ag 328.068†	-203.1	-0.9622 ug/L		0.11553	-0.9622 ppb	0.11553	12.01%
Al 396.153Radial†	1.7	1.4316 ug/L		4.52612	1.4316 ppb	4.52612	316.16%
As 188.979†	9.4	4.6273 ug/L		1.87054	4.6273 ppb	1.87054	40.42%
B 249.677†	438.9	10.937 ug/L		0.3508	10.937 ppb	0.3508	3.21%
Ba 233.527†	0.6	0.0049 ug/L		0.00542	0.0049 ppb	0.00542	109.82%
Be 313.107†	81.4	0.0321 ug/L		0.00692	0.0321 ppb	0.00692	21.56%
Ca 317.933Radial†	9.5	18.823 ug/L		4.1329	18.823 ppb	4.1329	21.96%
Cd 226.502†	6.9	0.0851 ug/L		0.06663	0.0851 ppb	0.06663	78.33%
Co 228.616†	-13.1	-0.3018 ug/L		0.08286	-0.3018 ppb	0.08286	27.45%
Cr 267.716†	-3.2	-0.0346 ug/L		0.26261	-0.0346 ppb	0.26261	759.93%
Cu 324.752†	-32.6	-0.0952 ug/L		0.88392	-0.0952 ppb	0.88392	928.05%
Fe 238.204 Radial†	1.9	23.189 ug/L		11.2910	23.189 ppb	11.2910	48.69%
K 766.490 Radial†	230.0	44.205 ug/L		6.8410	44.205 ppb	6.8410	15.48%

Mg 279.077 IEC†	0.7	31.127 ug/L	86.0196	31.127 ppb	86.0196	276.35%
Mn 257.610†	-49.4	-0.0582 ug/L	0.01831	-0.0582 ppb	0.01831	31.45%
Mo 202.031†	4.2	0.3335 ug/L	0.20812	0.3335 ppb	0.20812	62.40%
Na 589.592 Radial†	39.2	11.305 ug/L	6.2627	11.305 ppb	6.2627	55.40%
Ni 231.604†	21.6	0.6002 ug/L	0.18319	0.6002 ppb	0.18319	30.52%
P 214.914†	17.7	11.840 ug/L	2.7503	11.840 ppb	2.7503	23.23%
Pb 220.353†	7.4	1.0089 ug/L	1.16166	1.0089 ppb	1.16166	115.14%
S 181.975 Axial†	3.0	4.8104 ug/L	5.34109	4.8104 ppb	5.34109	111.03%
Sb 206.836†	28403.9	10690 ug/L	31.1	10690 ppb	31.1	0.29%
Se 196.026†	-23.0	-16.656 ug/L	4.2160	-16.656 ppb	4.2160	25.31%
Si 251.611†	729.1	24.836 ug/L	0.2768	24.836 ppb	0.2768	1.11%
Sn 189.927†	7.0	1.4200 ug/L	1.46574	1.4200 ppb	1.46574	103.22%
Sr 421.552†	24.6	0.1593 ug/L	0.06222	0.1593 ppb	0.06222	39.07%
Ti 334.940†	-35.7	-0.0538 ug/L	0.01401	-0.0538 ppb	0.01401	26.03%
Tl 190.801†	-3.2	-1.0899 ug/L	0.50810	-1.0899 ppb	0.50810	46.62%
U 409.014†	-235.4	-6.5145 ug/L	1.97318	-6.5145 ppb	1.97318	30.29%
V 292.402†	-56.8	-0.4282 ug/L	0.75025	-0.4282 ppb	0.75025	175.21%
Zn 213.857†	-44.9	-0.4933 ug/L	0.19402	-0.4933 ppb	0.19402	39.33%
SiO2†	810.0	58.788 ug/L	0.7744	58.788 ppb	0.7744	1.32%

Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

User canceled analysis.

Autosampler Location: 8

Date Collected: 2/22/2010 13:36:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Analysis Begun

Start Time: 2/22/2010 13:40:30

Plasma On Time: 2/22/2010 05:55:10

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022210.sif

Batch ID:

Results Data Set: 022210

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

Sequence No.: 5

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 13:40:30

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	4389.1	4389.1	99.8 %		13:42:22
1	Y RADIAL	4772.0	4772.0	98.90 %		13:42:22
1	Al 396.153Radial†	5391.3	5503.7	4788.1 ug/L	4788.1 ppb	13:42:22
1	Ca 317.933Radial†	2525.2	2509.2	4982.8 ug/L	4982.8 ppb	13:42:42
1	Fe 238.204 Radial†	420.6	410.1	4988.4 ug/L	4988.4 ppb	13:42:42
1	K 766.490 Radial†	29007.3	26563.7	5100.7 ug/L	5100.7 ppb	13:42:22
1	Mg 279.077 IEC†	117.1	114.4	5190.8 ug/L	5190.8 ppb	13:42:42
1	Na 589.592 Radial†	32416.2	33159.4	9564.9 ug/L	9564.9 ppb	13:42:22
1	Sr 421.552†	74469.3	74568.6	482.68 ug/L	482.68 ppb	13:42:22
1	Sc 361.383	917463.5	917463.5	104.43 %		13:43:39
1	Y 371.029	760334.0	760334.0	102.84 %		13:43:39
1	Ag 328.068†	106653.3	101684.2	490.11 ug/L	490.11 ppb	13:43:45
1	As 188.979†	1065.6	1044.8	516.50 ug/L	516.50 ppb	13:44:05
1	B 249.677†	20161.2	19773.6	490.61 ug/L	490.61 ppb	13:43:45
1	Ba 233.527†	62661.4	60009.3	502.83 ug/L	502.83 ppb	13:43:45
1	Be 313.107†	1314215.4	1262294.0	500.50 ug/L	500.50 ppb	13:43:39
1	Cd 226.502†	41762.6	40167.9	517.43 ug/L	517.43 ppb	13:43:45
1	Co 228.616†	23399.7	22457.6	519.01 ug/L	519.01 ppb	13:43:45
1	Cr 267.716†	43255.9	41340.8	500.71 ug/L	500.71 ppb	13:43:45
1	Cu 324.752†	169014.9	155639.2	477.07 ug/L	477.07 ppb	13:43:45
1	Mn 257.610†	440860.9	421701.6	505.62 ug/L	505.62 ppb	13:43:39
1	Mo 202.031†	6666.6	6376.1	499.18 ug/L	499.18 ppb	13:44:05
1	Ni 231.604†	19283.6	18392.2	510.30 ug/L	510.30 ppb	13:43:45
1	P 214.914†	4243.6	3867.5	2495.7 ug/L	2495.7 ppb	13:44:05
1	Pb 220.353†	3878.2	3766.1	512.42 ug/L	512.42 ppb	13:44:05
1	S 181.975 Axial†	711.5	650.2	1044.6 ug/L	1044.6 ppb	13:44:05
1	Sb 206.836†	1461.8	1365.1	532.00 ug/L	532.00 ppb	13:44:05
1	Se 196.026†	718.8	707.6	532.83 ug/L	532.83 ppb	13:44:05
1	Si 251.611†	76725.6	72946.2	2479.1 ug/L	2479.1 ppb	13:43:45
1	Sn 189.927†	2681.5	2554.2	514.93 ug/L	514.93 ppb	13:44:05
1	Ti 334.940†	314429.1	302254.5	480.02 ug/L	480.02 ppb	13:43:45
1	Tl 190.801†	1503.2	1467.0	507.22 ug/L	507.22 ppb	13:44:05
1	U 409.014†	15080.1	16865.4	464.83 ug/L	464.83 ppb	13:43:45
1	V 292.402†	68263.8	66714.3	497.48 ug/L	497.48 ppb	13:43:45
1	Zn 213.857†	49376.5	46691.5	500.71 ug/L	500.71 ppb	13:43:45
1	SiO2†	76367.9	72596.3	5255.8 ug/L	5255.8 ppb	13:45:12
2	Sc Radial	4323.5	4323.5	98.4 %		13:42:47
2	Y RADIAL	4698.4	4698.4	97.37 %		13:42:47
2	Al 396.153Radial†	5339.4	5532.9	4813.4 ug/L	4813.4 ppb	13:42:47

2	Ca 317.933Radial†	2548.5	2571.3	5106.1 ug/L	5106.1 ppb	13:43:07
2	Fe 238.204 Radial†	425.3	421.3	5124.1 ug/L	5124.1 ppb	13:43:07
2	K 766.490 Radial†	28851.8	26846.4	5155.0 ug/L	5155.0 ppb	13:42:47
2	Mg 279.077 IEC†	121.9	121.1	5494.5 ug/L	5494.5 ppb	13:43:07
2	Na 589.592 Radial†	32229.3	33462.0	9652.2 ug/L	9652.2 ppb	13:42:47
2	Sr 421.552†	73944.8	75167.1	486.55 ug/L	486.55 ppb	13:42:47
2	Sc 361.383	912378.4	912378.4	103.85 %		13:44:10
2	Y 371.029	756229.2	756229.2	102.28 %		13:44:10
2	Ag 328.068†	107151.8	102733.3	495.19 ug/L	495.19 ppb	13:44:16
2	As 188.979†	1066.9	1051.8	519.98 ug/L	519.98 ppb	13:44:36
2	B 249.677†	20361.8	20074.4	498.06 ug/L	498.06 ppb	13:44:16
2	Ba 233.527†	62882.7	60556.7	507.42 ug/L	507.42 ppb	13:44:16
2	Be 313.107†	1302851.2	1258365.3	498.96 ug/L	498.96 ppb	13:44:10
2	Cd 226.502†	41897.2	40520.3	521.96 ug/L	521.96 ppb	13:44:16
2	Co 228.616†	23539.3	22717.0	525.00 ug/L	525.00 ppb	13:44:16
2	Cr 267.716†	43435.5	41744.6	505.61 ug/L	505.61 ppb	13:44:16
2	Cu 324.752†	170064.8	157552.2	482.94 ug/L	482.94 ppb	13:44:16
2	Mn 257.610†	437242.5	420570.3	504.26 ug/L	504.26 ppb	13:44:10
2	Mo 202.031†	6714.5	6457.8	505.58 ug/L	505.58 ppb	13:44:36
2	Ni 231.604†	19345.5	18554.7	514.81 ug/L	514.81 ppb	13:44:16
2	P 214.914†	4261.9	3907.8	2521.5 ug/L	2521.5 ppb	13:44:36
2	Pb 220.353†	3914.5	3821.8	519.97 ug/L	519.97 ppb	13:44:36
2	S 181.975 Axial†	718.2	660.3	1060.9 ug/L	1060.9 ppb	13:44:36
2	Sb 206.836†	1481.9	1392.2	542.42 ug/L	542.42 ppb	13:44:36
2	Se 196.026†	722.6	715.1	538.75 ug/L	538.75 ppb	13:44:36
2	Si 251.611†	77107.5	73723.4	2505.5 ug/L	2505.5 ppb	13:44:16
2	Sn 189.927†	2698.3	2584.7	521.09 ug/L	521.09 ppb	13:44:36
2	Ti 334.940†	315667.0	305124.5	484.56 ug/L	484.56 ppb	13:44:16
2	Tl 190.801†	1504.8	1476.6	510.49 ug/L	510.49 ppb	13:44:36
2	U 409.014†	15277.3	17135.7	472.27 ug/L	472.27 ppb	13:44:16
2	V 292.402†	68574.1	67377.3	502.45 ug/L	502.45 ppb	13:44:16
2	Zn 213.857†	49590.9	47161.5	505.74 ug/L	505.74 ppb	13:44:16
2	SiO2†	76895.7	73512.0	5322.1 ug/L	5322.1 ppb	13:45:17
3	Sc Radial	4360.5	4360.5	99.2 %		13:43:12
3	Y RADIAL	4735.6	4735.6	98.14 %		13:43:12
3	Al 396.153Radial†	5385.4	5533.2	4813.8 ug/L	4813.8 ppb	13:43:12
3	Ca 317.933Radial†	2543.2	2544.0	5051.8 ug/L	5051.8 ppb	13:43:32
3	Fe 238.204 Radial†	422.9	415.2	5050.3 ug/L	5050.3 ppb	13:43:32
3	K 766.490 Radial†	29024.8	26771.7	5140.7 ug/L	5140.7 ppb	13:43:12
3	Mg 279.077 IEC†	116.2	114.3	5185.2 ug/L	5185.2 ppb	13:43:32
3	Na 589.592 Radial†	32418.7	33374.6	9627.0 ug/L	9627.0 ppb	13:43:12
3	Sr 421.552†	74485.7	75074.0	485.95 ug/L	485.95 ppb	13:43:12
3	Sc 361.383	916889.1	916889.1	104.37 %		13:44:41
3	Y 371.029	758630.9	758630.9	102.61 %		13:44:41
3	Ag 328.068†	107138.2	102212.7	492.67 ug/L	492.67 ppb	13:44:47
3	As 188.979†	1076.8	1056.2	522.13 ug/L	522.13 ppb	13:45:07
3	B 249.677†	20340.0	19957.1	495.16 ug/L	495.16 ppb	13:44:47
3	Ba 233.527†	62997.6	60369.0	505.84 ug/L	505.84 ppb	13:44:47
3	Be 313.107†	1302376.9	1251739.2	496.33 ug/L	496.33 ppb	13:44:41
3	Cd 226.502†	41907.1	40331.4	519.54 ug/L	519.54 ppb	13:44:47
3	Co 228.616†	23516.7	22583.9	521.93 ug/L	521.93 ppb	13:44:47
3	Cr 267.716†	43481.6	41583.0	503.64 ug/L	503.64 ppb	13:44:47
3	Cu 324.752†	169630.1	156330.1	479.19 ug/L	479.19 ppb	13:44:47
3	Mn 257.610†	438356.8	419566.8	503.07 ug/L	503.07 ppb	13:44:41
3	Mo 202.031†	6713.6	6425.2	503.02 ug/L	503.02 ppb	13:45:07
3	Ni 231.604†	19424.0	18538.3	514.36 ug/L	514.36 ppb	13:44:47
3	P 214.914†	4272.9	3898.1	2515.8 ug/L	2515.8 ppb	13:45:07
3	Pb 220.353†	3909.6	3798.6	516.83 ug/L	516.83 ppb	13:45:07
3	S 181.975 Axial†	706.5	645.8	1037.5 ug/L	1037.5 ppb	13:45:07
3	Sb 206.836†	1487.9	1390.9	541.91 ug/L	541.91 ppb	13:45:07
3	Se 196.026†	731.9	720.6	542.48 ug/L	542.48 ppb	13:45:07
3	Si 251.611†	77137.6	73387.0	2494.1 ug/L	2494.1 ppb	13:44:47
3	Sn 189.927†	2711.0	2584.1	520.96 ug/L	520.96 ppb	13:45:07
3	Ti 334.940†	315700.1	303660.9	482.26 ug/L	482.26 ppb	13:44:47
3	Tl 190.801†	1526.2	1489.9	515.06 ug/L	515.06 ppb	13:45:07
3	U 409.014†	15234.3	17022.2	469.15 ug/L	469.15 ppb	13:44:47
3	V 292.402†	68595.1	67072.6	500.17 ug/L	500.17 ppb	13:44:47
3	Zn 213.857†	49564.7	46901.5	502.95 ug/L	502.95 ppb	13:44:47
3	SiO2†	77907.4	74117.1	5366.0 ug/L	5366.0 ppb	13:45:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	915577.0	104.22 %	0.317			0.30%
Sc Radial	4357.7	99.1 %	0.75			0.75%
Y 371.029	758398.1	102.58 %	0.279			0.27%
Y RADIAL	4735.3	98.14 %	0.763			0.78%
Ag 328.068†	102210.1	492.66 ug/L	2.539	492.66 ppb	2.539	0.52%
QC value within limits for Ag 328.068 Recovery = 98.53%						
Al 396.153Radial†	5523.2	4805.1 ug/L	14.67	4805.1 ppb	14.67	0.31%
QC value within limits for Al 396.153Radial Recovery = 96.10%						
As 188.979†	1051.0	519.53 ug/L	2.840	519.53 ppb	2.840	0.55%
QC value within limits for As 188.979 Recovery = 103.91%						
B 249.677†	19935.1	494.61 ug/L	3.760	494.61 ppb	3.760	0.76%
QC value within limits for B 249.677 Recovery = 98.92%						
Ba 233.527†	60311.7	505.36 ug/L	2.333	505.36 ppb	2.333	0.46%
QC value within limits for Ba 233.527 Recovery = 101.07%						
Be 313.107†	1257466.2	498.60 ug/L	2.109	498.60 ppb	2.109	0.42%
QC value within limits for Be 313.107 Recovery = 99.72%						
Ca 317.933Radial†	2541.5	5046.9 ug/L	61.82	5046.9 ppb	61.82	1.22%
QC value within limits for Ca 317.933Radial Recovery = 100.94%						
Cd 226.502†	40339.9	519.64 ug/L	2.268	519.64 ppb	2.268	0.44%
QC value within limits for Cd 226.502 Recovery = 103.93%						
Co 228.616†	22586.2	521.98 ug/L	2.999	521.98 ppb	2.999	0.57%
QC value within limits for Co 228.616 Recovery = 104.40%						
Cr 267.716†	41556.1	503.32 ug/L	2.465	503.32 ppb	2.465	0.49%
QC value within limits for Cr 267.716 Recovery = 100.66%						
Cu 324.752†	156507.2	479.74 ug/L	2.971	479.74 ppb	2.971	0.62%
QC value within limits for Cu 324.752 Recovery = 95.95%						
Fe 238.204 Radial†	415.5	5054.3 ug/L	67.92	5054.3 ppb	67.92	1.34%
QC value within limits for Fe 238.204 Radial Recovery = 101.09%						
K 766.490 Radial†	26727.3	5132.1 ug/L	28.13	5132.1 ppb	28.13	0.55%
QC value within limits for K 766.490 Radial Recovery = 102.64%						
Mg 279.077 IEC†	116.6	5290.2 ug/L	176.98	5290.2 ppb	176.98	3.35%
QC value within limits for Mg 279.077 IEC Recovery = 105.80%						
Mn 257.610†	420612.9	504.32 ug/L	1.277	504.32 ppb	1.277	0.25%
QC value within limits for Mn 257.610 Recovery = 100.86%						
Mo 202.031†	6419.7	502.59 ug/L	3.222	502.59 ppb	3.222	0.64%
QC value within limits for Mo 202.031 Recovery = 100.52%						
Na 589.592 Radial†	33332.0	9614.7 ug/L	44.93	9614.7 ppb	44.93	0.47%
QC value within limits for Na 589.592 Radial Recovery = 96.15%						
Ni 231.604†	18495.1	513.16 ug/L	2.483	513.16 ppb	2.483	0.48%
QC value within limits for Ni 231.604 Recovery = 102.63%						
P 214.914†	3891.1	2511.0 ug/L	13.53	2511.0 ppb	13.53	0.54%
QC value within limits for P 214.914 Recovery = 100.44%						
Pb 220.353†	3795.5	516.41 ug/L	3.796	516.41 ppb	3.796	0.74%
QC value within limits for Pb 220.353 Recovery = 103.28%						
S 181.975 Axial†	652.1	1047.7 ug/L	11.98	1047.7 ppb	11.98	1.14%
QC value within limits for S 181.975 Axial Recovery = 104.77%						
Sb 206.836†	1382.7	538.77 ug/L	5.877	538.77 ppb	5.877	1.09%
QC value within limits for Sb 206.836 Recovery = 107.75%						
Se 196.026†	714.4	538.02 ug/L	4.868	538.02 ppb	4.868	0.90%
QC value within limits for Se 196.026 Recovery = 107.60%						
Si 251.611†	73352.2	2492.9 ug/L	13.24	2492.9 ppb	13.24	0.53%
QC value within limits for Si 251.611 Recovery = 99.72%						
Sn 189.927†	2574.3	518.99 ug/L	3.521	518.99 ppb	3.521	0.68%
QC value within limits for Sn 189.927 Recovery = 103.80%						
Sr 421.552†	74936.6	485.06 ug/L	2.084	485.06 ppb	2.084	0.43%
QC value within limits for Sr 421.552 Recovery = 97.01%						
Ti 334.940†	303680.0	482.28 ug/L	2.273	482.28 ppb	2.273	0.47%
QC value within limits for Ti 334.940 Recovery = 96.46%						
Tl 190.801†	1477.8	510.92 ug/L	3.938	510.92 ppb	3.938	0.77%
QC value within limits for Tl 190.801 Recovery = 102.18%						
U 409.014†	17007.8	468.75 ug/L	3.741	468.75 ppb	3.741	0.80%
QC value within limits for U 409.014 Recovery = 93.75%						
V 292.402†	67054.7	500.03 ug/L	2.484	500.03 ppb	2.484	0.50%
QC value within limits for V 292.402 Recovery = 100.01%						
Zn 213.857†	46918.2	503.13 ug/L	2.520	503.13 ppb	2.520	0.50%
QC value within limits for Zn 213.857 Recovery = 100.63%						
SiO2†	73408.5	5314.6 ug/L	55.52	5314.6 ppb	55.52	1.04%
QC value within limits for SiO2 Recovery = 99.39%						

Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 13:47:33

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	4424.8	4424.8	101 %		13:49:25
1	Y RADIAL	4848.6	4848.6	100.5 %		13:49:25
1	Al 396.153Radial†	-107.3	-2.3	-2.0755 ug/L	-2.0755 ppb	13:49:25
1	Ca 317.933Radial†	17.8	-2.1	-4.2180 ug/L	-4.2180 ppb	13:49:45
1	Fe 238.204 Radial†	10.0	-1.2	-14.430 ug/L	-14.430 ppb	13:49:45
1	K 766.490 Radial†	2723.4	218.0	41.905 ug/L	41.905 ppb	13:49:25
1	Mg 279.077 IEC†	5.4	2.5	112.09 ug/L	112.09 ppb	13:49:45
1	Na 589.592 Radial†	-651.7	46.7	13.457 ug/L	13.457 ppb	13:49:25
1	Sr 421.552†	47.6	33.8	0.2186 ug/L	0.2186 ppb	13:49:25
1	Sc 361.383	909331.5	909331.5	103.51 %		13:50:42
1	Y 371.029	764927.6	764927.6	103.46 %		13:50:42
1	Ag 328.068†	159.8	-288.5	-1.3793 ug/L	-1.3793 ppb	13:50:42
1	As 188.979†	-11.0	13.8	6.7537 ug/L	6.7537 ppb	13:51:02
1	B 249.677†	-131.6	341.0	8.5024 ug/L	8.5024 ppb	13:51:02
1	Ba 233.527†	0.2	7.3	0.0610 ug/L	0.0610 ppb	13:51:02
1	Be 313.107†	-4019.6	-31.2	-0.0127 ug/L	-0.0127 ppb	13:50:42
1	Cd 226.502†	-167.2	16.1	0.2067 ug/L	0.2067 ppb	13:51:02
1	Co 228.616†	-66.1	-12.9	-0.2949 ug/L	-0.2949 ppb	13:51:02
1	Cr 267.716†	66.7	-14.9	-0.1780 ug/L	-0.1780 ppb	13:51:02
1	Cu 324.752†	6074.6	-334.0	-1.0204 ug/L	-1.0204 ppb	13:50:42
1	Mn 257.610†	388.0	-74.8	-0.0957 ug/L	-0.0957 ppb	13:51:02
1	Mo 202.031†	16.1	8.0	0.6245 ug/L	0.6245 ppb	13:51:02
1	Ni 231.604†	56.5	-18.4	-0.5106 ug/L	-0.5106 ppb	13:51:02
1	P 214.914†	211.4	8.2	5.7074 ug/L	5.7074 ppb	13:51:02
1	Pb 220.353†	-58.9	-4.4	-0.5904 ug/L	-0.5904 ppb	13:51:02
1	S 181.975 Axial†	31.5	-0.8	-1.2416 ug/L	-1.2416 ppb	13:51:02
1	Sb 206.836†	77.1	39.8	14.988 ug/L	14.988 ppb	13:51:02
1	Se 196.026†	-23.5	-3.4	-2.5309 ug/L	-2.5309 ppb	13:51:02
1	Si 251.611†	571.9	29.3	0.9906 ug/L	0.9906 ppb	13:51:02
1	Sn 189.927†	15.4	1.4	0.2828 ug/L	0.2828 ppb	13:51:02
1	Ti 334.940†	-1314.2	-100.4	-0.1657 ug/L	-0.1657 ppb	13:50:42
1	Tl 190.801†	-38.6	-9.7	-3.3196 ug/L	-3.3196 ppb	13:51:02
1	U 409.014†	-2797.7	-2797.7	-7.6768 ug/L	-7.6768 ppb	13:50:42
1	V 292.402†	-1366.8	27.0	0.1971 ug/L	0.1971 ppb	13:50:42
1	Zn 213.857†	536.6	-71.1	-0.7625 ug/L	-0.7625 ppb	13:51:02
1	SiO2†	563.9	14.1	1.0055 ug/L	1.0055 ppb	13:51:58
2	Sc Radial	4341.8	4341.8	98.8 %		13:49:50
2	Y RADIAL	4722.6	4722.6	97.87 %		13:49:50
2	Al 396.153Radial†	-107.5	-4.6	-4.0538 ug/L	-4.0538 ppb	13:49:50
2	Ca 317.933Radial†	18.6	-0.9	-1.8706 ug/L	-1.8706 ppb	13:50:10
2	Fe 238.204 Radial†	12.4	1.4	17.470 ug/L	17.470 ppb	13:50:10
2	K 766.490 Radial†	2717.8	263.9	50.734 ug/L	50.734 ppb	13:49:50
2	Mg 279.077 IEC†	2.3	-0.5	-23.197 ug/L	-23.197 ppb	13:50:10
2	Na 589.592 Radial†	-619.7	66.7	19.230 ug/L	19.230 ppb	13:49:50
2	Sr 421.552†	27.9	14.7	0.0954 ug/L	0.0954 ppb	13:49:50
2	Sc 361.383	899285.9	899285.9	102.36 %		13:51:07
2	Y 371.029	756726.6	756726.6	102.35 %		13:51:07
2	Ag 328.068†	240.4	-208.1	-0.9866 ug/L	-0.9866 ppb	13:51:07
2	As 188.979†	-16.1	8.7	4.2897 ug/L	4.2897 ppb	13:51:27
2	B 249.677†	-101.6	368.9	9.1916 ug/L	9.1916 ppb	13:51:27
2	Ba 233.527†	-1.0	6.1	0.0507 ug/L	0.0507 ppb	13:51:27
2	Be 313.107†	-3924.4	18.3	0.0068 ug/L	0.0068 ppb	13:51:07
2	Cd 226.502†	-169.9	11.6	0.1464 ug/L	0.1464 ppb	13:51:27
2	Co 228.616†	-52.2	0.0	0.0010 ug/L	0.0010 ppb	13:51:27
2	Cr 267.716†	63.3	-17.6	-0.2080 ug/L	-0.2080 ppb	13:51:27
2	Cu 324.752†	6063.1	-279.8	-0.8518 ug/L	-0.8518 ppb	13:51:07
2	Mn 257.610†	428.9	-30.7	-0.0341 ug/L	-0.0341 ppb	13:51:27
2	Mo 202.031†	7.0	-0.7	-0.0560 ug/L	-0.0560 ppb	13:51:27
2	Ni 231.604†	67.9	-6.7	-0.1851 ug/L	-0.1851 ppb	13:51:27

2	P 214.914†	201.1	0.4	0.4450 ug/L	0.4450 ppb	13:51:27
2	Pb 220.353†	-60.8	-6.9	-0.9440 ug/L	-0.9440 ppb	13:51:27
2	S 181.975 Axial†	40.1	8.0	12.837 ug/L	12.837 ppb	13:51:27
2	Sb 206.836†	88.1	51.4	19.337 ug/L	19.337 ppb	13:51:27
2	Se 196.026†	-20.8	-1.0	-0.6937 ug/L	-0.6937 ppb	13:51:27
2	Si 251.611†	571.0	34.5	1.1778 ug/L	1.1778 ppb	13:51:27
2	Sn 189.927†	16.9	3.0	0.6013 ug/L	0.6013 ppb	13:51:27
2	Ti 334.940†	-1336.3	-136.1	-0.2108 ug/L	-0.2108 ppb	13:51:07
2	Tl 190.801†	-21.7	6.4	2.2115 ug/L	2.2115 ppb	13:51:27
2	U 409.014†	-2801.8	-311.9	-8.6280 ug/L	-8.6280 ppb	13:51:07
2	V 292.402†	-1451.6	-70.6	-0.5393 ug/L	-0.5393 ppb	13:51:07
2	Zn 213.857†	554.1	-48.2	-0.5216 ug/L	-0.5216 ppb	13:51:27
2	SiO2†	574.5	30.5	2.2172 ug/L	2.2172 ppb	13:52:03
3	Sc Radial	4356.4	4356.4	99.1 %		13:50:15
3	Y RADIAL	4779.9	4779.9	99.06 %		13:50:15
3	Al 396.153Radial†	-119.1	-15.9	-13.904 ug/L	-13.904 ppb	13:50:15
3	Ca 317.933Radial†	11.1	-8.6	-17.000 ug/L	-17.000 ppb	13:50:35
3	Fe 238.204 Radial†	11.4	0.4	4.6323 ug/L	4.6323 ppb	13:50:35
3	K 766.490 Radial†	2770.1	307.5	59.117 ug/L	59.117 ppb	13:50:15
3	Mg 279.077 IEC†	-0.4	-3.3	-147.63 ug/L	-147.63 ppb	13:50:35
3	Na 589.592 Radial†	-668.7	19.3	5.5619 ug/L	5.5619 ppb	13:50:15
3	Sr 421.552†	16.5	3.2	0.0207 ug/L	0.0207 ppb	13:50:15
3	Sc 361.383	901225.0	901225.0	102.58 %		13:51:33
3	Y 371.029	757594.4	757594.4	102.47 %		13:51:33
3	Ag 328.068†	250.9	-198.4	-0.9432 ug/L	-0.9432 ppb	13:51:33
3	As 188.979†	-15.2	9.7	4.7415 ug/L	4.7415 ppb	13:51:53
3	B 249.677†	-41.8	427.4	10.652 ug/L	10.652 ppb	13:51:53
3	Ba 233.527†	3.6	10.6	0.0877 ug/L	0.0877 ppb	13:51:53
3	Be 313.107†	-3964.0	-11.9	-0.0053 ug/L	-0.0053 ppb	13:51:33
3	Cd 226.502†	-177.8	4.3	0.0536 ug/L	0.0536 ppb	13:51:53
3	Co 228.616†	-58.5	-6.0	-0.1391 ug/L	-0.1391 ppb	13:51:53
3	Cr 267.716†	50.4	-30.3	-0.3624 ug/L	-0.3624 ppb	13:51:53
3	Cu 324.752†	6074.5	-281.4	-0.8571 ug/L	-0.8571 ppb	13:51:33
3	Mn 257.610†	402.0	-57.9	-0.0629 ug/L	-0.0629 ppb	13:51:53
3	Mo 202.031†	1.9	-5.7	-0.4426 ug/L	-0.4426 ppb	13:51:53
3	Ni 231.604†	67.2	-7.5	-0.2092 ug/L	-0.2092 ppb	13:51:53
3	P 214.914†	210.6	9.2	6.3721 ug/L	6.3721 ppb	13:51:53
3	Pb 220.353†	-66.2	-12.0	-1.6344 ug/L	-1.6344 ppb	13:51:53
3	S 181.975 Axial†	31.6	-0.4	-0.6480 ug/L	-0.6480 ppb	13:51:53
3	Sb 206.836†	81.4	44.6	16.806 ug/L	16.806 ppb	13:51:53
3	Se 196.026†	-23.9	-3.9	-2.8341 ug/L	-2.8341 ppb	13:51:53
3	Si 251.611†	566.0	28.4	0.9742 ug/L	0.9742 ppb	13:51:53
3	Sn 189.927†	23.5	9.4	1.8898 ug/L	1.8898 ppb	13:51:53
3	Ti 334.940†	-1356.0	-152.6	-0.2283 ug/L	-0.2283 ppb	13:51:33
3	Tl 190.801†	-33.6	-5.1	-1.7648 ug/L	-1.7648 ppb	13:51:53
3	U 409.014†	-2838.6	-341.9	-9.4558 ug/L	-9.4558 ppb	13:51:33
3	V 292.402†	-1459.4	-75.2	-0.5808 ug/L	-0.5808 ppb	13:51:33
3	Zn 213.857†	523.4	-79.3	-0.8565 ug/L	-0.8565 ppb	13:51:53
3	SiO2†	540.8	-3.5	-0.2401 ug/L	-0.2401 ppb	13:52:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903280.8	102.82 %		0.607			0.59%
Sc Radial	4374.3	99.5 %		1.01			1.01%
Y 371.029	759749.5	102.76 %		0.609			0.59%
Y RADIAL	4783.7	99.14 %		1.308			1.32%
Ag 328.068†	-231.7	-1.1030 ug/L		0.24024	-1.1030 ppb	0.24024	21.78%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-7.6	-6.6779 ug/L		6.33603	-6.6779 ppb	6.33603	94.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	10.7	5.2616 ug/L		1.31180	5.2616 ppb	1.31180	24.93%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	379.1	9.4487 ug/L		1.09778	9.4487 ppb	1.09778	11.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.0	0.0665 ug/L		0.01908	0.0665 ppb	0.01908	28.70%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-8.3	-0.0037 ug/L		0.00983	-0.0037 ppb	0.00983	262.71%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-3.9	-7.6963 ug/L		8.14250	-7.6963 ppb	8.14250	105.80%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	10.7	0.1356 ug/L	0.07714	0.1356 ppb	0.07714	56.90%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	-6.3	-0.1444 ug/L	0.14801	-0.1444 ppb	0.14801	102.53%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	-20.9	-0.2495 ug/L	0.09896	-0.2495 ppb	0.09896	39.66%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-298.4	-0.9098 ug/L	0.09586	-0.9098 ppb	0.09586	10.54%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	0.2	2.5576 ug/L	16.05091	2.5576 ppb	16.05091	627.58%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	263.1	50.585 ug/L	8.6071	50.585 ppb	8.6071	17.02%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-0.4	-19.579 ug/L	129.8945	-19.579 ppb	129.8945	663.45%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	-54.5	-0.0642 ug/L	0.03081	-0.0642 ppb	0.03081	47.96%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	0.5	0.0420 ug/L	0.54022	0.0420 ppb	0.54022	>999.9%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	44.2	12.750 ug/L	6.8616	12.750 ppb	6.8616	53.82%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-10.9	-0.3016 ug/L	0.18134	-0.3016 ppb	0.18134	60.12%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	6.0	4.1748 ug/L	3.24721	4.1748 ppb	3.24721	77.78%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	-7.8	-1.0563 ug/L	0.53099	-1.0563 ppb	0.53099	50.27%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	2.3	3.6490 ug/L	7.96224	3.6490 ppb	7.96224	218.20%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	45.2	17.044 ug/L	2.1838	17.044 ppb	2.1838	12.81%			
QC value greater than the upper limit for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-2.8	-2.0195 ug/L	1.15817	-2.0195 ppb	1.15817	57.35%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	30.8	1.0475 ug/L	0.11309	1.0475 ppb	0.11309	10.80%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	4.6	0.9247 ug/L	0.85090	0.9247 ppb	0.85090	92.02%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	17.2	0.1116 ug/L	0.09991	0.1116 ppb	0.09991	89.56%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	-129.7	-0.2016 ug/L	0.03229	-0.2016 ppb	0.03229	16.01%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	-2.8	-0.9576 ug/L	2.85253	-0.9576 ppb	2.85253	297.88%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	-310.4	-8.5869 ug/L	0.89022	-8.5869 ppb	0.89022	10.37%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	-39.6	-0.3077 ug/L	0.43763	-0.3077 ppb	0.43763	142.24%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-66.2	-0.7135 ug/L	0.17277	-0.7135 ppb	0.17277	24.21%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	13.7	0.9942 ug/L	1.22869	0.9942 ppb	1.22869	123.59%			
QC value within limits for SiO2 Recovery = Not calculated									
QC Failed. Continue with analysis.									

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 14:07:54

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	4302.6	4302.6	97.9 %		14:09:46
1	Y RADIAL	4675.8	4675.8	96.91 %		14:09:46
1	Al 396.153Radial†	5313.4	5532.7	4813.1 ug/L	4813.1 ppb	14:09:46
1	Ca 317.933Radial†	2534.2	2569.3	5102.0 ug/L	5102.0 ppb	14:10:06
1	Fe 238.204 Radial†	424.2	422.3	5137.1 ug/L	5137.1 ppb	14:10:06
1	K 766.490 Radial†	28506.0	26635.4	5114.4 ug/L	5114.4 ppb	14:09:46
1	Mg 279.077 IEC†	118.1	117.8	5342.1 ug/L	5342.1 ppb	14:10:06
1	Na 589.592 Radial†	31978.5	33364.7	9624.1 ug/L	9624.1 ppb	14:09:46
1	Sr 421.552†	73568.0	75147.0	486.42 ug/L	486.42 ppb	14:09:46
1	Sc 361.383	906581.5	906581.5	103.19 %		14:11:04
1	Y 371.029	750246.8	750246.8	101.47 %		14:11:04
1	Ag 328.068†	108093.5	104305.6	502.74 ug/L	502.74 ppb	14:11:09
1	As 188.979†	1066.9	1058.4	523.27 ug/L	523.27 ppb	14:11:29
1	B 249.677†	20202.3	20045.3	497.31 ug/L	497.31 ppb	14:11:09
1	Ba 233.527†	63342.6	61389.6	514.39 ug/L	514.39 ppb	14:11:09
1	Be 313.107†	1291406.4	1255296.3	497.76 ug/L	497.76 ppb	14:11:04
1	Cd 226.502†	42156.6	41029.7	528.53 ug/L	528.53 ppb	14:11:09
1	Co 228.616†	23772.1	23087.5	533.55 ug/L	533.55 ppb	14:11:09
1	Cr 267.716†	43679.5	42248.5	511.70 ug/L	511.70 ppb	14:11:09
1	Cu 324.752†	171437.6	159929.6	490.23 ug/L	490.23 ppb	14:11:09
1	Mn 257.610†	436013.7	422071.6	506.07 ug/L	506.07 ppb	14:11:04
1	Mo 202.031†	6688.8	6474.3	506.87 ug/L	506.87 ppb	14:11:29
1	Ni 231.604†	19509.9	18833.2	522.54 ug/L	522.54 ppb	14:11:09
1	P 214.914†	4245.3	3918.0	2526.8 ug/L	2526.8 ppb	14:11:29
1	Pb 220.353†	3905.2	3836.8	522.02 ug/L	522.02 ppb	14:11:29
1	S 181.975 Axial†	708.3	655.2	1052.6 ug/L	1052.6 ppb	14:11:29
1	Sb 206.836†	1458.3	1378.4	537.25 ug/L	537.25 ppb	14:11:29
1	Se 196.026†	718.2	715.4	538.99 ug/L	538.99 ppb	14:11:29
1	Si 251.611†	77789.5	74859.0	2544.2 ug/L	2544.2 ppb	14:11:09
1	Sn 189.927†	2673.5	2577.3	519.58 ug/L	519.58 ppb	14:11:29
1	Ti 334.940†	319153.6	310446.8	493.02 ug/L	493.02 ppb	14:11:09
1	Tl 190.801†	1502.3	1483.4	512.86 ug/L	512.86 ppb	14:11:29
1	U 409.014†	15458.1	17405.1	479.71 ug/L	479.71 ppb	14:11:09
1	V 292.402†	68968.3	68181.6	508.38 ug/L	508.38 ppb	14:11:09
1	Zn 213.857†	49880.0	47747.0	512.02 ug/L	512.02 ppb	14:11:09
1	SiO2†	77052.0	74137.0	5367.4 ug/L	5367.4 ppb	14:12:36
2	Sc Radial	4293.3	4293.3	97.7 %		14:10:11
2	Y RADIAL	4681.8	4681.8	97.03 %		14:10:11
2	Al 396.153Radial†	5317.5	5548.6	4827.0 ug/L	4827.0 ppb	14:10:11
2	Ca 317.933Radial†	2535.9	2576.7	5116.7 ug/L	5116.7 ppb	14:10:31
2	Fe 238.204 Radial†	423.9	422.9	5144.1 ug/L	5144.1 ppb	14:10:31
2	K 766.490 Radial†	28550.4	26744.0	5135.3 ug/L	5135.3 ppb	14:10:11
2	Mg 279.077 IEC†	120.0	120.0	5442.8 ug/L	5442.8 ppb	14:10:31
2	Na 589.592 Radial†	31885.1	33340.0	9617.0 ug/L	9617.0 ppb	14:10:11
2	Sr 421.552†	73425.5	75164.0	486.53 ug/L	486.53 ppb	14:10:11
2	Sc 361.383	903784.5	903784.5	102.87 %		14:11:35
2	Y 371.029	748610.4	748610.4	101.25 %		14:11:35
2	Ag 328.068†	106936.2	103504.9	498.90 ug/L	498.90 ppb	14:11:40
2	As 188.979†	1067.3	1061.9	524.99 ug/L	524.99 ppb	14:12:00
2	B 249.677†	19937.9	19848.9	492.43 ug/L	492.43 ppb	14:11:40
2	Ba 233.527†	62692.6	60947.8	510.69 ug/L	510.69 ppb	14:11:40
2	Be 313.107†	1293970.3	1261661.5	500.27 ug/L	500.27 ppb	14:11:35
2	Cd 226.502†	41644.6	40658.4	523.74 ug/L	523.74 ppb	14:11:40
2	Co 228.616†	23468.9	22864.1	528.40 ug/L	528.40 ppb	14:11:40
2	Cr 267.716†	43313.2	42023.4	508.98 ug/L	508.98 ppb	14:11:40
2	Cu 324.752†	169502.2	158562.4	486.04 ug/L	486.04 ppb	14:11:40
2	Mn 257.610†	435143.5	422533.3	506.62 ug/L	506.62 ppb	14:11:35
2	Mo 202.031†	6664.5	6470.7	506.59 ug/L	506.59 ppb	14:12:00
2	Ni 231.604†	19275.7	18664.0	517.84 ug/L	517.84 ppb	14:11:40

2	P 214.914†	4209.7	3896.0	2513.0 ug/L	2513.0 ppb	14:12:00
2	Pb 220.353†	3888.4	3832.3	521.40 ug/L	521.40 ppb	14:12:00
2	S 181.975 Axial†	697.2	646.6	1038.8 ug/L	1038.8 ppb	14:12:00
2	Sb 206.836†	1438.0	1363.1	531.50 ug/L	531.50 ppb	14:12:00
2	Se 196.026†	714.6	714.0	538.00 ug/L	538.00 ppb	14:12:00
2	Si 251.611†	76956.8	74283.0	2524.6 ug/L	2524.6 ppb	14:11:40
2	Sn 189.927†	2669.4	2581.3	520.41 ug/L	520.41 ppb	14:12:00
2	Ti 334.940†	315420.8	307775.5	488.78 ug/L	488.78 ppb	14:11:40
2	Tl 190.801†	1507.5	1493.0	516.14 ug/L	516.14 ppb	14:12:00
2	U 409.014†	15232.0	17231.7	474.92 ug/L	474.92 ppb	14:11:40
2	V 292.402†	68347.0	67784.5	505.45 ug/L	505.45 ppb	14:11:40
2	Zn 213.857†	49394.4	47424.6	508.56 ug/L	508.56 ppb	14:11:40
2	SiO2†	77484.3	74788.3	5414.7 ug/L	5414.7 ppb	14:12:41
3	Sc Radial	4381.6	4381.6	99.7 %		14:10:36
3	Y RADIAL	4769.9	4769.9	98.85 %		14:10:36
3	Al 396.153Radial†	5454.5	5576.3	4851.3 ug/L	4851.3 ppb	14:10:36
3	Ca 317.933Radial†	2531.4	2519.7	5003.7 ug/L	5003.7 ppb	14:10:56
3	Fe 238.204 Radial†	423.0	413.2	5026.8 ug/L	5026.8 ppb	14:10:56
3	K 766.490 Radial†	29037.5	26643.4	5116.0 ug/L	5116.0 ppb	14:10:36
3	Mg 279.077 IEC†	117.5	115.0	5218.9 ug/L	5218.9 ppb	14:10:56
3	Na 589.592 Radial†	32831.4	33631.2	9701.0 ug/L	9701.0 ppb	14:10:36
3	Sr 421.552†	75379.3	75608.6	489.41 ug/L	489.41 ppb	14:10:36
3	Sc 361.383	907715.1	907715.1	103.32 %		14:12:06
3	Y 371.029	751533.3	751533.3	101.65 %		14:12:06
3	Ag 328.068†	107392.9	103496.7	498.82 ug/L	498.82 ppb	14:12:11
3	As 188.979†	1072.2	1062.2	525.07 ug/L	525.07 ppb	14:12:31
3	B 249.677†	20165.3	19985.0	495.84 ug/L	495.84 ppb	14:12:11
3	Ba 233.527†	62988.2	60970.0	510.88 ug/L	510.88 ppb	14:12:11
3	Be 313.107†	1298671.9	1260765.2	499.92 ug/L	499.92 ppb	14:12:06
3	Cd 226.502†	41807.0	40640.3	523.52 ug/L	523.52 ppb	14:12:11
3	Co 228.616†	23573.3	22866.4	528.45 ug/L	528.45 ppb	14:12:11
3	Cr 267.716†	43293.4	41821.9	506.53 ug/L	506.53 ppb	14:12:11
3	Cu 324.752†	170699.1	159007.4	487.39 ug/L	487.39 ppb	14:12:11
3	Mn 257.610†	437554.8	423035.5	507.22 ug/L	507.22 ppb	14:12:06
3	Mo 202.031†	6683.7	6461.2	505.84 ug/L	505.84 ppb	14:12:31
3	Ni 231.604†	19295.4	18601.9	516.12 ug/L	516.12 ppb	14:12:11
3	P 214.914†	4265.6	3932.4	2537.2 ug/L	2537.2 ppb	14:12:31
3	Pb 220.353†	3893.0	3820.3	519.80 ug/L	519.80 ppb	14:12:31
3	S 181.975 Axial†	701.4	647.6	1040.5 ug/L	1040.5 ppb	14:12:31
3	Sb 206.836†	1464.2	1382.4	538.73 ug/L	538.73 ppb	14:12:31
3	Se 196.026†	723.4	719.4	541.59 ug/L	541.59 ppb	14:12:31
3	Si 251.611†	77356.2	74345.5	2526.7 ug/L	2526.7 ppb	14:12:11
3	Sn 189.927†	2682.6	2582.8	520.69 ug/L	520.69 ppb	14:12:31
3	Ti 334.940†	316631.0	307619.1	488.53 ug/L	488.53 ppb	14:12:11
3	Tl 190.801†	1515.4	1494.3	516.59 ug/L	516.59 ppb	14:12:31
3	U 409.014†	15466.0	17394.0	479.43 ug/L	479.43 ppb	14:12:11
3	V 292.402†	68588.9	67730.9	505.07 ug/L	505.07 ppb	14:12:11
3	Zn 213.857†	49657.9	47471.7	509.10 ug/L	509.10 ppb	14:12:11
3	SiO2†	77148.4	74137.0	5367.4 ug/L	5367.4 ppb	14:12:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906027.1	103.13 %	0.230			0.22%
Sc Radial	4325.8	98.4 %	1.10			1.12%
Y 371.029	750130.2	101.46 %	0.198			0.20%
Y RADIAL	4709.1	97.60 %	1.091			1.12%
Ag 328.068†	103769.1	500.16 ug/L	2.241	500.16 ppb	2.241	0.45%
QC value within limits for Ag 328.068 Recovery = 100.03%						
Al 396.153Radial†	5552.5	4830.5 ug/L	19.31	4830.5 ppb	19.31	0.40%
QC value within limits for Al 396.153Radial Recovery = 96.61%						
As 188.979†	1060.8	524.44 ug/L	1.017	524.44 ppb	1.017	0.19%
QC value within limits for As 188.979 Recovery = 104.89%						
B 249.677†	19959.7	495.19 ug/L	2.505	495.19 ppb	2.505	0.51%
QC value within limits for B 249.677 Recovery = 99.04%						
Ba 233.527†	61102.5	511.99 ug/L	2.086	511.99 ppb	2.086	0.41%
QC value within limits for Ba 233.527 Recovery = 102.40%						
Be 313.107†	1259241.0	499.32 ug/L	1.358	499.32 ppb	1.358	0.27%
QC value within limits for Be 313.107 Recovery = 99.86%						
Ca 317.933Radial†	2555.2	5074.1 ug/L	61.45	5074.1 ppb	61.45	1.21%

QC value within limits for Ca 317.933Radial Recovery = 101.48%									
Cd	226.502†	40776.1	525.27 ug/L	2.831	525.27 ppb	2.831	0.54%		
QC value within limits for Cd 226.502 Recovery = 105.05%									
Co	228.616†	22939.3	530.13 ug/L	2.960	530.13 ppb	2.960	0.56%		
QC value within limits for Co 228.616 Recovery = 106.03%									
Cr	267.716†	42031.3	509.07 ug/L	2.587	509.07 ppb	2.587	0.51%		
QC value within limits for Cr 267.716 Recovery = 101.81%									
Cu	324.752†	159166.5	487.89 ug/L	2.137	487.89 ppb	2.137	0.44%		
QC value within limits for Cu 324.752 Recovery = 97.58%									
Fe	238.204 Radial†	419.5	5102.6 ug/L	65.78	5102.6 ppb	65.78	1.29%		
QC value within limits for Fe 238.204 Radial Recovery = 102.05%									
K	766.490 Radial†	26674.3	5121.9 ug/L	11.63	5121.9 ppb	11.63	0.23%		
QC value within limits for K 766.490 Radial Recovery = 102.44%									
Mg	279.077 IEC†	117.6	5334.6 ug/L	112.12	5334.6 ppb	112.12	2.10%		
QC value within limits for Mg 279.077 IEC Recovery = 106.69%									
Mn	257.610†	422546.8	506.64 ug/L	0.575	506.64 ppb	0.575	0.11%		
QC value within limits for Mn 257.610 Recovery = 101.33%									
Mo	202.031†	6468.8	506.43 ug/L	0.533	506.43 ppb	0.533	0.11%		
QC value within limits for Mo 202.031 Recovery = 101.29%									
Na	589.592 Radial†	33445.3	9647.3 ug/L	46.57	9647.3 ppb	46.57	0.48%		
QC value within limits for Na 589.592 Radial Recovery = 96.47%									
Ni	231.604†	18699.7	518.83 ug/L	3.321	518.83 ppb	3.321	0.64%		
QC value within limits for Ni 231.604 Recovery = 103.77%									
P	214.914†	3915.5	2525.7 ug/L	12.13	2525.7 ppb	12.13	0.48%		
QC value within limits for P 214.914 Recovery = 101.03%									
Pb	220.353†	3829.8	521.07 ug/L	1.146	521.07 ppb	1.146	0.22%		
QC value within limits for Pb 220.353 Recovery = 104.21%									
S	181.975 Axial†	649.8	1044.0 ug/L	7.56	1044.0 ppb	7.56	0.72%		
QC value within limits for S 181.975 Axial Recovery = 104.40%									
Sb	206.836†	1374.6	535.83 ug/L	3.822	535.83 ppb	3.822	0.71%		
QC value within limits for Sb 206.836 Recovery = 107.17%									
Se	196.026†	716.2	539.53 ug/L	1.854	539.53 ppb	1.854	0.34%		
QC value within limits for Se 196.026 Recovery = 107.91%									
Si	251.611†	74495.8	2531.9 ug/L	10.77	2531.9 ppb	10.77	0.43%		
QC value within limits for Si 251.611 Recovery = 101.27%									
Sn	189.927†	2580.5	520.23 ug/L	0.576	520.23 ppb	0.576	0.11%		
QC value within limits for Sn 189.927 Recovery = 104.05%									
Sr	421.552†	75306.5	487.46 ug/L	1.695	487.46 ppb	1.695	0.35%		
QC value within limits for Sr 421.552 Recovery = 97.49%									
Ti	334.940†	308613.8	490.11 ug/L	2.526	490.11 ppb	2.526	0.52%		
QC value within limits for Ti 334.940 Recovery = 98.02%									
Tl	190.801†	1490.2	515.19 ug/L	2.036	515.19 ppb	2.036	0.40%		
QC value within limits for Tl 190.801 Recovery = 103.04%									
U	409.014†	17343.6	478.02 ug/L	2.689	478.02 ppb	2.689	0.56%		
QC value within limits for U 409.014 Recovery = 95.60%									
V	292.402†	67899.0	506.30 ug/L	1.811	506.30 ppb	1.811	0.36%		
QC value within limits for V 292.402 Recovery = 101.26%									
Zn	213.857†	47547.7	509.89 ug/L	1.859	509.89 ppb	1.859	0.36%		
QC value within limits for Zn 213.857 Recovery = 101.98%									
SiO2†		74354.1	5383.2 ug/L	27.29	5383.2 ppb	27.29	0.51%		
QC value within limits for SiO2 Recovery = 100.67%									
All analyte(s) passed QC.									

Sequence No.: 10

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 2/22/2010 14:14:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4509.4	4509.4	103 %		14:16:50
1	Y RADIAL	4930.4	4930.4	102.2 %		14:16:50
1	Al 396.153Radial†	90.2	192.1	167.48 ug/L	167.48 ppb	14:16:50
1	Ca 317.933Radial†	129.0	106.0	210.49 ug/L	210.49 ppb	14:17:10
1	Fe 238.204 Radial†	20.7	9.1	110.48 ug/L	110.48 ppb	14:17:10
1	K 766.490 Radial†	3410.0	836.5	160.61 ug/L	160.61 ppb	14:16:50
1	Mg 279.077 IEC†	9.7	6.6	301.21 ug/L	301.21 ppb	14:17:10
1	Na 589.592 Radial†	371.3	1055.9	304.59 ug/L	304.59 ppb	14:16:50
1	Sr 421.552†	818.1	784.0	5.0735 ug/L	5.0735 ppb	14:16:50
1	Sc 361.383	919900.6	919900.6	104.71 %		14:18:06
1	Y 371.029	771091.2	771091.2	104.29 %		14:18:06
1	Ag 328.068†	1335.0	832.0	3.9974 ug/L	3.9974 ppb	14:18:11
1	As 188.979†	46.4	68.8	33.782 ug/L	33.782 ppb	14:18:31
1	B 249.677†	1795.9	2183.2	54.390 ug/L	54.390 ppb	14:18:11
1	Ba 233.527†	628.4	607.3	5.0905 ug/L	5.0905 ppb	14:18:31
1	Be 313.107†	9300.5	12734.4	5.0496 ug/L	5.0496 ppb	14:18:11
1	Cd 226.502†	249.1	415.5	5.3542 ug/L	5.3542 ppb	14:18:31
1	Co 228.616†	161.7	205.5	4.7592 ug/L	4.7592 ppb	14:18:31
1	Cr 267.716†	501.8	399.9	4.8325 ug/L	4.8325 ppb	14:18:31
1	Cu 324.752†	9536.3	2904.5	8.8821 ug/L	8.8821 ppb	14:18:11
1	Mn 257.610†	9783.0	8893.2	10.656 ug/L	10.656 ppb	14:18:11
1	Mo 202.031†	144.9	130.9	10.246 ug/L	10.246 ppb	14:18:31
1	Ni 231.604†	264.8	179.8	4.9897 ug/L	4.9897 ppb	14:18:31
1	P 214.914†	450.0	233.8	154.75 ug/L	154.75 ppb	14:18:31
1	Pb 220.353†	21.5	73.0	9.9509 ug/L	9.9509 ppb	14:18:31
1	S 181.975 Axial†	100.7	65.0	104.50 ug/L	104.50 ppb	14:18:31
1	Sb 206.836†	74.5	36.4	14.073 ug/L	14.073 ppb	14:18:31
1	Se 196.026†	21.7	40.0	29.514 ug/L	29.514 ppb	14:18:31
1	Si 251.611†	3469.9	2790.6	94.950 ug/L	94.950 ppb	14:18:31
1	Sn 189.927†	69.0	52.4	10.583 ug/L	10.583 ppb	14:18:31
1	Ti 334.940†	2095.6	3170.7	5.0177 ug/L	5.0177 ppb	14:18:11
1	Tl 190.801†	40.4	66.2	22.792 ug/L	22.792 ppb	14:18:31
1	U 409.014†	-720.8	1736.9	48.022 ug/L	48.022 ppb	14:18:06
1	V 292.402†	-696.7	682.1	5.2381 ug/L	5.2381 ppb	14:18:11
1	Zn 213.857†	1589.9	928.9	9.9938 ug/L	9.9938 ppb	14:18:31
1	SiO2†	3656.1	2960.9	214.64 ug/L	214.64 ppb	14:19:38
2	Sc Radial	4430.8	4430.8	101 %		14:17:15
2	Y RADIAL	4837.7	4837.7	100.3 %		14:17:15
2	Al 396.153Radial†	104.2	207.6	181.04 ug/L	181.04 ppb	14:17:15
2	Ca 317.933Radial†	126.3	105.5	209.47 ug/L	209.47 ppb	14:17:35
2	Fe 238.204 Radial†	18.0	6.7	81.533 ug/L	81.533 ppb	14:17:35
2	K 766.490 Radial†	3552.6	1036.9	199.14 ug/L	199.14 ppb	14:17:15
2	Mg 279.077 IEC†	10.4	7.5	339.92 ug/L	339.92 ppb	14:17:35
2	Na 589.592 Radial†	432.5	1123.1	323.95 ug/L	323.95 ppb	14:17:15
2	Sr 421.552†	791.2	771.5	4.9926 ug/L	4.9926 ppb	14:17:15
2	Sc 361.383	923812.7	923812.7	105.15 %		14:18:37
2	Y 371.029	774785.9	774785.9	104.79 %		14:18:37
2	Ag 328.068†	1280.1	774.4	3.7110 ug/L	3.7110 ppb	14:18:42
2	As 188.979†	37.1	59.7	29.308 ug/L	29.308 ppb	14:19:02
2	B 249.677†	1800.6	2180.4	54.324 ug/L	54.324 ppb	14:18:42
2	Ba 233.527†	638.8	614.6	5.1504 ug/L	5.1504 ppb	14:19:02
2	Be 313.107†	9319.8	12715.1	5.0417 ug/L	5.0417 ppb	14:18:42
2	Cd 226.502†	244.2	409.8	5.2850 ug/L	5.2850 ppb	14:19:02
2	Co 228.616†	165.6	208.5	4.8301 ug/L	4.8301 ppb	14:19:02
2	Cr 267.716†	505.2	401.0	4.8429 ug/L	4.8429 ppb	14:19:02
2	Cu 324.752†	9517.0	2847.6	8.7058 ug/L	8.7058 ppb	14:18:42
2	Mn 257.610†	9555.2	8637.1	10.344 ug/L	10.344 ppb	14:18:42
2	Mo 202.031†	143.8	129.3	10.119 ug/L	10.119 ppb	14:19:02
2	Ni 231.604†	276.9	190.3	5.2815 ug/L	5.2815 ppb	14:19:02

2	P 214.914†	447.4	229.4	151.88 ug/L	151.88 ppb	14:19:02
2	Pb 220.353†	28.0	79.2	10.790 ug/L	10.790 ppb	14:19:02
2	S 181.975 Axial†	106.6	70.2	112.84 ug/L	112.84 ppb	14:19:02
2	Sb 206.836†	85.7	46.7	17.936 ug/L	17.936 ppb	14:19:02
2	Se 196.026†	21.6	39.9	29.330 ug/L	29.330 ppb	14:19:02
2	Si 251.611†	3510.0	2814.6	95.770 ug/L	95.770 ppb	14:19:02
2	Sn 189.927†	63.8	47.2	9.5272 ug/L	9.5272 ppb	14:19:02
2	Ti 334.940†	2019.4	3089.7	4.8855 ug/L	4.8855 ppb	14:18:42
2	Tl 190.801†	34.0	60.0	20.664 ug/L	20.664 ppb	14:19:02
2	U 409.014†	-705.6	1754.3	48.505 ug/L	48.505 ppb	14:18:37
2	V 292.402†	-730.0	653.2	5.0297 ug/L	5.0297 ppb	14:18:42
2	Zn 213.857†	1617.3	948.5	10.208 ug/L	10.208 ppb	14:19:02
2	SiO2†	3616.1	2908.1	210.81 ug/L	210.81 ppb	14:19:43
3	Sc Radial	4378.6	4378.6	99.6 %		14:17:40
3	Y RADIAL	4799.6	4799.6	99.47 %		14:17:40
3	Al 396.153Radial†	116.8	221.5	193.10 ug/L	193.10 ppb	14:17:40
3	Ca 317.933Radial†	129.4	110.1	218.67 ug/L	218.67 ppb	14:18:00
3	Fe 238.204 Radial†	19.1	8.0	97.701 ug/L	97.701 ppb	14:18:00
3	K 766.490 Radial†	3384.0	909.7	174.67 ug/L	174.67 ppb	14:17:40
3	Mg 279.077 IEC†	10.7	7.9	357.91 ug/L	357.91 ppb	14:18:00
3	Na 589.592 Radial†	428.1	1123.8	324.16 ug/L	324.16 ppb	14:17:40
3	Sr 421.552†	844.5	834.3	5.3994 ug/L	5.3994 ppb	14:17:40
3	Sc 361.383	917020.2	917020.2	104.38 %		14:19:07
3	Y 371.029	768559.5	768559.5	103.95 %		14:19:07
3	Ag 328.068†	1310.5	812.6	3.8934 ug/L	3.8934 ppb	14:19:12
3	As 188.979†	39.3	62.1	30.514 ug/L	30.514 ppb	14:19:32
3	B 249.677†	1818.7	2210.5	55.070 ug/L	55.070 ppb	14:19:12
3	Ba 233.527†	659.3	638.7	5.3518 ug/L	5.3518 ppb	14:19:32
3	Be 313.107†	9230.4	12695.2	5.0337 ug/L	5.0337 ppb	14:19:12
3	Cd 226.502†	261.7	428.3	5.5222 ug/L	5.5222 ppb	14:19:32
3	Co 228.616†	167.1	211.1	4.8933 ug/L	4.8933 ppb	14:19:32
3	Cr 267.716†	506.4	405.8	4.8992 ug/L	4.8992 ppb	14:19:32
3	Cu 324.752†	9486.7	2885.6	8.8202 ug/L	8.8202 ppb	14:19:12
3	Mn 257.610†	9758.7	8899.3	10.659 ug/L	10.659 ppb	14:19:12
3	Mo 202.031†	155.3	141.3	11.061 ug/L	11.061 ppb	14:19:32
3	Ni 231.604†	277.6	192.9	5.3527 ug/L	5.3527 ppb	14:19:32
3	P 214.914†	452.6	237.6	157.33 ug/L	157.33 ppb	14:19:32
3	Pb 220.353†	14.0	65.9	9.0001 ug/L	9.0001 ppb	14:19:32
3	S 181.975 Axial†	106.9	71.2	114.44 ug/L	114.44 ppb	14:19:32
3	Sb 206.836†	86.6	48.2	18.547 ug/L	18.547 ppb	14:19:32
3	Se 196.026†	21.1	39.6	29.133 ug/L	29.133 ppb	14:19:32
3	Si 251.611†	3528.5	2857.1	97.205 ug/L	97.205 ppb	14:19:32
3	Sn 189.927†	70.7	54.3	10.962 ug/L	10.962 ppb	14:19:32
3	Ti 334.940†	1979.2	3065.4	4.8443 ug/L	4.8443 ppb	14:19:12
3	Tl 190.801†	27.3	53.7	18.525 ug/L	18.525 ppb	14:19:32
3	U 409.014†	-492.6	1953.4	54.009 ug/L	54.009 ppb	14:19:07
3	V 292.402†	-757.6	621.7	4.8192 ug/L	4.8192 ppb	14:19:12
3	Zn 213.857†	1619.5	962.1	10.352 ug/L	10.352 ppb	14:19:32
3	SiO2†	3608.4	2926.2	212.10 ug/L	212.10 ppb	14:19:48

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920244.5	104.75 %	0.388			0.37%
Sc Radial	4439.6	101 %	1.5			1.48%
Y 371.029	771478.8	104.34 %	0.424			0.41%
Y RADIAL	4855.9	100.6 %	1.39			1.39%
Ag 328.068†	806.3	3.8673 ug/L	0.14497	3.8673 ppb	0.14497	3.75%
QC value within limits for Ag 328.068 Recovery = 77.35%						
Al 396.153Radial†	207.1	180.54 ug/L	12.818	180.54 ppb	12.818	7.10%
QC value within limits for Al 396.153Radial Recovery = 90.27%						
As 188.979†	63.5	31.201 ug/L	2.3146	31.201 ppb	2.3146	7.42%
QC value within limits for As 188.979 Recovery = 104.00%						
B 249.677†	2191.4	54.594 ug/L	0.4132	54.594 ppb	0.4132	0.76%
QC value within limits for B 249.677 Recovery = 109.19%						
Ba 233.527†	620.2	5.1976 ug/L	0.13688	5.1976 ppb	0.13688	2.63%
QC value within limits for Ba 233.527 Recovery = 103.95%						
Be 313.107†	12714.9	5.0417 ug/L	0.00795	5.0417 ppb	0.00795	0.16%
QC value within limits for Be 313.107 Recovery = 100.83%						
Ca 317.933Radial†	107.2	212.88 ug/L	5.043	212.88 ppb	5.043	2.37%

QC value within limits for Ca 317.933 Radial Recovery = 106.44%							
Cd 226.502†	417.9	5.3871 ug/L	0.12200	5.3871 ppb	0.12200	2.26%	
QC value within limits for Cd 226.502 Recovery = 107.74%							
Co 228.616†	208.4	4.8275 ug/L	0.06709	4.8275 ppb	0.06709	1.39%	
QC value within limits for Co 228.616 Recovery = 96.55%							
Cr 267.716†	402.2	4.8582 ug/L	0.03589	4.8582 ppb	0.03589	0.74%	
QC value within limits for Cr 267.716 Recovery = 97.16%							
Cu 324.752†	2879.2	8.8027 ug/L	0.08943	8.8027 ppb	0.08943	1.02%	
QC value within limits for Cu 324.752 Recovery = 88.03%							
Fe 238.204 Radial†	8.0	96.570 ug/L	14.5049	96.570 ppb	14.5049	15.02%	
QC value within limits for Fe 238.204 Radial Recovery = 96.57%							
K 766.490 Radial†	927.7	178.14 ug/L	19.499	178.14 ppb	19.499	10.95%	
QC value within limits for K 766.490 Radial Recovery = 118.76%							
Mg 279.077 IEC†	7.3	333.01 ug/L	28.971	333.01 ppb	28.971	8.70%	
QC value within limits for Mg 279.077 IEC Recovery = 111.00%							
Mn 257.610†	8809.9	10.553 ug/L	0.1809	10.553 ppb	0.1809	1.71%	
QC value within limits for Mn 257.610 Recovery = 105.53%							
Mo 202.031†	133.8	10.475 ug/L	0.5115	10.475 ppb	0.5115	4.88%	
QC value within limits for Mo 202.031 Recovery = 104.75%							
Na 589.592 Radial†	1100.9	317.56 ug/L	11.239	317.56 ppb	11.239	3.54%	
QC value within limits for Na 589.592 Radial Recovery = 105.85%							
Ni 231.604†	187.7	5.2080 ug/L	0.19233	5.2080 ppb	0.19233	3.69%	
QC value within limits for Ni 231.604 Recovery = 104.16%							
P 214.914†	233.6	154.65 ug/L	2.724	154.65 ppb	2.724	1.76%	
QC value within limits for P 214.914 Recovery = 103.10%							
Pb 220.353†	72.7	9.9137 ug/L	0.89553	9.9137 ppb	0.89553	9.03%	
QC value within limits for Pb 220.353 Recovery = 99.14%							
S 181.975 Axial†	68.8	110.59 ug/L	5.340	110.59 ppb	5.340	4.83%	
QC value within limits for S 181.975 Axial Recovery = 110.59%							
Sb 206.836†	43.8	16.852 ug/L	2.4263	16.852 ppb	2.4263	14.40%	
QC value greater than the upper limit for Sb 206.836 Recovery = 168.52%							
Se 196.026†	39.8	29.326 ug/L	0.1901	29.326 ppb	0.1901	0.65%	
QC value within limits for Se 196.026 Recovery = 97.75%							
Si 251.611†	2820.8	95.975 ug/L	1.1416	95.975 ppb	1.1416	1.19%	
QC value within limits for Si 251.611 Recovery = 95.98%							
Sn 189.927†	51.3	10.357 ug/L	0.7434	10.357 ppb	0.7434	7.18%	
QC value within limits for Sn 189.927 Recovery = 103.57%							
Sr 421.552†	796.6	5.1552 ug/L	0.21534	5.1552 ppb	0.21534	4.18%	
QC value within limits for Sr 421.552 Recovery = 103.10%							
Ti 334.940†	3108.6	4.9158 ug/L	0.09059	4.9158 ppb	0.09059	1.84%	
QC value within limits for Ti 334.940 Recovery = 98.32%							
Tl 190.801†	60.0	20.660 ug/L	2.1332	20.660 ppb	2.1332	10.33%	
QC value within limits for Tl 190.801 Recovery = 103.30%							
U 409.014†	1814.9	50.179 ug/L	3.3260	50.179 ppb	3.3260	6.63%	
QC value within limits for U 409.014 Recovery = 100.36%							
V 292.402†	652.3	5.0290 ug/L	0.20943	5.0290 ppb	0.20943	4.16%	
QC value within limits for V 292.402 Recovery = 100.58%							
Zn 213.857†	946.5	10.185 ug/L	0.1803	10.185 ppb	0.1803	1.77%	
QC value within limits for Zn 213.857 Recovery = 101.85%							
SiO2†	2931.8	212.51 ug/L	1.949	212.51 ppb	1.949	0.92%	
QC value within limits for SiO2 Recovery = 99.77%							
QC Failed. Continue with analysis.							

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

Autosampler Location: 8
 Date Collected: 2/22/2010 14:21:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4245.5	4245.5	96.6 %		14:23:52
1	Y RADIAL	4644.2	4644.2	96.25 %		14:23:52
1	Al 396.153Radial†	-113.0	-12.7	-11.145 ug/L	-11.145 ppb	14:24:12
1	Ca 317.933Radial†	21.9	2.9	5.8199 ug/L	5.8199 ppb	14:24:12
1	Fe 238.204 Radial†	10.9	0.2	2.5920 ug/L	2.5920 ppb	14:24:12
1	K 766.490 Radial†	2729.1	338.1	64.993 ug/L	64.993 ppb	14:23:52
1	Mg 279.077 IEC†	2.7	-0.1	-4.9044 ug/L	-4.9044 ppb	14:24:12
1	Na 589.592 Radial†	-607.7	64.8	18.687 ug/L	18.687 ppb	14:23:52
1	Sr 421.552†	18.2	5.3	0.0343 ug/L	0.0343 ppb	14:23:52
1	Sc 361.383	925006.3	925006.3	105.29 %		14:25:08
1	Y 371.029	775044.0	775044.0	104.83 %		14:25:08
1	Ag 328.068†	215.0	-238.7	-1.1392 ug/L	-1.1392 ppb	14:25:13
1	As 188.979†	-10.2	14.8	7.2337 ug/L	7.2337 ppb	14:25:33
1	B 249.677†	-293.9	189.0	4.7120 ug/L	4.7120 ppb	14:25:33
1	Ba 233.527†	-6.1	1.3	0.0108 ug/L	0.0108 ppb	14:25:33
1	Be 313.107†	-4046.4	9.1	0.0033 ug/L	0.0033 ppb	14:25:13
1	Cd 226.502†	-172.3	14.0	0.1785 ug/L	0.1785 ppb	14:25:33
1	Co 228.616†	-69.4	-14.9	-0.3430 ug/L	-0.3430 ppb	14:25:33
1	Cr 267.716†	48.9	-32.9	-0.3958 ug/L	-0.3958 ppb	14:25:33
1	Cu 324.752†	6163.4	-349.2	-1.0675 ug/L	-1.0675 ppb	14:25:13
1	Mn 257.610†	413.9	-56.7	-0.0674 ug/L	-0.0674 ppb	14:25:33
1	Mo 202.031†	7.6	-0.3	-0.0252 ug/L	-0.0252 ppb	14:25:33
1	Ni 231.604†	62.0	-14.2	-0.3931 ug/L	-0.3931 ppb	14:25:33
1	P 214.914†	209.4	2.9	2.1321 ug/L	2.1321 ppb	14:25:33
1	Pb 220.353†	-63.2	-7.5	-1.0254 ug/L	-1.0254 ppb	14:25:33
1	S 181.975 Axial†	31.5	-1.3	-2.0785 ug/L	-2.0785 ppb	14:25:33
1	Sb 206.836†	54.7	17.3	6.4998 ug/L	6.4998 ppb	14:25:33
1	Se 196.026†	-22.8	-2.3	-1.6803 ug/L	-1.6803 ppb	14:25:33
1	Si 251.611†	545.9	-4.8	-0.1632 ug/L	-0.1632 ppb	14:25:33
1	Sn 189.927†	16.8	2.5	0.4953 ug/L	0.4953 ppb	14:25:33
1	Ti 334.940†	-1328.9	-92.8	-0.1441 ug/L	-0.1441 ppb	14:25:13
1	Tl 190.801†	-38.5	-9.0	-3.0799 ug/L	-3.0799 ppb	14:25:33
1	U 409.014†	-2734.2	-171.5	-4.7435 ug/L	-4.7435 ppb	14:25:08
1	V 292.402†	-1433.9	-14.4	-0.1157 ug/L	-0.1157 ppb	14:25:13
1	Zn 213.857†	556.7	-60.8	-0.6545 ug/L	-0.6545 ppb	14:25:33
1	SiO2†	519.8	-37.0	-2.6877 ug/L	-2.6877 ppb	14:26:39
2	Sc Radial	4379.1	4379.1	99.6 %		14:24:17
2	Y RADIAL	4826.4	4826.4	100.0 %		14:24:17
2	Al 396.153Radial†	-107.4	-3.6	-3.1526 ug/L	-3.1526 ppb	14:24:37
2	Ca 317.933Radial†	18.1	-1.6	-3.2455 ug/L	-3.2455 ppb	14:24:37
2	Fe 238.204 Radial†	12.5	1.4	16.856 ug/L	16.856 ppb	14:24:37
2	K 766.490 Radial†	2711.0	233.7	44.924 ug/L	44.924 ppb	14:24:17
2	Mg 279.077 IEC†	0.3	-2.6	-117.75 ug/L	-117.75 ppb	14:24:37
2	Na 589.592 Radial†	-625.2	66.4	19.165 ug/L	19.165 ppb	14:24:17
2	Sr 421.552†	27.1	13.7	0.0884 ug/L	0.0884 ppb	14:24:17
2	Sc 361.383	911049.2	911049.2	103.70 %		14:25:39
2	Y 371.029	765205.6	765205.6	103.50 %		14:25:39
2	Ag 328.068†	214.0	-236.6	-1.1249 ug/L	-1.1249 ppb	14:25:44
2	As 188.979†	-24.3	1.0	0.4806 ug/L	0.4806 ppb	14:26:04
2	B 249.677†	-282.8	195.4	4.8690 ug/L	4.8690 ppb	14:26:04
2	Ba 233.527†	-19.2	-11.4	-0.0948 ug/L	-0.0948 ppb	14:26:04
2	Be 313.107†	-3870.6	119.7	0.0471 ug/L	0.0471 ppb	14:25:44
2	Cd 226.502†	-173.9	10.0	0.1255 ug/L	0.1255 ppb	14:26:04
2	Co 228.616†	-57.3	-4.2	-0.0975 ug/L	-0.0975 ppb	14:26:04
2	Cr 267.716†	72.3	-9.6	-0.1133 ug/L	-0.1133 ppb	14:26:04
2	Cu 324.752†	6020.6	-397.2	-1.2140 ug/L	-1.2140 ppb	14:25:44
2	Mn 257.610†	422.8	-42.1	-0.0439 ug/L	-0.0439 ppb	14:26:04
2	Mo 202.031†	5.9	-1.9	-0.1450 ug/L	-0.1450 ppb	14:26:04
2	Ni 231.604†	62.3	-12.9	-0.3585 ug/L	-0.3585 ppb	14:26:04

2	P 214.914†	206.5	3.1	2.3078 ug/L	2.3078 ppb	14:26:04
2	Pb 220.353†	-66.5	-11.6	-1.5791 ug/L	-1.5791 ppb	14:26:04
2	S 181.975 Axial†	38.3	5.8	9.3067 ug/L	9.3067 ppb	14:26:04
2	Sb 206.836†	55.8	19.1	7.1735 ug/L	7.1735 ppb	14:26:04
2	Se 196.026†	-22.2	-2.0	-1.4264 ug/L	-1.4264 ppb	14:26:04
2	Si 251.611†	526.3	-15.8	-0.5357 ug/L	-0.5357 ppb	14:26:04
2	Sn 189.927†	15.1	1.1	0.2143 ug/L	0.2143 ppb	14:26:04
2	Ti 334.940†	-1284.0	-68.8	-0.0981 ug/L	-0.0981 ppb	14:25:44
2	Tl 190.801†	-30.4	-1.7	-0.5830 ug/L	-0.5830 ppb	14:26:04
2	U 409.014†	-2690.5	-169.2	-4.6812 ug/L	-4.6812 ppb	14:25:39
2	V 292.402†	-1415.1	-17.1	-0.1414 ug/L	-0.1414 ppb	14:25:44
2	Zn 213.857†	554.2	-55.1	-0.5951 ug/L	-0.5951 ppb	14:26:04
2	SiO2†	522.3	-27.1	-1.9605 ug/L	-1.9605 ppb	14:26:44
3	Sc Radial	4281.7	4281.7	97.4 %		14:24:42
3	Y RADIAL	4675.8	4675.8	96.91 %		14:24:42
3	Al 396.153Radial†	-103.5	-2.0	-1.7956 ug/L	-1.7956 ppb	14:25:02
3	Ca 317.933Radial†	18.5	-0.8	-1.5851 ug/L	-1.5851 ppb	14:25:02
3	Fe 238.204 Radial†	8.1	-2.8	-33.875 ug/L	-33.875 ppb	14:25:02
3	K 766.490 Radial†	2592.9	174.3	33.509 ug/L	33.509 ppb	14:24:42
3	Mg 279.077 IEC†	5.2	2.5	113.61 ug/L	113.61 ppb	14:25:02
3	Na 589.592 Radial†	-610.3	67.5	19.470 ug/L	19.470 ppb	14:24:42
3	Sr 421.552†	24.1	11.3	0.0729 ug/L	0.0729 ppb	14:24:42
3	Sc 361.383	925144.9	925144.9	105.31 %		14:26:09
3	Y 371.029	775391.9	775391.9	104.87 %		14:26:09
3	Ag 328.068†	278.5	-178.5	-0.8638 ug/L	-0.8638 ppb	14:26:14
3	As 188.979†	-14.5	10.7	5.2119 ug/L	5.2119 ppb	14:26:34
3	B 249.677†	-298.1	185.0	4.6174 ug/L	4.6174 ppb	14:26:34
3	Ba 233.527†	-16.3	-8.4	-0.0714 ug/L	-0.0714 ppb	14:26:34
3	Be 313.107†	-4053.5	2.9	0.0009 ug/L	0.0009 ppb	14:26:14
3	Cd 226.502†	-183.4	3.5	0.0474 ug/L	0.0474 ppb	14:26:34
3	Co 228.616†	-63.6	-9.3	-0.2122 ug/L	-0.2122 ppb	14:26:34
3	Cr 267.716†	77.3	-6.0	-0.0745 ug/L	-0.0745 ppb	14:26:34
3	Cu 324.752†	6112.8	-398.1	-1.2206 ug/L	-1.2206 ppb	14:26:14
3	Mn 257.610†	414.4	-56.3	-0.0754 ug/L	-0.0754 ppb	14:26:34
3	Mo 202.031†	23.5	14.8	1.1557 ug/L	1.1557 ppb	14:26:34
3	Ni 231.604†	51.8	-23.8	-0.6609 ug/L	-0.6609 ppb	14:26:34
3	P 214.914†	208.3	1.8	1.4944 ug/L	1.4944 ppb	14:26:34
3	Pb 220.353†	-47.4	7.5	1.0217 ug/L	1.0217 ppb	14:26:34
3	S 181.975 Axial†	33.8	0.9	1.4225 ug/L	1.4225 ppb	14:26:34
3	Sb 206.836†	49.2	12.0	4.5419 ug/L	4.5419 ppb	14:26:34
3	Se 196.026†	-28.9	-8.1	-5.9985 ug/L	-5.9985 ppb	14:26:34
3	Si 251.611†	516.4	-32.9	-1.1357 ug/L	-1.1357 ppb	14:26:34
3	Sn 189.927†	19.2	4.8	0.9620 ug/L	0.9620 ppb	14:26:34
3	Ti 334.940†	-1305.9	-70.8	-0.1209 ug/L	-0.1209 ppb	14:26:14
3	Tl 190.801†	-33.2	-4.0	-1.3612 ug/L	-1.3612 ppb	14:26:34
3	U 409.014†	-2649.3	-90.5	-2.4987 ug/L	-2.4987 ppb	14:26:09
3	V 292.402†	-1435.0	-15.3	-0.0934 ug/L	-0.0934 ppb	14:26:14
3	Zn 213.857†	561.3	-56.4	-0.5998 ug/L	-0.5998 ppb	14:26:34
3	SiO2†	521.1	-35.8	-2.6317 ug/L	-2.6317 ppb	14:26:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920400.1	104.77 %		0.922			0.88%
Sc Radial	4302.1	97.9 %		1.57			1.61%
Y 371.029	771880.5	104.40 %		0.782			0.75%
Y RADIAL	4715.5	97.73 %		2.018			2.07%
Ag 328.068†	-217.9	-1.0426 ug/L		0.15507	-1.0426 ppb	0.15507	14.87%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-6.1	-5.3645 ug/L		5.05207	-5.3645 ppb	5.05207	94.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	8.8	4.3087 ug/L		3.46599	4.3087 ppb	3.46599	80.44%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	189.8	4.7328 ug/L		0.12706	4.7328 ppb	0.12706	2.68%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-6.1	-0.0518 ug/L		0.05548	-0.0518 ppb	0.05548	107.16%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	43.9	0.0171 ug/L		0.02603	0.0171 ppb	0.02603	152.19%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.2	0.3298 ug/L		4.82653	0.3298 ppb	4.82653	>999.9%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	9.1	0.1171 ug/L	0.06598	0.1171 ppb	0.06598	56.33%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-9.5	-0.2176 ug/L	0.12285	-0.2176 ppb	0.12285	56.47%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-16.2	-0.1945 ug/L	0.17536	-0.1945 ppb	0.17536	90.15%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-381.5	-1.1674 ug/L	0.08656	-1.1674 ppb	0.08656	7.41%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-0.4	-4.8089 ug/L	26.16274	-4.8089 ppb	26.16274	544.05%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	248.7	47.809 ug/L	15.9387	47.809 ppb	15.9387	33.34%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-0.1	-3.0157 ug/L	115.69128	-3.0157 ppb	115.69128	>999.9%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-51.7	-0.0623 ug/L	0.01637	-0.0623 ppb	0.01637	26.29%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	4.2	0.3285 ug/L	0.71891	0.3285 ppb	0.71891	218.85%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	66.2	19.107 ug/L	0.3946	19.107 ppb	0.3946	2.07%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-17.0	-0.4708 ug/L	0.16552	-0.4708 ppb	0.16552	35.15%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	2.6	1.9781 ug/L	0.42803	1.9781 ppb	0.42803	21.64%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-3.9	-0.5276 ug/L	1.36995	-0.5276 ppb	1.36995	259.66%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	1.8	2.8836 ug/L	5.83150	2.8836 ppb	5.83150	202.23%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	16.1	6.0717 ug/L	1.36700	6.0717 ppb	1.36700	22.51%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-4.2	-3.0351 ug/L	2.56952	-3.0351 ppb	2.56952	84.66%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-17.8	-0.6115 ug/L	0.49065	-0.6115 ppb	0.49065	80.23%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	2.8	0.5572 ug/L	0.37767	0.5572 ppb	0.37767	67.78%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	10.1	0.0652 ug/L	0.02787	0.0652 ppb	0.02787	42.74%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-77.5	-0.1210 ug/L	0.02298	-0.1210 ppb	0.02298	18.99%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-4.9	-1.6747 ug/L	1.27765	-1.6747 ppb	1.27765	76.29%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-143.7	-3.9745 ug/L	1.27844	-3.9745 ppb	1.27844	32.17%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-15.6	-0.1169 ug/L	0.02405	-0.1169 ppb	0.02405	20.58%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-57.4	-0.6164 ug/L	0.03301	-0.6164 ppb	0.03301	5.36%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-33.3	-2.4266 ug/L	0.40464	-2.4266 ppb	0.40464	16.68%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

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Analysis Begun

Start Time: 2/22/2010 14:43:45

Plasma On Time: 2/22/2010 05:55:10

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022210.sif

Batch ID:

Results Data Set: 022210

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

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Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 14:43:46

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	4337.5	4337.5	98.7 %		14:45:38
1	Y RADIAL	4699.6	4699.6	97.40 %		14:45:38
1	Al 396.153Radial†	5397.8	5574.5	4849.7 ug/L	4849.7 ppb	14:45:38
1	Ca 317.933Radial†	2559.8	2574.4	5112.2 ug/L	5112.2 ppb	14:45:58
1	Fe 238.204 Radial†	430.6	425.3	5172.7 ug/L	5172.7 ppb	14:45:58
1	K 766.490 Radial†	28879.6	26779.9	5142.0 ug/L	5142.0 ppb	14:45:38
1	Mg 279.077 IEC†	118.7	117.4	5326.9 ug/L	5326.9 ppb	14:45:58
1	Na 589.592 Radial†	34087.4	35239.3	10165 ug/L	10165 ppb	14:45:38
1	Sr 421.552†	75973.6	76980.5	498.29 ug/L	498.29 ppb	14:45:38
1	Sc 361.383	908689.4	908689.4	103.43 %		14:46:56
1	Y 371.029	752519.1	752519.1	101.78 %		14:46:56
1	Ag 328.068†	106760.8	102774.2	495.40 ug/L	495.40 ppb	14:47:01
1	As 188.979†	1083.7	1072.2	530.00 ug/L	530.00 ppb	14:47:21
1	B 249.677†	19813.4	19623.8	486.82 ug/L	486.82 ppb	14:47:01
1	Ba 233.527†	62619.2	60547.8	507.35 ug/L	507.35 ppb	14:47:01
1	Be 313.107†	1308755.0	1269166.1	503.23 ug/L	503.23 ppb	14:46:56
1	Cd 226.502†	41683.5	40477.6	521.41 ug/L	521.41 ppb	14:47:01
1	Co 228.616†	23461.5	22733.8	525.40 ug/L	525.40 ppb	14:47:01
1	Cr 267.716†	43256.0	41740.8	505.56 ug/L	505.56 ppb	14:47:01
1	Cu 324.752†	169461.9	157634.1	483.19 ug/L	483.19 ppb	14:47:01
1	Mn 257.610†	440486.4	425415.8	510.08 ug/L	510.08 ppb	14:46:56
1	Mo 202.031†	6728.6	6497.7	508.70 ug/L	508.70 ppb	14:47:21
1	Ni 231.604†	19237.5	18525.9	514.01 ug/L	514.01 ppb	14:47:01
1	P 214.914†	4256.7	3919.4	2529.2 ug/L	2529.2 ppb	14:47:21
1	Pb 220.353†	3919.2	3841.6	522.68 ug/L	522.68 ppb	14:47:21
1	S 181.975 Axial†	712.2	657.4	1056.1 ug/L	1056.1 ppb	14:47:21
1	Sb 206.836†	1446.1	1363.4	531.69 ug/L	531.69 ppb	14:47:21
1	Se 196.026†	731.5	726.6	547.26 ug/L	547.26 ppb	14:47:21
1	Si 251.611†	76686.6	73617.9	2501.9 ug/L	2501.9 ppb	14:47:01
1	Sn 189.927†	2699.0	2595.9	523.34 ug/L	523.34 ppb	14:47:21
1	Ti 334.940†	314715.6	305438.7	485.07 ug/L	485.07 ppb	14:47:01
1	Tl 190.801†	1507.1	1484.6	513.28 ug/L	513.28 ppb	14:47:21
1	U 409.014†	15394.9	17309.2	477.07 ug/L	477.07 ppb	14:47:01
1	V 292.402†	68338.7	67417.8	502.79 ug/L	502.79 ppb	14:47:01
1	Zn 213.857†	49342.5	47115.2	505.24 ug/L	505.24 ppb	14:47:01
1	SiO2†	77038.2	73950.4	5353.8 ug/L	5353.8 ppb	14:48:29
2	Sc Radial	4362.1	4362.1	99.2 %		14:46:04
2	Y RADIAL	4705.9	4705.9	97.53 %		14:46:04
2	Al 396.153Radial†	5363.8	5509.3	4792.4 ug/L	4792.4 ppb	14:46:04
2	Ca 317.933Radial†	2553.9	2553.8	5071.4 ug/L	5071.4 ppb	14:46:24
2	Fe 238.204 Radial†	430.4	422.6	5140.8 ug/L	5140.8 ppb	14:46:24
2	K 766.490 Radial†	28758.5	26492.5	5086.8 ug/L	5086.8 ppb	14:46:04
2	Mg 279.077 IEC†	121.3	119.4	5416.6 ug/L	5416.6 ppb	14:46:24
2	Na 589.592 Radial†	33828.0	34782.6	10033 ug/L	10033 ppb	14:46:04
2	Sr 421.552†	75593.1	76161.9	492.99 ug/L	492.99 ppb	14:46:04
2	Sc 361.383	896284.3	896284.3	102.02 %		14:47:27
2	Y 371.029	742935.0	742935.0	100.48 %		14:47:27

2	Ag 328.068†	109001.6	106399.1	512.80 ug/L	512.80 ppb	14:47:32
2	As 188.979†	1063.4	1066.8	527.45 ug/L	527.45 ppb	14:47:52
2	B 249.677†	20302.2	20368.1	505.34 ug/L	505.34 ppb	14:47:32
2	Ba 233.527†	63685.0	62430.5	523.12 ug/L	523.12 ppb	14:47:32
2	Be 313.107†	1289527.1	1267831.8	502.74 ug/L	502.74 ppb	14:47:27
2	Cd 226.502†	42352.0	41690.6	537.05 ug/L	537.05 ppb	14:47:32
2	Co 228.616†	23789.5	23369.2	540.06 ug/L	540.06 ppb	14:47:32
2	Cr 267.716†	44054.2	43102.0	522.03 ug/L	522.03 ppb	14:47:32
2	Cu 324.752†	172992.5	163362.4	500.74 ug/L	500.74 ppb	14:47:32
2	Mn 257.610†	433827.2	424782.6	509.32 ug/L	509.32 ppb	14:47:27
2	Mo 202.031†	6687.7	6547.7	512.61 ug/L	512.61 ppb	14:47:52
2	Ni 231.604†	19563.7	19103.1	530.03 ug/L	530.03 ppb	14:47:32
2	P 214.914†	4221.6	3941.9	2540.8 ug/L	2540.8 ppb	14:47:52
2	Pb 220.353†	3879.6	3855.3	524.52 ug/L	524.52 ppb	14:47:52
2	S 181.975 Axial†	706.1	660.9	1061.9 ug/L	1061.9 ppb	14:47:52
2	Sb 206.836†	1436.9	1373.7	535.70 ug/L	535.70 ppb	14:47:52
2	Se 196.026†	720.2	725.2	546.19 ug/L	546.19 ppb	14:47:52
2	Si 251.611†	78152.1	76080.5	2585.8 ug/L	2585.8 ppb	14:47:32
2	Sn 189.927†	2673.7	2607.3	525.62 ug/L	525.62 ppb	14:47:52
2	Ti 334.940†	320898.0	315709.8	501.36 ug/L	501.36 ppb	14:47:32
2	Tl 190.801†	1489.2	1487.3	514.25 ug/L	514.25 ppb	14:47:52
2	U 409.014†	15769.1	17882.0	492.88 ug/L	492.88 ppb	14:47:32
2	V 292.402†	69566.2	69535.5	518.44 ug/L	518.44 ppb	14:47:32
2	Zn 213.857†	50207.6	48623.4	521.44 ug/L	521.44 ppb	14:47:32
2	SiO2†	76470.8	74425.1	5388.1 ug/L	5388.1 ppb	14:48:34
3	Sc Radial	4231.1	4231.1	96.3 %		14:46:29
3	Y RADIAL	4606.9	4606.9	95.48 %		14:46:29
3	Al 396.153Radial†	5263.0	5572.0	4847.4 ug/L	4847.4 ppb	14:46:29
3	Ca 317.933Radial†	2542.5	2621.7	5206.1 ug/L	5206.1 ppb	14:46:49
3	Fe 238.204 Radial†	430.4	436.1	5303.8 ug/L	5303.8 ppb	14:46:49
3	K 766.490 Radial†	28374.1	26990.6	5182.5 ug/L	5182.5 ppb	14:46:29
3	Mg 279.077 IEC†	116.5	118.2	5362.3 ug/L	5362.3 ppb	14:46:49
3	Na 589.592 Radial†	32891.8	34865.8	10057 ug/L	10057 ppb	14:46:29
3	Sr 421.552†	73746.6	76602.8	495.85 ug/L	495.85 ppb	14:46:29
3	Sc 361.383	902174.2	902174.2	102.69 %		14:47:58
3	Y 371.029	748462.7	748462.7	101.23 %		14:47:58
3	Ag 328.068†	107191.4	103938.9	501.04 ug/L	501.04 ppb	14:48:03
3	As 188.979†	1067.7	1064.1	526.10 ug/L	526.10 ppb	14:48:23
3	B 249.677†	19927.6	19873.4	493.01 ug/L	493.01 ppb	14:48:03
3	Ba 233.527†	62743.5	61106.1	512.03 ug/L	512.03 ppb	14:48:03
3	Be 313.107†	1297437.7	1267283.2	502.50 ug/L	502.50 ppb	14:47:58
3	Cd 226.502†	41546.5	40635.1	523.43 ug/L	523.43 ppb	14:48:03
3	Co 228.616†	23432.5	22869.4	528.52 ug/L	528.52 ppb	14:48:03
3	Cr 267.716†	43431.3	42213.6	511.30 ug/L	511.30 ppb	14:48:03
3	Cu 324.752†	170030.2	159370.7	488.52 ug/L	488.52 ppb	14:48:03
3	Mn 257.610†	435428.8	423566.2	507.88 ug/L	507.88 ppb	14:47:58
3	Mo 202.031†	6699.6	6516.5	510.18 ug/L	510.18 ppb	14:48:23
3	Ni 231.604†	19302.2	18723.2	519.49 ug/L	519.49 ppb	14:48:03
3	P 214.914†	4236.7	3929.7	2534.9 ug/L	2534.9 ppb	14:48:23
3	Pb 220.353†	3870.4	3821.4	519.93 ug/L	519.93 ppb	14:48:23
3	S 181.975 Axial†	698.0	648.5	1041.9 ug/L	1041.9 ppb	14:48:23
3	Sb 206.836†	1432.1	1359.9	530.37 ug/L	530.37 ppb	14:48:23
3	Se 196.026†	719.4	719.9	542.87 ug/L	542.87 ppb	14:48:23
3	Si 251.611†	76941.8	74401.8	2528.6 ug/L	2528.6 ppb	14:48:03
3	Sn 189.927†	2671.6	2588.1	521.78 ug/L	521.78 ppb	14:48:23
3	Ti 334.940†	315587.7	308485.2	489.92 ug/L	489.92 ppb	14:48:03
3	Tl 190.801†	1512.0	1499.9	518.55 ug/L	518.55 ppb	14:48:23
3	U 409.014†	15386.2	17408.2	479.78 ug/L	479.78 ppb	14:48:03
3	V 292.402†	68605.1	68154.3	508.21 ug/L	508.21 ppb	14:48:03
3	Zn 213.857†	49368.5	47485.1	509.18 ug/L	509.18 ppb	14:48:03
3	SiO2†	76057.5	73533.3	5323.5 ug/L	5323.5 ppb	14:48:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902382.6	102.72 %	0.706			0.69%
Sc Radial	4310.2	98.1 %	1.58			1.62%
Y 371.029	747972.3	101.17 %	0.651			0.64%
Y RADIAL	4670.8	96.80 %	1.148			1.19%
Ag 328.068†	104370.7	503.08 ug/L	8.880	503.08 ppb	8.880	1.77%

QC value within limits for Ag 328.068 Recovery = 100.62%							
Al 396.153Radial†	5552.0	4829.8 ug/L	32.41	4829.8 ppb	32.41	0.67%	
QC value within limits for Al 396.153Radial Recovery = 96.60%							
As 188.979†	1067.7	527.85 ug/L	1.980	527.85 ppb	1.980	0.38%	
QC value within limits for As 188.979 Recovery = 105.57%							
B 249.677†	19955.1	495.06 ug/L	9.426	495.06 ppb	9.426	1.90%	
QC value within limits for B 249.677 Recovery = 99.01%							
Ba 233.527†	61361.5	514.16 ug/L	8.099	514.16 ppb	8.099	1.58%	
QC value within limits for Ba 233.527 Recovery = 102.83%							
Be 313.107†	1268093.7	502.82 ug/L	0.374	502.82 ppb	0.374	0.07%	
QC value within limits for Be 313.107 Recovery = 100.56%							
Ca 317.933Radial†	2583.3	5129.9 ug/L	69.10	5129.9 ppb	69.10	1.35%	
QC value within limits for Ca 317.933Radial Recovery = 102.60%							
Cd 226.502†	40934.4	527.30 ug/L	8.510	527.30 ppb	8.510	1.61%	
QC value within limits for Cd 226.502 Recovery = 105.46%							
Co 228.616†	22990.8	531.32 ug/L	7.721	531.32 ppb	7.721	1.45%	
QC value within limits for Co 228.616 Recovery = 106.26%							
Cr 267.716†	42352.1	512.96 ug/L	8.359	512.96 ppb	8.359	1.63%	
QC value within limits for Cr 267.716 Recovery = 102.59%							
Cu 324.752†	160122.4	490.82 ug/L	8.997	490.82 ppb	8.997	1.83%	
QC value within limits for Cu 324.752 Recovery = 98.16%							
Fe 238.204 Radial†	428.0	5205.8 ug/L	86.35	5205.8 ppb	86.35	1.66%	
QC value within limits for Fe 238.204 Radial Recovery = 104.12%							
K 766.490 Radial†	26754.3	5137.1 ug/L	48.05	5137.1 ppb	48.05	0.94%	
QC value within limits for K 766.490 Radial Recovery = 102.74%							
Mg 279.077 IEC†	118.3	5368.6 ug/L	45.17	5368.6 ppb	45.17	0.84%	
QC value within limits for Mg 279.077 IEC Recovery = 107.37%							
Mn 257.610†	424588.2	509.09 ug/L	1.119	509.09 ppb	1.119	0.22%	
QC value within limits for Mn 257.610 Recovery = 101.82%							
Mo 202.031†	6520.6	510.50 ug/L	1.972	510.50 ppb	1.972	0.39%	
QC value within limits for Mo 202.031 Recovery = 102.10%							
Na 589.592 Radial†	34962.5	10085 ug/L	70.2	10085 ppb	70.2	0.70%	
QC value within limits for Na 589.592 Radial Recovery = 100.85%							
Ni 231.604†	18784.1	521.17 ug/L	8.139	521.17 ppb	8.139	1.56%	
QC value within limits for Ni 231.604 Recovery = 104.23%							
P 214.914†	3930.4	2535.0 ug/L	5.81	2535.0 ppb	5.81	0.23%	
QC value within limits for P 214.914 Recovery = 101.40%							
Pb 220.353†	3839.4	522.38 ug/L	2.312	522.38 ppb	2.312	0.44%	
QC value within limits for Pb 220.353 Recovery = 104.48%							
S 181.975 Axial†	655.6	1053.3 ug/L	10.30	1053.3 ppb	10.30	0.98%	
QC value within limits for S 181.975 Axial Recovery = 105.33%							
Sb 206.836†	1365.7	532.59 ug/L	2.777	532.59 ppb	2.777	0.52%	
QC value within limits for Sb 206.836 Recovery = 106.52%							
Se 196.026†	723.9	545.44 ug/L	2.290	545.44 ppb	2.290	0.42%	
QC value within limits for Se 196.026 Recovery = 109.09%							
Si 251.611†	74700.1	2538.8 ug/L	42.84	2538.8 ppb	42.84	1.69%	
QC value within limits for Si 251.611 Recovery = 101.55%							
Sn 189.927†	2597.1	523.58 ug/L	1.931	523.58 ppb	1.931	0.37%	
QC value within limits for Sn 189.927 Recovery = 104.72%							
Sr 421.552†	76581.8	495.71 ug/L	2.652	495.71 ppb	2.652	0.53%	
QC value within limits for Sr 421.552 Recovery = 99.14%							
Ti 334.940†	309877.9	492.12 ug/L	8.365	492.12 ppb	8.365	1.70%	
QC value within limits for Ti 334.940 Recovery = 98.42%							
Tl 190.801†	1490.6	515.36 ug/L	2.802	515.36 ppb	2.802	0.54%	
QC value within limits for Tl 190.801 Recovery = 103.07%							
U 409.014†	17533.1	483.24 ug/L	8.455	483.24 ppb	8.455	1.75%	
QC value within limits for U 409.014 Recovery = 96.65%							
V 292.402†	68369.2	509.81 ug/L	7.947	509.81 ppb	7.947	1.56%	
QC value within limits for V 292.402 Recovery = 101.96%							
Zn 213.857†	47741.2	511.95 ug/L	8.450	511.95 ppb	8.450	1.65%	
QC value within limits for Zn 213.857 Recovery = 102.39%							
SiO2†	73969.6	5355.1 ug/L	32.35	5355.1 ppb	32.35	0.60%	
QC value within limits for SiO2 Recovery = 100.14%							

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 14:50:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4330.9	4330.9	98.5 %		14:52:42
1	Y RADIAL	4734.9	4734.9	98.13 %		14:52:42
1	Al 396.153Radial†	-99.1	3.7	3.1799 ug/L	3.1799 ppb	14:53:02
1	Ca 317.933Radial†	16.7	-2.8	-5.6267 ug/L	-5.6267 ppb	14:53:02
1	Fe 238.204 Radial†	11.3	0.3	3.7651 ug/L	3.7651 ppb	14:53:02
1	K 766.490 Radial†	2625.2	176.9	34.003 ug/L	34.003 ppb	14:52:42
1	Mg 279.077 IEC†	5.0	2.3	102.39 ug/L	102.39 ppb	14:53:02
1	Na 589.592 Radial†	-621.5	63.2	18.225 ug/L	18.225 ppb	14:52:42
1	Sr 421.552†	3.3	-10.2	-0.0659 ug/L	-0.0659 ppb	14:52:42
1	Sc 361.383	888981.9	888981.9	101.19 %		14:53:59
1	Y 371.029	748993.4	748993.4	101.30 %		14:53:59
1	Ag 328.068†	290.8	-155.6	-0.7395 ug/L	-0.7395 ppb	14:53:59
1	As 188.979†	-34.3	-9.5	-4.6498 ug/L	-4.6498 ppb	14:54:19
1	B 249.677†	-330.9	141.1	3.5163 ug/L	3.5163 ppb	14:54:19
1	Ba 233.527†	-6.7	0.5	0.0047 ug/L	0.0047 ppb	14:54:19
1	Be 313.107†	-3780.6	116.1	0.0456 ug/L	0.0456 ppb	14:53:59
1	Cd 226.502†	-188.6	-8.8	-0.1142 ug/L	-0.1142 ppb	14:54:19
1	Co 228.616†	-57.3	-5.6	-0.1282 ug/L	-0.1282 ppb	14:54:19
1	Cr 267.716†	73.6	-6.7	-0.0780 ug/L	-0.0780 ppb	14:54:19
1	Cu 324.752†	6108.9	-165.8	-0.5057 ug/L	-0.5057 ppb	14:53:59
1	Mn 257.610†	419.4	-35.3	-0.0461 ug/L	-0.0461 ppb	14:54:19
1	Mo 202.031†	17.6	9.8	0.7691 ug/L	0.7691 ppb	14:54:19
1	Ni 231.604†	82.0	8.0	0.2219 ug/L	0.2219 ppb	14:54:19
1	P 214.914†	201.1	2.8	1.9598 ug/L	1.9598 ppb	14:54:19
1	Pb 220.353†	-57.7	-4.6	-0.6170 ug/L	-0.6170 ppb	14:54:19
1	S 181.975 Axial†	31.3	-0.2	-0.3744 ug/L	-0.3744 ppb	14:54:19
1	Sb 206.836†	56.3	20.9	7.8817 ug/L	7.8817 ppb	14:54:19
1	Se 196.026†	-33.3	-13.6	-9.8820 ug/L	-9.8820 ppb	14:54:19
1	Si 251.611†	526.2	-3.3	-0.1214 ug/L	-0.1214 ppb	14:54:19
1	Sn 189.927†	13.9	0.3	0.0584 ug/L	0.0584 ppb	14:54:19
1	Ti 334.940†	-1261.2	-77.0	-0.1296 ug/L	-0.1296 ppb	14:53:59
1	Tl 190.801†	-28.9	-1.0	-0.3417 ug/L	-0.3417 ppb	14:54:19
1	U 409.014†	-2611.0	-155.0	-4.2881 ug/L	-4.2881 ppb	14:53:59
1	V 292.402†	-1329.0	34.1	0.2553 ug/L	0.2553 ppb	14:53:59
1	Zn 213.857†	562.7	-33.4	-0.3633 ug/L	-0.3633 ppb	14:54:19
1	SiO2†	541.6	4.5	0.3061 ug/L	0.3061 ppb	14:55:15
2	Sc Radial	4295.9	4295.9	97.7 %		14:53:07
2	Y RADIAL	4726.5	4726.5	97.96 %		14:53:07
2	Al 396.153Radial†	-107.2	-5.5	-4.8280 ug/L	-4.8280 ppb	14:53:27
2	Ca 317.933Radial†	20.3	1.0	1.9873 ug/L	1.9873 ppb	14:53:27
2	Fe 238.204 Radial†	11.7	0.9	10.697 ug/L	10.697 ppb	14:53:27
2	K 766.490 Radial†	2599.0	171.9	33.030 ug/L	33.030 ppb	14:53:07
2	Mg 279.077 IEC†	2.2	-0.6	-27.900 ug/L	-27.900 ppb	14:53:27
2	Na 589.592 Radial†	-614.1	65.6	18.928 ug/L	18.928 ppb	14:53:07
2	Sr 421.552†	32.8	20.1	0.1302 ug/L	0.1302 ppb	14:53:07
2	Sc 361.383	899740.9	899740.9	102.41 %		14:54:24
2	Y 371.029	757480.0	757480.0	102.45 %		14:54:24
2	Ag 328.068†	147.8	-298.6	-1.4253 ug/L	-1.4253 ppb	14:54:24
2	As 188.979†	-17.6	7.3	3.5750 ug/L	3.5750 ppb	14:54:44
2	B 249.677†	-317.6	158.0	3.9372 ug/L	3.9372 ppb	14:54:44
2	Ba 233.527†	5.9	12.9	0.1076 ug/L	0.1076 ppb	14:54:44
2	Be 313.107†	-3940.6	4.5	0.0012 ug/L	0.0012 ppb	14:54:24
2	Cd 226.502†	-183.4	-1.5	-0.0206 ug/L	-0.0206 ppb	14:54:44
2	Co 228.616†	-71.6	-18.9	-0.4358 ug/L	-0.4358 ppb	14:54:44
2	Cr 267.716†	56.0	-24.7	-0.2962 ug/L	-0.2962 ppb	14:54:44
2	Cu 324.752†	6074.2	-271.9	-0.8308 ug/L	-0.8308 ppb	14:54:24
2	Mn 257.610†	429.5	-30.3	-0.0341 ug/L	-0.0341 ppb	14:54:44
2	Mo 202.031†	9.2	1.4	0.1135 ug/L	0.1135 ppb	14:54:44
2	Ni 231.604†	74.6	-0.2	-0.0058 ug/L	-0.0058 ppb	14:54:44

2	P 214.914†	214.4	13.3	9.0703 ug/L	9.0703 ppb	14:54:44
2	Pb 220.353†	-59.4	-5.5	-0.7514 ug/L	-0.7514 ppb	14:54:44
2	S 181.975 Axial†	36.7	4.6	7.4750 ug/L	7.4750 ppb	14:54:44
2	Sb 206.836†	43.0	7.2	2.7329 ug/L	2.7329 ppb	14:54:44
2	Se 196.026†	-27.6	-7.6	-5.4765 ug/L	-5.4765 ppb	14:54:44
2	Si 251.611†	527.9	-7.8	-0.2685 ug/L	-0.2685 ppb	14:54:44
2	Sn 189.927†	17.6	3.7	0.7453 ug/L	0.7453 ppb	14:54:44
2	Ti 334.940†	-1347.9	-146.8	-0.2290 ug/L	-0.2290 ppb	14:54:24
2	Tl 190.801†	-25.6	2.6	0.8927 ug/L	0.8927 ppb	14:54:44
2	U 409.014†	-2615.1	-128.2	-3.5455 ug/L	-3.5455 ppb	14:54:24
2	V 292.402†	-1422.2	-41.2	-0.3103 ug/L	-0.3103 ppb	14:54:24
2	Zn 213.857†	564.3	-38.4	-0.4166 ug/L	-0.4166 ppb	14:54:44
2	SiO2†	528.0	-15.2	-1.1053 ug/L	-1.1053 ppb	14:55:20
3	Sc Radial	4282.9	4282.9	97.4 %		14:53:32
3	Y RADIAL	4715.3	4715.3	97.72 %		14:53:32
3	Al 396.153Radial†	-91.8	10.0	8.7039 ug/L	8.7039 ppb	14:53:52
3	Ca 317.933Radial†	24.3	5.1	10.182 ug/L	10.182 ppb	14:53:52
3	Fe 238.204 Radial†	12.8	2.0	24.033 ug/L	24.033 ppb	14:53:52
3	K 766.490 Radial†	2660.6	243.1	46.716 ug/L	46.716 ppb	14:53:32
3	Mg 279.077 IEC†	3.0	0.3	12.211 ug/L	12.211 ppb	14:53:52
3	Na 589.592 Radial†	-612.0	65.9	19.003 ug/L	19.003 ppb	14:53:32
3	Sr 421.552†	49.9	37.7	0.2438 ug/L	0.2438 ppb	14:53:32
3	Sc 361.383	885273.0	885273.0	100.77 %		14:54:49
3	Y 371.029	745694.0	745694.0	100.86 %		14:54:49
3	Ag 328.068†	238.1	-206.7	-0.9792 ug/L	-0.9792 ppb	14:54:49
3	As 188.979†	-22.6	2.0	0.9812 ug/L	0.9812 ppb	14:55:09
3	B 249.677†	-325.0	145.5	3.6242 ug/L	3.6242 ppb	14:55:09
3	Ba 233.527†	-1.7	5.5	0.0458 ug/L	0.0458 ppb	14:55:09
3	Be 313.107†	-3898.4	-16.5	-0.0070 ug/L	-0.0070 ppb	14:54:49
3	Cd 226.502†	-174.3	4.6	0.0561 ug/L	0.0561 ppb	14:55:09
3	Co 228.616†	-57.0	-5.5	-0.1261 ug/L	-0.1261 ppb	14:55:09
3	Cr 267.716†	71.1	-8.8	-0.1023 ug/L	-0.1023 ppb	14:55:09
3	Cu 324.752†	5994.1	-254.5	-0.7754 ug/L	-0.7754 ppb	14:54:49
3	Mn 257.610†	411.9	-41.0	-0.0472 ug/L	-0.0472 ppb	14:55:09
3	Mo 202.031†	18.2	10.5	0.8255 ug/L	0.8255 ppb	14:55:09
3	Ni 231.604†	73.8	0.2	0.0054 ug/L	0.0054 ppb	14:55:09
3	P 214.914†	207.4	9.8	6.6970 ug/L	6.6970 ppb	14:55:09
3	Pb 220.353†	-29.7	23.0	3.1213 ug/L	3.1213 ppb	14:55:09
3	S 181.975 Axial†	34.1	2.6	4.2242 ug/L	4.2242 ppb	14:55:09
3	Sb 206.836†	51.5	16.4	6.2039 ug/L	6.2039 ppb	14:55:09
3	Se 196.026†	-16.6	2.9	2.1839 ug/L	2.1839 ppb	14:55:09
3	Si 251.611†	540.2	12.8	0.4269 ug/L	0.4269 ppb	14:55:09
3	Sn 189.927†	15.7	2.1	0.4152 ug/L	0.4152 ppb	14:55:09
3	Ti 334.940†	-1303.0	-123.7	-0.1936 ug/L	-0.1936 ppb	14:54:49
3	Tl 190.801†	-29.5	-1.7	-0.5872 ug/L	-0.5872 ppb	14:55:09
3	U 409.014†	-2656.9	-211.4	-5.8499 ug/L	-5.8499 ppb	14:54:49
3	V 292.402†	-1404.7	-46.5	-0.3447 ug/L	-0.3447 ppb	14:54:49
3	Zn 213.857†	584.1	-9.9	-0.1095 ug/L	-0.1095 ppb	14:55:09
3	SiO2†	551.8	16.9	1.2051 ug/L	1.2051 ppb	14:55:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	891331.9	101.46 %	0.855			0.84%
Sc Radial	4303.3	97.9 %	0.56			0.58%
Y 371.029	750722.5	101.54 %	0.822			0.81%
Y RADIAL	4725.6	97.94 %	0.204			0.21%
Ag 328.068†	-220.3	-1.0480 ug/L	0.34806	-1.0480 ppb	0.34806	33.21%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.7	2.3519 ug/L	6.80381	2.3519 ppb	6.80381	289.29%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.0312 ug/L	4.20482	-0.0312 ppb	4.20482	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	148.2	3.6926 ug/L	0.21859	3.6926 ppb	0.21859	5.92%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.3	0.0527 ug/L	0.05180	0.0527 ppb	0.05180	98.30%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	34.7	0.0133 ug/L	0.02831	0.0133 ppb	0.02831	212.89%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.1	2.1808 ug/L	7.90607	2.1808 ppb	7.90607	362.53%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.9	-0.0262 ug/L	0.08528	-0.0262 ppb	0.08528	325.19%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-10.0	-0.2300 ug/L	0.17824	-0.2300 ppb	0.17824	77.49%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-13.4	-0.1588 ug/L	0.11956	-0.1588 ppb	0.11956	75.27%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-230.7	-0.7040 ug/L	0.17397	-0.7040 ppb	0.17397	24.71%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.1	12.832 ug/L	10.3013	12.832 ppb	10.3013	80.28%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	197.3	37.916 ug/L	7.6361	37.916 ppb	7.6361	20.14%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.6	28.901 ug/L	66.7296	28.901 ppb	66.7296	230.89%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-35.5	-0.0425 ug/L	0.00725	-0.0425 ppb	0.00725	17.07%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.3	0.5694 ug/L	0.39577	0.5694 ppb	0.39577	69.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	64.9	18.719 ug/L	0.4288	18.719 ppb	0.4288	2.29%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	2.7	0.0738 ug/L	0.12831	0.0738 ppb	0.12831	173.78%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.6	5.9090 ug/L	3.62014	5.9090 ppb	3.62014	61.26%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.3	0.5843 ug/L	2.19811	0.5843 ppb	2.19811	376.20%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.3	3.7749 ug/L	3.94392	3.7749 ppb	3.94392	104.48%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	14.8	5.6062 ug/L	2.62596	5.6062 ppb	2.62596	46.84%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.1	-4.3915 ug/L	6.10568	-4.3915 ppb	6.10568	139.03%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	0.6	0.0123 ug/L	0.36651	0.0123 ppb	0.36651	>999.9%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.0	0.4063 ug/L	0.34350	0.4063 ppb	0.34350	84.55%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	15.9	0.1027 ug/L	0.15665	0.1027 ppb	0.15665	152.53%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-115.9	-0.1841 ug/L	0.05036	-0.1841 ppb	0.05036	27.36%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.0	-0.0121 ug/L	0.79312	-0.0121 ppb	0.79312	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-164.9	-4.5611 ug/L	1.17621	-4.5611 ppb	1.17621	25.79%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-17.9	-0.1332 ug/L	0.33694	-0.1332 ppb	0.33694	252.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-27.3	-0.2964 ug/L	0.16411	-0.2964 ppb	0.16411	55.36%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	2.1	0.1353 ug/L	1.16462	0.1353 ppb	1.16462	860.73%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 16:00:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4347.2	4347.2	98.9 %		16:02:17
1	Y RADIAL	4731.5	4731.5	98.06 %		16:02:17
1	Al 396.153Radial†	5257.7	5420.7	4714.9 ug/L	4714.9 ppb	16:02:17
1	Ca 317.933Radial†	2535.9	2544.5	5052.8 ug/L	5052.8 ppb	16:02:37
1	Fe 238.204 Radial†	435.5	429.2	5221.2 ug/L	5221.2 ppb	16:02:37
1	K 766.490 Radial†	28655.9	26488.6	5085.8 ug/L	5085.8 ppb	16:02:17
1	Mg 279.077 IEC†	119.2	117.7	5340.2 ug/L	5340.2 ppb	16:02:37
1	Na 589.592 Radial†	35962.4	37058.3	10690 ug/L	10690 ppb	16:02:17
1	Sr 421.552†	77122.3	77970.7	504.70 ug/L	504.70 ppb	16:02:17
1	Sc 361.383	895821.4	895821.4	101.97 %		16:03:35
1	Y 371.029	741888.7	741888.7	100.34 %		16:03:35
1	Ag 328.068†	107533.6	105014.7	506.18 ug/L	506.18 ppb	16:03:40
1	As 188.979†	1054.9	1058.9	523.57 ug/L	523.57 ppb	16:04:00
1	B 249.677†	19960.8	20043.6	497.26 ug/L	497.26 ppb	16:03:40
1	Ba 233.527†	62665.9	61463.3	515.02 ug/L	515.02 ppb	16:03:40
1	Be 313.107†	1300889.1	1279627.6	507.39 ug/L	507.39 ppb	16:03:35
1	Cd 226.502†	41638.4	41012.2	528.30 ug/L	528.30 ppb	16:03:40
1	Co 228.616†	23438.9	23037.5	532.41 ug/L	532.41 ppb	16:03:40
1	Cr 267.716†	43368.9	42452.3	514.18 ug/L	514.18 ppb	16:03:40
1	Cu 324.752†	170293.8	160803.4	492.91 ug/L	492.91 ppb	16:03:40
1	Mn 257.610†	438580.3	429663.8	515.18 ug/L	515.18 ppb	16:03:35
1	Mo 202.031†	6691.9	6555.2	513.20 ug/L	513.20 ppb	16:04:00
1	Ni 231.604†	19231.5	18787.2	521.26 ug/L	521.26 ppb	16:03:40
1	P 214.914†	4217.9	3940.5	2541.4 ug/L	2541.4 ppb	16:04:00
1	Pb 220.353†	3885.9	3863.4	525.60 ug/L	525.60 ppb	16:04:00
1	S 181.975 Axial†	691.1	646.6	1038.8 ug/L	1038.8 ppb	16:04:00
1	Sb 206.836†	1418.9	1356.8	529.36 ug/L	529.36 ppb	16:04:00
1	Se 196.026†	712.2	717.8	541.05 ug/L	541.05 ppb	16:04:00
1	Si 251.611†	76995.2	74985.5	2548.5 ug/L	2548.5 ppb	16:03:40
1	Sn 189.927†	2676.6	2611.4	526.45 ug/L	526.45 ppb	16:04:00
1	Ti 334.940†	315875.0	310946.3	493.81 ug/L	493.81 ppb	16:03:40
1	Tl 190.801†	1509.2	1507.7	521.26 ug/L	521.26 ppb	16:04:00
1	U 409.014†	15381.0	17509.4	482.58 ug/L	482.58 ppb	16:03:40
1	V 292.402†	68528.4	68552.9	511.19 ug/L	511.19 ppb	16:03:40
1	Zn 213.857†	49400.4	47857.2	513.20 ug/L	513.20 ppb	16:03:40
1	SiO2†	76696.8	74685.5	5407.0 ug/L	5407.0 ppb	16:05:07
2	Sc Radial	4275.8	4275.8	97.3 %		16:02:42
2	Y RADIAL	4650.3	4650.3	96.38 %		16:02:42
2	Al 396.153Radial†	5357.6	5612.2	4882.2 ug/L	4882.2 ppb	16:02:42
2	Ca 317.933Radial†	2526.4	2577.5	5118.4 ug/L	5118.4 ppb	16:03:02
2	Fe 238.204 Radial†	433.4	434.5	5284.4 ug/L	5284.4 ppb	16:03:02
2	K 766.490 Radial†	28773.7	27093.4	5202.0 ug/L	5202.0 ppb	16:02:42
2	Mg 279.077 IEC†	121.2	121.8	5523.6 ug/L	5523.6 ppb	16:03:02
2	Na 589.592 Radial†	36076.5	37782.6	10898 ug/L	10898 ppb	16:02:42
2	Sr 421.552†	77702.2	79868.5	516.99 ug/L	516.99 ppb	16:02:42
2	Sc 361.383	888483.2	888483.2	101.13 %		16:04:06
2	Y 371.029	737118.7	737118.7	99.697 %		16:04:06
2	Ag 328.068†	106734.7	105095.7	506.59 ug/L	506.59 ppb	16:04:11
2	As 188.979†	1059.5	1072.0	530.01 ug/L	530.01 ppb	16:04:31
2	B 249.677†	19829.4	20075.3	498.03 ug/L	498.03 ppb	16:04:11
2	Ba 233.527†	62665.3	61970.3	519.26 ug/L	519.26 ppb	16:04:11
2	Be 313.107†	1288268.9	1277685.7	506.63 ug/L	506.63 ppb	16:04:06
2	Cd 226.502†	41476.1	41189.0	530.57 ug/L	530.57 ppb	16:04:11
2	Co 228.616†	23391.8	23180.7	535.72 ug/L	535.72 ppb	16:04:11
2	Cr 267.716†	43278.8	42714.5	517.36 ug/L	517.36 ppb	16:04:11
2	Cu 324.752†	169089.1	160991.5	493.49 ug/L	493.49 ppb	16:04:11
2	Mn 257.610†	434044.8	428731.4	514.06 ug/L	514.06 ppb	16:04:06
2	Mo 202.031†	6681.5	6599.1	516.65 ug/L	516.65 ppb	16:04:31
2	Ni 231.604†	19171.6	18883.7	523.94 ug/L	523.94 ppb	16:04:11

2	P 214.914†	4212.7	3969.5	2560.7 ug/L	2560.7 ppb	16:04:31
2	Pb 220.353†	3891.6	3900.5	530.68 ug/L	530.68 ppb	16:04:31
2	S 181.975 Axial†	706.8	667.7	1072.7 ug/L	1072.7 ppb	16:04:31
2	Sb 206.836†	1424.9	1374.2	536.06 ug/L	536.06 ppb	16:04:31
2	Se 196.026†	723.0	734.2	553.25 ug/L	553.25 ppb	16:04:31
2	Si 251.611†	76554.1	75173.0	2554.8 ug/L	2554.8 ppb	16:04:11
2	Sn 189.927†	2688.4	2644.8	533.19 ug/L	533.19 ppb	16:04:31
2	Ti 334.940†	314307.3	311954.7	495.40 ug/L	495.40 ppb	16:04:11
2	Tl 190.801†	1502.0	1512.7	522.98 ug/L	522.98 ppb	16:04:31
2	U 409.014†	15309.4	17563.1	484.05 ug/L	484.05 ppb	16:04:11
2	V 292.402†	68279.6	68862.0	513.51 ug/L	513.51 ppb	16:04:11
2	Zn 213.857†	49140.6	48000.5	514.72 ug/L	514.72 ppb	16:04:11
2	SiO2†	76875.0	75482.9	5464.8 ug/L	5464.8 ppb	16:05:12
3	Sc Radial	4242.9	4242.9	96.5 %		16:03:07
3	Y RADIAL	4608.5	4608.5	95.51 %		16:03:07
3	Al 396.153Radial†	5295.7	5590.7	4863.3 ug/L	4863.3 ppb	16:03:07
3	Ca 317.933Radial†	2557.6	2629.9	5222.5 ug/L	5222.5 ppb	16:03:27
3	Fe 238.204 Radial†	438.7	443.4	5392.3 ug/L	5392.3 ppb	16:03:27
3	K 766.490 Radial†	28632.4	27176.5	5217.9 ug/L	5217.9 ppb	16:03:07
3	Mg 279.077 IEC†	119.0	120.4	5462.1 ug/L	5462.1 ppb	16:03:27
3	Na 589.592 Radial†	35920.5	37908.9	10935 ug/L	10935 ppb	16:03:07
3	Sr 421.552†	77194.2	79962.3	517.59 ug/L	517.59 ppb	16:03:07
3	Sc 361.383	890139.9	890139.9	101.32 %		16:04:37
3	Y 371.029	738480.9	738480.9	99.881 %		16:04:37
3	Ag 328.068†	106393.2	104562.3	504.06 ug/L	504.06 ppb	16:04:42
3	As 188.979†	1066.5	1077.1	532.47 ug/L	532.47 ppb	16:05:02
3	B 249.677†	19727.6	19938.4	494.61 ug/L	494.61 ppb	16:04:42
3	Ba 233.527†	62300.8	61495.2	515.29 ug/L	515.29 ppb	16:04:42
3	Be 313.107†	1291921.9	1278920.3	507.11 ug/L	507.11 ppb	16:04:37
3	Cd 226.502†	41387.1	41024.8	528.44 ug/L	528.44 ppb	16:04:42
3	Co 228.616†	23332.7	23079.3	533.39 ug/L	533.39 ppb	16:04:42
3	Cr 267.716†	43070.5	42429.2	513.92 ug/L	513.92 ppb	16:04:42
3	Cu 324.752†	168373.4	159974.0	490.37 ug/L	490.37 ppb	16:04:42
3	Mn 257.610†	435249.1	429121.3	514.54 ug/L	514.54 ppb	16:04:37
3	Mo 202.031†	6732.5	6637.1	519.63 ug/L	519.63 ppb	16:05:02
3	Ni 231.604†	19096.4	18774.2	520.90 ug/L	520.90 ppb	16:04:42
3	P 214.914†	4242.3	3991.0	2575.6 ug/L	2575.6 ppb	16:05:02
3	Pb 220.353†	3873.0	3875.0	527.21 ug/L	527.21 ppb	16:05:02
3	S 181.975 Axial†	710.1	669.6	1075.8 ug/L	1075.8 ppb	16:05:02
3	Sb 206.836†	1439.2	1385.7	540.40 ug/L	540.40 ppb	16:05:02
3	Se 196.026†	722.6	732.5	552.38 ug/L	552.38 ppb	16:05:02
3	Si 251.611†	76360.4	74840.9	2543.4 ug/L	2543.4 ppb	16:04:42
3	Sn 189.927†	2676.4	2628.0	529.81 ug/L	529.81 ppb	16:05:02
3	Ti 334.940†	313252.9	310335.7	492.85 ug/L	492.85 ppb	16:04:42
3	Tl 190.801†	1504.8	1512.7	522.97 ug/L	522.97 ppb	16:05:02
3	U 409.014†	15369.3	17594.1	484.90 ug/L	484.90 ppb	16:04:42
3	V 292.402†	68129.6	68588.3	511.53 ug/L	511.53 ppb	16:04:42
3	Zn 213.857†	48978.7	47750.3	512.02 ug/L	512.02 ppb	16:04:42
3	SiO2†	76619.6	75089.3	5436.2 ug/L	5436.2 ppb	16:05:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	891481.5	101.47 %	0.438			0.43%
Sc Radial	4288.6	97.6 %	1.21			1.24%
Y 371.029	739162.8	99.974 %	0.3323			0.33%
Y RADIAL	4663.4	96.65 %	1.296			1.34%
Ag 328.068†	104890.9	505.61 ug/L	1.358	505.61 ppb	1.358	0.27%
QC value within limits for Ag 328.068 Recovery = 101.12%						
Al 396.153Radial†	5541.2	4820.1 ug/L	91.60	4820.1 ppb	91.60	1.90%
QC value within limits for Al 396.153Radial Recovery = 96.40%						
As 188.979†	1069.4	528.68 ug/L	4.598	528.68 ppb	4.598	0.87%
QC value within limits for As 188.979 Recovery = 105.74%						
B 249.677†	20019.1	496.63 ug/L	1.796	496.63 ppb	1.796	0.36%
QC value within limits for B 249.677 Recovery = 99.33%						
Ba 233.527†	61642.9	516.52 ug/L	2.376	516.52 ppb	2.376	0.46%
QC value within limits for Ba 233.527 Recovery = 103.30%						
Be 313.107†	1278744.5	507.04 ug/L	0.387	507.04 ppb	0.387	0.08%
QC value within limits for Be 313.107 Recovery = 101.41%						
Ca 317.933Radial†	2584.0	5131.2 ug/L	85.59	5131.2 ppb	85.59	1.67%

QC value within limits for Ca 317.933 Radial Recovery = 102.62%							
Cd	226.502†	41075.3	529.10 ug/L	1.273	529.10 ppb	1.273	0.24%
QC value within limits for Cd 226.502 Recovery = 105.82%							
Co	228.616†	23099.2	533.84 ug/L	1.703	533.84 ppb	1.703	0.32%
QC value within limits for Co 228.616 Recovery = 106.77%							
Cr	267.716†	42532.0	515.15 ug/L	1.915	515.15 ppb	1.915	0.37%
QC value within limits for Cr 267.716 Recovery = 103.03%							
Cu	324.752†	160589.6	492.25 ug/L	1.656	492.25 ppb	1.656	0.34%
QC value within limits for Cu 324.752 Recovery = 98.45%							
Fe	238.204 Radial†	435.7	5299.3 ug/L	86.51	5299.3 ppb	86.51	1.63%
QC value within limits for Fe 238.204 Radial Recovery = 105.99%							
K	766.490 Radial†	26919.5	5168.6 ug/L	72.10	5168.6 ppb	72.10	1.40%
QC value within limits for K 766.490 Radial Recovery = 103.37%							
Mg	279.077 IEC†	120.0	5442.0 ug/L	93.37	5442.0 ppb	93.37	1.72%
QC value within limits for Mg 279.077 IEC Recovery = 108.84%							
Mn	257.610†	429172.2	514.59 ug/L	0.561	514.59 ppb	0.561	0.11%
QC value within limits for Mn 257.610 Recovery = 102.92%							
Mo	202.031†	6597.1	516.49 ug/L	3.216	516.49 ppb	3.216	0.62%
QC value within limits for Mo 202.031 Recovery = 103.30%							
Na	589.592 Radial†	37583.3	10841 ug/L	132.4	10841 ppb	132.4	1.22%
QC value within limits for Na 589.592 Radial Recovery = 108.41%							
Ni	231.604†	18815.0	522.03 ug/L	1.660	522.03 ppb	1.660	0.32%
QC value within limits for Ni 231.604 Recovery = 104.41%							
P	214.914†	3967.0	2559.2 ug/L	17.15	2559.2 ppb	17.15	0.67%
QC value within limits for P 214.914 Recovery = 102.37%							
Pb	220.353†	3879.6	527.83 ug/L	2.593	527.83 ppb	2.593	0.49%
QC value within limits for Pb 220.353 Recovery = 105.57%							
S	181.975 Axial†	661.3	1062.5 ug/L	20.52	1062.5 ppb	20.52	1.93%
QC value within limits for S 181.975 Axial Recovery = 106.25%							
Sb	206.836†	1372.2	535.27 ug/L	5.561	535.27 ppb	5.561	1.04%
QC value within limits for Sb 206.836 Recovery = 107.05%							
Se	196.026†	728.2	548.90 ug/L	6.806	548.90 ppb	6.806	1.24%
QC value within limits for Se 196.026 Recovery = 109.78%							
Si	251.611†	74999.8	2548.9 ug/L	5.69	2548.9 ppb	5.69	0.22%
QC value within limits for Si 251.611 Recovery = 101.96%							
Sn	189.927†	2628.1	529.82 ug/L	3.366	529.82 ppb	3.366	0.64%
QC value within limits for Sn 189.927 Recovery = 105.96%							
Sr	421.552†	79267.2	513.10 ug/L	7.274	513.10 ppb	7.274	1.42%
QC value within limits for Sr 421.552 Recovery = 102.62%							
Ti	334.940†	311078.9	494.02 ug/L	1.289	494.02 ppb	1.289	0.26%
QC value within limits for Ti 334.940 Recovery = 98.80%							
Tl	190.801†	1511.1	522.40 ug/L	0.989	522.40 ppb	0.989	0.19%
QC value within limits for Tl 190.801 Recovery = 104.48%							
U	409.014†	17555.5	483.85 ug/L	1.175	483.85 ppb	1.175	0.24%
QC value within limits for U 409.014 Recovery = 96.77%							
V	292.402†	68667.8	512.08 ug/L	1.253	512.08 ppb	1.253	0.24%
QC value within limits for V 292.402 Recovery = 102.42%							
Zn	213.857†	47869.3	513.32 ug/L	1.354	513.32 ppb	1.354	0.26%
QC value within limits for Zn 213.857 Recovery = 102.66%							
SiO2†		75085.9	5436.0 ug/L	28.90	5436.0 ppb	28.90	0.53%
QC value within limits for SiO2 Recovery = 101.65%							
All analyte(s) passed QC.							

Sequence No.: 13

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 2/22/2010 16:07:28

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	3988.6	3988.6	90.7 %		16:09:41
1	Y RADIAL	4287.6	4287.6	88.86 %		16:09:21
1	Al 396.153Radial†	109.6	225.0	196.19 ug/L	196.19 ppb	16:09:21
1	Ca 317.933Radial†	114.3	106.2	210.93 ug/L	210.93 ppb	16:09:41
1	Fe 238.204 Radial†	17.3	7.9	96.223 ug/L	96.223 ppb	16:09:41
1	K 766.490 Radial†	3366.7	1222.7	234.83 ug/L	234.83 ppb	16:09:21
1	Mg 279.077 IEC†	7.9	5.8	265.33 ug/L	265.33 ppb	16:09:41
1	Na 589.592 Radial†	559.5	1310.6	378.06 ug/L	378.06 ppb	16:09:21
1	Sr 421.552†	781.7	848.0	5.4877 ug/L	5.4877 ppb	16:09:21
1	Sc 361.383	885206.7	885206.7	100.76 %		16:10:38
1	Y 371.029	744681.8	744681.8	100.72 %		16:10:38
1	Ag 328.068†	1276.0	823.5	3.9516 ug/L	3.9516 ppb	16:10:38
1	As 188.979†	46.2	70.3	34.498 ug/L	34.498 ppb	16:10:58
1	B 249.677†	1650.3	2105.9	52.464 ug/L	52.464 ppb	16:10:38
1	Ba 233.527†	626.6	629.0	5.2698 ug/L	5.2698 ppb	16:10:58
1	Be 313.107†	8913.0	12697.9	5.0347 ug/L	5.0347 ppb	16:10:38
1	Cd 226.502†	233.6	409.5	5.2779 ug/L	5.2779 ppb	16:10:58
1	Co 228.616†	170.5	220.3	5.1031 ug/L	5.1031 ppb	16:10:58
1	Cr 267.716†	477.7	394.7	4.7686 ug/L	4.7686 ppb	16:10:58
1	Cu 324.752†	9240.4	2967.8	9.0771 ug/L	9.0771 ppb	16:10:38
1	Mn 257.610†	9429.2	8908.3	10.674 ug/L	10.674 ppb	16:10:38
1	Mo 202.031†	142.8	134.2	10.506 ug/L	10.506 ppb	16:10:58
1	Ni 231.604†	260.7	185.7	5.1527 ug/L	5.1527 ppb	16:10:58
1	P 214.914†	444.0	244.7	162.00 ug/L	162.00 ppb	16:10:58
1	Pb 220.353†	31.9	84.2	11.471 ug/L	11.471 ppb	16:10:58
1	S 181.975 Axial†	105.3	73.3	117.89 ug/L	117.89 ppb	16:10:58
1	Sb 206.836†	61.7	26.5	10.335 ug/L	10.335 ppb	16:10:58
1	Se 196.026†	30.6	49.7	36.473 ug/L	36.473 ppb	16:10:58
1	Si 251.611†	3429.5	2880.3	98.005 ug/L	98.005 ppb	16:10:58
1	Sn 189.927†	63.3	49.3	9.9610 ug/L	9.9610 ppb	16:10:58
1	Ti 334.940†	1869.5	3024.7	4.7901 ug/L	4.7901 ppb	16:10:38
1	Tl 190.801†	32.7	60.0	20.682 ug/L	20.682 ppb	16:10:58
1	U 409.014†	-800.7	1630.7	45.083 ug/L	45.083 ppb	16:10:38
1	V 292.402†	-761.3	591.9	4.5738 ug/L	4.5738 ppb	16:10:38
1	Zn 213.857†	1540.9	939.8	10.112 ug/L	10.112 ppb	16:10:58
1	SiO2†	3623.3	3065.2	222.20 ug/L	222.20 ppb	16:11:54
2	Sc Radial	4074.0	4074.0	92.7 %		16:10:06
2	Y RADIAL	4615.3	4615.3	95.65 %		16:09:46
2	Al 396.153Radial†	94.1	205.8	179.44 ug/L	179.44 ppb	16:09:46
2	Ca 317.933Radial†	110.5	99.5	197.59 ug/L	197.59 ppb	16:10:06
2	Fe 238.204 Radial†	18.6	8.9	108.06 ug/L	108.06 ppb	16:10:06
2	K 766.490 Radial†	3310.3	1084.1	208.20 ug/L	208.20 ppb	16:09:46
2	Mg 279.077 IEC†	7.9	5.7	257.85 ug/L	257.85 ppb	16:10:06
2	Na 589.592 Radial†	500.5	1234.1	355.97 ug/L	355.97 ppb	16:09:46
2	Sr 421.552†	756.7	802.9	5.1963 ug/L	5.1963 ppb	16:09:46
2	Sc 361.383	895402.1	895402.1	101.92 %		16:11:03
2	Y 371.029	754357.2	754357.2	102.03 %		16:11:03
2	Ag 328.068†	1305.1	837.5	4.0197 ug/L	4.0197 ppb	16:11:03
2	As 188.979†	41.4	65.1	31.967 ug/L	31.967 ppb	16:11:23
2	B 249.677†	1708.9	2144.7	53.430 ug/L	53.430 ppb	16:11:03
2	Ba 233.527†	632.4	627.6	5.2578 ug/L	5.2578 ppb	16:11:23
2	Be 313.107†	9045.6	12727.3	5.0465 ug/L	5.0465 ppb	16:11:03
2	Cd 226.502†	242.6	415.6	5.3565 ug/L	5.3565 ppb	16:11:23
2	Co 228.616†	171.3	219.1	5.0742 ug/L	5.0742 ppb	16:11:23
2	Cr 267.716†	491.6	402.9	4.8681 ug/L	4.8681 ppb	16:11:23
2	Cu 324.752†	9278.5	2900.7	8.8710 ug/L	8.8710 ppb	16:11:03
2	Mn 257.610†	9489.5	8860.9	10.618 ug/L	10.618 ppb	16:11:03
2	Mo 202.031†	138.4	128.2	10.042 ug/L	10.042 ppb	16:11:23
2	Ni 231.604†	264.7	186.6	5.1788 ug/L	5.1788 ppb	16:11:23

2	P 214.914†	431.9	227.8	150.75 ug/L	150.75 ppb	16:11:23
2	Pb 220.353†	31.6	83.5	11.381 ug/L	11.381 ppb	16:11:23
2	S 181.975 Axial†	113.1	79.7	128.18 ug/L	128.18 ppb	16:11:23
2	Sb 206.836†	61.0	25.1	9.8064 ug/L	9.8064 ppb	16:11:23
2	Se 196.026†	19.2	38.2	28.143 ug/L	28.143 ppb	16:11:23
2	Si 251.611†	3467.3	2878.7	97.955 ug/L	97.955 ppb	16:11:23
2	Sn 189.927†	66.8	52.0	10.508 ug/L	10.508 ppb	16:11:23
2	Ti 334.940†	1948.8	3081.3	4.8780 ug/L	4.8780 ppb	16:11:03
2	Tl 190.801†	35.4	62.3	21.480 ug/L	21.480 ppb	16:11:23
2	U 409.014†	-736.0	1703.2	47.087 ug/L	47.087 ppb	16:11:03
2	V 292.402†	-817.6	545.3	4.2262 ug/L	4.2262 ppb	16:11:03
2	Zn 213.857†	1536.3	917.8	9.8729 ug/L	9.8729 ppb	16:11:23
2	SiO2†	3599.6	3001.1	217.56 ug/L	217.56 ppb	16:11:59
3	Sc Radial	4063.6	4063.6	92.4 %		16:10:31
3	Y RADIAL	4593.8	4593.8	95.21 %		16:10:11
3	Al 396.153Radial†	92.0	203.8	177.66 ug/L	177.66 ppb	16:10:11
3	Ca 317.933Radial†	126.1	116.6	231.56 ug/L	231.56 ppb	16:10:31
3	Fe 238.204 Radial†	20.7	11.3	136.63 ug/L	136.63 ppb	16:10:31
3	K 766.490 Radial†	3391.4	1181.0	226.82 ug/L	226.82 ppb	16:10:11
3	Mg 279.077 IEC†	7.3	5.0	226.94 ug/L	226.94 ppb	16:10:31
3	Na 589.592 Radial†	494.7	1229.2	354.55 ug/L	354.55 ppb	16:10:11
3	Sr 421.552†	767.0	816.2	5.2819 ug/L	5.2819 ppb	16:10:11
3	Sc 361.383	880600.1	880600.1	100.24 %		16:11:29
3	Y 371.029	742606.5	742606.5	100.44 %		16:11:29
3	Ag 328.068†	1219.7	773.9	3.7274 ug/L	3.7274 ppb	16:11:29
3	As 188.979†	38.4	62.8	30.850 ug/L	30.850 ppb	16:11:49
3	B 249.677†	1650.7	2114.9	52.682 ug/L	52.682 ppb	16:11:29
3	Ba 233.527†	634.2	639.9	5.3624 ug/L	5.3624 ppb	16:11:49
3	Be 313.107†	8909.3	12740.5	5.0515 ug/L	5.0515 ppb	16:11:29
3	Cd 226.502†	235.2	412.2	5.3092 ug/L	5.3092 ppb	16:11:49
3	Co 228.616†	164.1	214.7	4.9752 ug/L	4.9752 ppb	16:11:49
3	Cr 267.716†	474.8	394.3	4.7680 ug/L	4.7680 ppb	16:11:49
3	Cu 324.752†	9218.2	2993.6	9.1588 ug/L	9.1588 ppb	16:11:29
3	Mn 257.610†	9335.7	8864.0	10.626 ug/L	10.626 ppb	16:11:29
3	Mo 202.031†	145.5	137.6	10.777 ug/L	10.777 ppb	16:11:49
3	Ni 231.604†	261.4	187.8	5.2108 ug/L	5.2108 ppb	16:11:49
3	P 214.914†	425.3	228.3	151.02 ug/L	151.02 ppb	16:11:49
3	Pb 220.353†	25.2	77.7	10.586 ug/L	10.586 ppb	16:11:49
3	S 181.975 Axial†	106.4	74.9	120.43 ug/L	120.43 ppb	16:11:49
3	Sb 206.836†	65.1	30.2	11.761 ug/L	11.761 ppb	16:11:49
3	Se 196.026†	25.4	44.6	32.948 ug/L	32.948 ppb	16:11:49
3	Si 251.611†	3456.1	2924.7	99.511 ug/L	99.511 ppb	16:11:49
3	Sn 189.927†	66.1	52.5	10.602 ug/L	10.602 ppb	16:11:49
3	Ti 334.940†	1850.9	3015.8	4.7823 ug/L	4.7823 ppb	16:11:29
3	Tl 190.801†	29.7	57.3	19.734 ug/L	19.734 ppb	16:11:49
3	U 409.014†	-829.2	1598.1	44.177 ug/L	44.177 ppb	16:11:29
3	V 292.402†	-749.8	599.4	4.6246 ug/L	4.6246 ppb	16:11:29
3	Zn 213.857†	1544.0	950.9	10.226 ug/L	10.226 ppb	16:11:49
3	SiO2†	3588.0	3048.9	221.01 ug/L	221.01 ppb	16:12:04

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	887069.6	100.97 %		0.862			0.85%
Sc Radial	4042.1	92.0 %		1.06			1.15%
Y 371.029	747215.2	101.06 %		0.848			0.84%
Y RADIAL	4498.9	93.24 %		3.799			4.07%
Ag 328.068†	811.6	3.8996 ug/L		0.15293	3.8996 ppb	0.15293	3.92%
QC value within limits for Ag 328.068 Recovery = 77.99%							
Al 396.153Radial†	211.5	184.43 ug/L		10.226	184.43 ppb	10.226	5.54%
QC value within limits for Al 396.153Radial Recovery = 92.21%							
As 188.979†	66.1	32.438 ug/L		1.8691	32.438 ppb	1.8691	5.76%
QC value within limits for As 188.979 Recovery = 108.13%							
B 249.677†	2121.9	52.859 ug/L		0.5064	52.859 ppb	0.5064	0.96%
QC value within limits for B 249.677 Recovery = 105.72%							
Ba 233.527†	632.1	5.2967 ug/L		0.05719	5.2967 ppb	0.05719	1.08%
QC value within limits for Ba 233.527 Recovery = 105.93%							
Be 313.107†	12721.9	5.0442 ug/L		0.00864	5.0442 ppb	0.00864	0.17%
QC value within limits for Be 313.107 Recovery = 100.88%							
Ca 317.933Radial†	107.4	213.36 ug/L		17.114	213.36 ppb	17.114	8.02%

QC value within limits for Ca 317.933 Radial Recovery = 106.68%

Cd	226.502†	412.5	5.3145 ug/L	0.03954	5.3145 ppb	0.03954	0.74%
QC value within limits for Cd 226.502 Recovery = 106.29%							
Co	228.616†	218.0	5.0509 ug/L	0.06706	5.0509 ppb	0.06706	1.33%
QC value within limits for Co 228.616 Recovery = 101.02%							
Cr	267.716†	397.3	4.8015 ug/L	0.05763	4.8015 ppb	0.05763	1.20%
QC value within limits for Cr 267.716 Recovery = 96.03%							
Cu	324.752†	2954.0	9.0356 ug/L	0.14828	9.0356 ppb	0.14828	1.64%
QC value within limits for Cu 324.752 Recovery = 90.36%							
Fe	238.204 Radial†	9.4	113.64 ug/L	20.770	113.64 ppb	20.770	18.28%
QC value within limits for Fe 238.204 Radial Recovery = 113.64%							
K	766.490 Radial†	1162.6	223.28 ug/L	13.666	223.28 ppb	13.666	6.12%
QC value greater than the upper limit for K 766.490 Radial Recovery = 148.86%							
Mg	279.077 IEC†	5.5	250.04 ug/L	20.349	250.04 ppb	20.349	8.14%
QC value within limits for Mg 279.077 IEC Recovery = 83.35%							
Mn	257.610†	8877.7	10.639 ug/L	0.0300	10.639 ppb	0.0300	0.28%
QC value within limits for Mn 257.610 Recovery = 106.39%							
Mo	202.031†	133.3	10.442 ug/L	0.3720	10.442 ppb	0.3720	3.56%
QC value within limits for Mo 202.031 Recovery = 104.42%							
Na	589.592 Radial†	1258.0	362.86 ug/L	13.178	362.86 ppb	13.178	3.63%
QC value within limits for Na 589.592 Radial Recovery = 120.95%							
Ni	231.604†	186.7	5.1808 ug/L	0.02911	5.1808 ppb	0.02911	0.56%
QC value within limits for Ni 231.604 Recovery = 103.62%							
P	214.914†	233.6	154.59 ug/L	6.422	154.59 ppb	6.422	4.15%
QC value within limits for P 214.914 Recovery = 103.06%							
Pb	220.353†	81.8	11.146 ug/L	0.4868	11.146 ppb	0.4868	4.37%
QC value within limits for Pb 220.353 Recovery = 111.46%							
S	181.975 Axial†	76.0	122.17 ug/L	5.361	122.17 ppb	5.361	4.39%
QC value within limits for S 181.975 Axial Recovery = 122.17%							
Sb	206.836†	27.3	10.634 ug/L	1.0108	10.634 ppb	1.0108	9.50%
QC value within limits for Sb 206.836 Recovery = 106.34%							
Se	196.026†	44.2	32.521 ug/L	4.1812	32.521 ppb	4.1812	12.86%
QC value within limits for Se 196.026 Recovery = 108.40%							
Si	251.611†	2894.6	98.490 ug/L	0.8841	98.490 ppb	0.8841	0.90%
QC value within limits for Si 251.611 Recovery = 98.49%							
Sn	189.927†	51.3	10.357 ug/L	0.3461	10.357 ppb	0.3461	3.34%
QC value within limits for Sn 189.927 Recovery = 103.57%							
Sr	421.552†	822.4	5.3220 ug/L	0.14975	5.3220 ppb	0.14975	2.81%
QC value within limits for Sr 421.552 Recovery = 106.44%							
Ti	334.940†	3040.6	4.8168 ug/L	0.05313	4.8168 ppb	0.05313	1.10%
QC value within limits for Ti 334.940 Recovery = 96.34%							
Tl	190.801†	59.9	20.632 ug/L	0.8740	20.632 ppb	0.8740	4.24%
QC value within limits for Tl 190.801 Recovery = 103.16%							
U	409.014†	1644.0	45.449 ug/L	1.4893	45.449 ppb	1.4893	3.28%
QC value within limits for U 409.014 Recovery = 90.90%							
V	292.402†	578.9	4.4749 ug/L	0.21684	4.4749 ppb	0.21684	4.85%
QC value within limits for V 292.402 Recovery = 89.50%							
Zn	213.857†	936.2	10.070 ug/L	0.1802	10.070 ppb	0.1802	1.79%
QC value within limits for Zn 213.857 Recovery = 100.70%							
SiO2†		3038.4	220.26 ug/L	2.411	220.26 ppb	2.411	1.09%
QC value within limits for SiO2 Recovery = 103.41%							

QC Failed. Continue with analysis.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 16:14:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4175.4	4175.4	95.0 %		16:16:08
1	Y RADIAL	4565.7	4565.7	94.62 %		16:16:08
1	Al 396.153Radial†	-101.3	-2.4	-2.1562 ug/L	-2.1562 ppb	16:16:28
1	Ca 317.933Radial†	22.4	3.8	7.5960 ug/L	7.5960 ppb	16:16:28
1	Fe 238.204 Radial†	8.1	-2.6	-31.620 ug/L	-31.620 ppb	16:16:28
1	K 766.490 Radial†	2689.9	344.3	66.159 ug/L	66.159 ppb	16:16:08
1	Mg 279.077 IEC†	1.1	-1.7	-76.737 ug/L	-76.737 ppb	16:16:28
1	Na 589.592 Radial†	-481.9	186.7	53.846 ug/L	53.846 ppb	16:16:08
1	Sr 421.552†	-2.0	-15.6	-0.1013 ug/L	-0.1013 ppb	16:16:08
1	Sc 361.383	875108.7	875108.7	99.611 %		16:17:25
1	Y 371.029	736350.0	736350.0	99.593 %		16:17:25
1	Ag 328.068†	175.9	-266.4	-1.2839 ug/L	-1.2839 ppb	16:17:25
1	As 188.979†	-13.9	10.5	5.1496 ug/L	5.1496 ppb	16:17:45
1	B 249.677†	-371.8	94.8	2.3696 ug/L	2.3696 ppb	16:17:45
1	Ba 233.527†	-14.6	-7.6	-0.0648 ug/L	-0.0648 ppb	16:17:45
1	Be 313.107†	-3898.4	-61.5	-0.0247 ug/L	-0.0247 ppb	16:17:25
1	Cd 226.502†	-171.6	5.4	0.0720 ug/L	0.0720 ppb	16:17:45
1	Co 228.616†	-68.1	-17.4	-0.3988 ug/L	-0.3988 ppb	16:17:45
1	Cr 267.716†	86.1	7.1	0.0835 ug/L	0.0835 ppb	16:17:45
1	Cu 324.752†	5897.0	-282.9	-0.8669 ug/L	-0.8669 ppb	16:17:25
1	Mn 257.610†	422.6	-25.5	-0.0305 ug/L	-0.0305 ppb	16:17:45
1	Mo 202.031†	17.3	9.8	0.7656 ug/L	0.7656 ppb	16:17:45
1	Ni 231.604†	83.6	10.9	0.3025 ug/L	0.3025 ppb	16:17:45
1	P 214.914†	206.9	11.7	8.0347 ug/L	8.0347 ppb	16:17:45
1	Pb 220.353†	-58.8	-6.5	-0.8764 ug/L	-0.8764 ppb	16:17:45
1	S 181.975 Axial†	37.1	6.1	9.7981 ug/L	9.7981 ppb	16:17:45
1	Sb 206.836†	34.6	-0.0	-0.0123 ug/L	-0.0123 ppb	16:17:45
1	Se 196.026†	-32.8	-13.6	-9.9706 ug/L	-9.9706 ppb	16:17:45
1	Si 251.611†	529.5	8.3	0.2746 ug/L	0.2746 ppb	16:17:45
1	Sn 189.927†	9.5	-4.0	-0.7945 ug/L	-0.7945 ppb	16:17:45
1	Ti 334.940†	-1275.7	-111.4	-0.1682 ug/L	-0.1682 ppb	16:17:25
1	Tl 190.801†	-29.0	-1.5	-0.5157 ug/L	-0.5157 ppb	16:17:45
1	U 409.014†	-2539.0	-123.6	-3.4153 ug/L	-3.4153 ppb	16:17:25
1	V 292.402†	-1375.8	-33.8	-0.2407 ug/L	-0.2407 ppb	16:17:25
1	Zn 213.857†	566.0	-21.3	-0.2264 ug/L	-0.2264 ppb	16:17:45
1	SiO2†	531.5	2.9	0.1863 ug/L	0.1863 ppb	16:18:41
2	Sc Radial	4076.4	4076.4	92.7 %		16:16:33
2	Y RADIAL	4473.5	4473.5	92.71 %		16:16:33
2	Al 396.153Radial†	-106.5	-10.7	-9.3472 ug/L	-9.3472 ppb	16:16:53
2	Ca 317.933Radial†	13.6	-5.1	-10.122 ug/L	-10.122 ppb	16:16:53
2	Fe 238.204 Radial†	11.4	1.1	13.591 ug/L	13.591 ppb	16:16:53
2	K 766.490 Radial†	2575.4	289.5	55.657 ug/L	55.657 ppb	16:16:33
2	Mg 279.077 IEC†	4.3	1.8	81.685 ug/L	81.685 ppb	16:16:53
2	Na 589.592 Radial†	-554.9	95.6	27.580 ug/L	27.580 ppb	16:16:33
2	Sr 421.552†	15.3	3.0	0.0194 ug/L	0.0194 ppb	16:16:33
2	Sc 361.383	890515.0	890515.0	101.36 %		16:17:50
2	Y 371.029	750417.1	750417.1	101.50 %		16:17:50
2	Ag 328.068†	235.9	-210.2	-1.0017 ug/L	-1.0017 ppb	16:17:50
2	As 188.979†	-24.7	0.1	0.0302 ug/L	0.0302 ppb	16:18:10
2	B 249.677†	-415.3	58.4	1.4550 ug/L	1.4550 ppb	16:18:10
2	Ba 233.527†	-13.6	-6.3	-0.0522 ug/L	-0.0522 ppb	16:18:10
2	Be 313.107†	-3811.2	92.3	0.0363 ug/L	0.0363 ppb	16:17:50
2	Cd 226.502†	-180.7	-0.6	-0.0102 ug/L	-0.0102 ppb	16:18:10
2	Co 228.616†	-61.1	-9.2	-0.2124 ug/L	-0.2124 ppb	16:18:10
2	Cr 267.716†	65.6	-14.7	-0.1758 ug/L	-0.1758 ppb	16:18:10
2	Cu 324.752†	6029.6	-254.4	-0.7783 ug/L	-0.7783 ppb	16:17:50
2	Mn 257.610†	407.6	-47.7	-0.0591 ug/L	-0.0591 ppb	16:18:10
2	Mo 202.031†	12.7	5.0	0.3901 ug/L	0.3901 ppb	16:18:10
2	Ni 231.604†	58.5	-15.3	-0.4243 ug/L	-0.4243 ppb	16:18:10

2	P 214.914†	206.0	7.3	5.0023 ug/L	5.0023 ppb	16:18:10
2	Pb 220.353†	-57.2	-4.0	-0.5393 ug/L	-0.5393 ppb	16:18:10
2	S 181.975 Axial†	40.1	8.4	13.450 ug/L	13.450 ppb	16:18:10
2	Sb 206.836†	38.6	3.4	1.2785 ug/L	1.2785 ppb	16:18:10
2	Se 196.026†	-27.9	-8.2	-5.9129 ug/L	-5.9129 ppb	16:18:10
2	Si 251.611†	531.0	0.6	0.0142 ug/L	0.0142 ppb	16:18:10
2	Sn 189.927†	12.2	-1.4	-0.2871 ug/L	-0.2871 ppb	16:18:10
2	Ti 334.940†	-1248.1	-62.0	-0.1057 ug/L	-0.1057 ppb	16:17:50
2	Tl 190.801†	-34.7	-6.6	-2.2776 ug/L	-2.2776 ppb	16:18:10
2	U 409.014†	-2516.1	-56.9	-1.5753 ug/L	-1.5753 ppb	16:17:50
2	V 292.402†	-1380.1	-14.1	-0.1011 ug/L	-0.1011 ppb	16:17:50
2	Zn 213.857†	576.0	-21.2	-0.2281 ug/L	-0.2281 ppb	16:18:10
2	SiO2†	552.0	13.8	0.9930 ug/L	0.9930 ppb	16:18:46
3	Sc Radial	4186.5	4186.5	95.2 %		16:16:58
3	Y RADIAL	4585.8	4585.8	95.04 %		16:16:58
3	Al 396.153Radial†	-108.5	-9.7	-8.4383 ug/L	-8.4383 ppb	16:17:18
3	Ca 317.933Radial†	20.9	2.2	4.3965 ug/L	4.3965 ppb	16:17:18
3	Fe 238.204 Radial†	7.5	-3.3	-39.534 ug/L	-39.534 ppb	16:17:18
3	K 766.490 Radial†	2547.8	187.5	36.033 ug/L	36.033 ppb	16:16:58
3	Mg 279.077 IEC†	1.3	-1.5	-66.697 ug/L	-66.697 ppb	16:17:18
3	Na 589.592 Radial†	-521.7	146.3	42.191 ug/L	42.191 ppb	16:16:58
3	Sr 421.552†	37.3	25.6	0.1659 ug/L	0.1659 ppb	16:16:58
3	Sc 361.383	885808.6	885808.6	100.83 %		16:18:16
3	Y 371.029	747253.6	747253.6	101.07 %		16:18:16
3	Ag 328.068†	260.0	-185.0	-0.8963 ug/L	-0.8963 ppb	16:18:16
3	As 188.979†	-23.5	1.1	0.5481 ug/L	0.5481 ppb	16:18:36
3	B 249.677†	-398.3	73.1	1.8295 ug/L	1.8295 ppb	16:18:36
3	Ba 233.527†	-7.0	0.2	-0.0005 ug/L	-0.0005 ppb	16:18:36
3	Be 313.107†	-3834.8	48.9	0.0190 ug/L	0.0190 ppb	16:18:16
3	Cd 226.502†	-187.2	-8.0	-0.0997 ug/L	-0.0997 ppb	16:18:36
3	Co 228.616†	-64.6	-13.0	-0.3008 ug/L	-0.3008 ppb	16:18:36
3	Cr 267.716†	59.1	-20.8	-0.2535 ug/L	-0.2535 ppb	16:18:36
3	Cu 324.752†	5940.3	-311.4	-0.9542 ug/L	-0.9542 ppb	16:18:16
3	Mn 257.610†	422.8	-30.4	-0.0376 ug/L	-0.0376 ppb	16:18:36
3	Mo 202.031†	1.2	-6.3	-0.4989 ug/L	-0.4989 ppb	16:18:36
3	Ni 231.604†	68.7	-4.9	-0.1365 ug/L	-0.1365 ppb	16:18:36
3	P 214.914†	196.4	-1.2	-0.6065 ug/L	-0.6065 ppb	16:18:36
3	Pb 220.353†	-60.6	-7.6	-1.0270 ug/L	-1.0270 ppb	16:18:36
3	S 181.975 Axial†	37.1	5.6	9.0554 ug/L	9.0554 ppb	16:18:36
3	Sb 206.836†	32.7	-2.3	-0.8726 ug/L	-0.8726 ppb	16:18:36
3	Se 196.026†	-13.7	5.8	4.0629 ug/L	4.0629 ppb	16:18:36
3	Si 251.611†	544.7	17.0	0.5844 ug/L	0.5844 ppb	16:18:36
3	Sn 189.927†	13.4	-0.2	-0.0462 ug/L	-0.0462 ppb	16:18:36
3	Ti 334.940†	-1267.9	-88.2	-0.1320 ug/L	-0.1320 ppb	16:18:16
3	Tl 190.801†	-26.4	1.4	0.4740 ug/L	0.4740 ppb	16:18:36
3	U 409.014†	-2600.5	-153.8	-4.2498 ug/L	-4.2498 ppb	16:18:16
3	V 292.402†	-1401.1	-42.1	-0.3202 ug/L	-0.3202 ppb	16:18:16
3	Zn 213.857†	567.7	-26.5	-0.2785 ug/L	-0.2785 ppb	16:18:36
3	SiO2†	520.0	-14.9	-1.0713 ug/L	-1.0713 ppb	16:18:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	883810.8	100.60 %		0.899			0.89%
Sc Radial	4146.1	94.3 %		1.38			1.46%
Y 371.029	744673.6	100.72 %		0.998			0.99%
Y RADIAL	4541.7	94.13 %		1.242			1.32%
Ag 328.068†	-220.5	-1.0607 ug/L		0.20042	-1.0607 ppb	0.20042	18.90%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-7.6	-6.6473 ug/L		3.91581	-6.6473 ppb	3.91581	58.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.9	1.9093 ug/L		2.81810	1.9093 ppb	2.81810	147.60%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	75.4	1.8847 ug/L		0.45978	1.8847 ppb	0.45978	24.40%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-4.6	-0.0392 ug/L		0.03407	-0.0392 ppb	0.03407	86.95%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	26.6	0.0102 ug/L		0.03146	0.0102 ppb	0.03146	308.40%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.3	0.6236 ug/L		9.44223	0.6236 ppb	9.44223	>999.9%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.1	-0.0126 ug/L	0.08590	-0.0126 ppb	0.08590	680.15%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-13.2	-0.3040 ug/L	0.09326	-0.3040 ppb	0.09326	30.68%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-9.5	-0.1152 ug/L	0.17649	-0.1152 ppb	0.17649	153.15%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-282.9	-0.8665 ug/L	0.08795	-0.8665 ppb	0.08795	10.15%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.6	-19.187 ug/L	28.6617	-19.187 ppb	28.6617	149.38%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	273.8	52.616 ug/L	15.2916	52.616 ppb	15.2916	29.06%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.5	-20.583 ug/L	88.7087	-20.583 ppb	88.7087	430.98%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-34.5	-0.0424 ug/L	0.01489	-0.0424 ppb	0.01489	35.10%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.8	0.2189 ug/L	0.64935	0.2189 ppb	0.64935	296.62%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	142.9	41.206 ug/L	13.1609	41.206 ppb	13.1609	31.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.1	-0.0861 ug/L	0.36602	-0.0861 ppb	0.36602	425.22%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.9	4.1435 ug/L	4.38417	4.1435 ppb	4.38417	105.81%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-6.0	-0.8142 ug/L	0.24975	-0.8142 ppb	0.24975	30.67%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	6.7	10.768 ug/L	2.3523	10.768 ppb	2.3523	21.85%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	0.4	0.1312 ug/L	1.08272	0.1312 ppb	1.08272	825.26%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-5.3	-3.9402 ug/L	7.22170	-3.9402 ppb	7.22170	183.28%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	8.6	0.2911 ug/L	0.28547	0.2911 ppb	0.28547	98.07%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-1.9	-0.3759 ug/L	0.38198	-0.3759 ppb	0.38198	101.61%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	4.3	0.0280 ug/L	0.13378	0.0280 ppb	0.13378	477.68%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-87.2	-0.1353 ug/L	0.03137	-0.1353 ppb	0.03137	23.18%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.3	-0.7731 ug/L	1.39373	-0.7731 ppb	1.39373	180.28%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-111.4	-3.0801 ug/L	1.36836	-3.0801 ppb	1.36836	44.43%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-30.0	-0.2207 ug/L	0.11089	-0.2207 ppb	0.11089	50.25%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-23.0	-0.2444 ug/L	0.02959	-0.2444 ppb	0.02959	12.11%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	0.6	0.0360 ug/L	1.04032	0.0360 ppb	1.04032	>999.9%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 16
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/22/2010 16:28:51
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4213.9	4213.9	95.9 %		16:30:43
1	Y RADIAL	4630.0	4630.0	95.96 %		16:30:43
1	Al 396.153Radial†	5312.2	5645.6	4911.8 ug/L	4911.8 ppb	16:30:43
1	Ca 317.933Radial†	2494.2	2582.1	5127.5 ug/L	5127.5 ppb	16:31:03
1	Fe 238.204 Radial†	417.8	424.7	5165.5 ug/L	5165.5 ppb	16:31:03
1	K 766.490 Radial†	28367.7	27104.0	5204.2 ug/L	5204.2 ppb	16:30:43
1	Mg 279.077 IEC†	115.6	117.8	5342.4 ug/L	5342.4 ppb	16:31:03
1	Na 589.592 Radial†	33736.6	35886.1	10351 ug/L	10351 ppb	16:30:43
1	Sr 421.552†	75320.2	78556.2	508.49 ug/L	508.49 ppb	16:30:43
1	Sc 361.383	897748.3	897748.3	102.19 %		16:32:01
1	Y 371.029	746674.4	746674.4	100.99 %		16:32:01
1	Ag 328.068†	106554.5	103830.2	500.47 ug/L	500.47 ppb	16:32:06
1	As 188.979†	1046.8	1048.8	518.56 ug/L	518.56 ppb	16:32:26
1	B 249.677†	19625.4	19673.3	488.06 ug/L	488.06 ppb	16:32:06
1	Ba 233.527†	61975.5	60655.8	508.26 ug/L	508.26 ppb	16:32:06
1	Be 313.107†	1291106.3	1267316.0	502.51 ug/L	502.51 ppb	16:32:01
1	Cd 226.502†	41067.4	40365.8	519.97 ug/L	519.97 ppb	16:32:06
1	Co 228.616†	23135.7	22691.4	524.41 ug/L	524.41 ppb	16:32:06
1	Cr 267.716†	42944.3	41945.5	508.04 ug/L	508.04 ppb	16:32:06
1	Cu 324.752†	168522.6	158711.7	486.49 ug/L	486.49 ppb	16:32:06
1	Mn 257.610†	432387.6	422680.5	506.80 ug/L	506.80 ppb	16:32:01
1	Mo 202.031†	6643.0	6493.2	508.35 ug/L	508.35 ppb	16:32:26
1	Ni 231.604†	19046.1	18565.3	515.11 ug/L	515.11 ppb	16:32:06
1	P 214.914†	4176.6	3891.1	2509.6 ug/L	2509.6 ppb	16:32:26
1	Pb 220.353†	3856.3	3826.2	520.60 ug/L	520.60 ppb	16:32:26
1	S 181.975 Axial†	690.1	644.1	1034.8 ug/L	1034.8 ppb	16:32:26
1	Sb 206.836†	1415.1	1350.0	526.61 ug/L	526.61 ppb	16:32:26
1	Se 196.026†	712.9	716.9	540.26 ug/L	540.26 ppb	16:32:26
1	Si 251.611†	75876.3	73728.5	2505.7 ug/L	2505.7 ppb	16:32:06
1	Sn 189.927†	2650.5	2580.2	520.18 ug/L	520.18 ppb	16:32:26
1	Ti 334.940†	312759.1	307232.2	487.92 ug/L	487.92 ppb	16:32:06
1	Tl 190.801†	1484.2	1480.0	511.70 ug/L	511.70 ppb	16:32:26
1	U 409.014†	15520.9	17613.9	485.49 ug/L	485.49 ppb	16:32:06
1	V 292.402†	68201.0	68088.3	507.73 ug/L	507.73 ppb	16:32:06
1	Zn 213.857†	48871.8	47236.0	506.53 ug/L	506.53 ppb	16:32:06
1	SiO2†	75829.1	73674.9	5333.8 ug/L	5333.8 ppb	16:33:33
2	Sc Radial	4299.8	4299.8	97.8 %		16:31:08
2	Y RADIAL	4692.8	4692.8	97.26 %		16:31:08
2	Al 396.153Radial†	5352.7	5576.4	4851.4 ug/L	4851.4 ppb	16:31:08
2	Ca 317.933Radial†	2492.7	2528.6	5021.3 ug/L	5021.3 ppb	16:31:28
2	Fe 238.204 Radial†	415.7	413.9	5034.8 ug/L	5034.8 ppb	16:31:28
2	K 766.490 Radial†	28570.8	26720.7	5130.6 ug/L	5130.6 ppb	16:31:08
2	Mg 279.077 IEC†	115.0	114.7	5204.6 ug/L	5204.6 ppb	16:31:28
2	Na 589.592 Radial†	34055.8	35509.8	10243 ug/L	10243 ppb	16:31:08
2	Sr 421.552†	76151.9	77837.7	503.84 ug/L	503.84 ppb	16:31:08
2	Sc 361.383	906627.6	906627.6	103.20 %		16:32:32
2	Y 371.029	753676.1	753676.1	101.94 %		16:32:32
2	Ag 328.068†	107678.7	103898.3	500.75 ug/L	500.75 ppb	16:32:37
2	As 188.979†	1060.0	1051.6	519.90 ug/L	519.90 ppb	16:32:57
2	B 249.677†	19903.5	19754.7	490.11 ug/L	490.11 ppb	16:32:37
2	Ba 233.527†	62682.4	60746.8	509.01 ug/L	509.01 ppb	16:32:37
2	Be 313.107†	1301503.6	1265016.9	501.60 ug/L	501.60 ppb	16:32:32
2	Cd 226.502†	41514.9	40405.8	520.50 ug/L	520.50 ppb	16:32:37
2	Co 228.616†	23359.9	22686.9	524.30 ug/L	524.30 ppb	16:32:37
2	Cr 267.716†	43351.1	41928.1	507.82 ug/L	507.82 ppb	16:32:37
2	Cu 324.752†	170965.6	159463.7	488.79 ug/L	488.79 ppb	16:32:37
2	Mn 257.610†	436703.3	422718.3	506.84 ug/L	506.84 ppb	16:32:32
2	Mo 202.031†	6671.5	6457.2	505.52 ug/L	505.52 ppb	16:32:57
2	Ni 231.604†	19219.6	18550.9	514.71 ug/L	514.71 ppb	16:32:37

2	P 214.914†	4176.1	3850.6	2482.1 ug/L	2482.1 ppb	16:32:57
2	Pb 220.353†	3857.2	3790.1	515.70 ug/L	515.70 ppb	16:32:57
2	S 181.975 Axial†	698.2	645.4	1036.8 ug/L	1036.8 ppb	16:32:57
2	Sb 206.836†	1423.4	1344.6	524.41 ug/L	524.41 ppb	16:32:57
2	Se 196.026†	725.6	722.5	543.83 ug/L	543.83 ppb	16:32:57
2	Si 251.611†	76863.0	73957.5	2513.5 ug/L	2513.5 ppb	16:32:37
2	Sn 189.927†	2649.3	2553.7	514.83 ug/L	514.83 ppb	16:32:57
2	Ti 334.940†	316092.1	307464.4	488.29 ug/L	488.29 ppb	16:32:37
2	Tl 190.801†	1504.0	1485.0	513.42 ug/L	513.42 ppb	16:32:57
2	U 409.014†	15532.9	17476.8	481.71 ug/L	481.71 ppb	16:32:37
2	V 292.402†	68671.6	67890.7	506.24 ug/L	506.24 ppb	16:32:37
2	Zn 213.857†	49361.8	47242.4	506.62 ug/L	506.62 ppb	16:32:37
2	SiO2†	75909.8	73026.3	5286.8 ug/L	5286.8 ppb	16:33:39
3	Sc Radial	4176.7	4176.7	95.0 %		16:31:34
3	Y RADIAL	4560.8	4560.8	94.52 %		16:31:34
3	Al 396.153Radial†	5169.5	5544.9	4824.0 ug/L	4824.0 ppb	16:31:34
3	Ca 317.933Radial†	2481.7	2592.1	5147.4 ug/L	5147.4 ppb	16:31:54
3	Fe 238.204 Radial†	418.6	429.4	5222.9 ug/L	5222.9 ppb	16:31:54
3	K 766.490 Radial†	27885.5	26860.6	5157.5 ug/L	5157.5 ppb	16:31:34
3	Mg 279.077 IEC†	112.7	115.7	5249.8 ug/L	5249.8 ppb	16:31:54
3	Na 589.592 Radial†	32999.3	35424.1	10218 ug/L	10218 ppb	16:31:34
3	Sr 421.552†	73782.9	77639.4	502.56 ug/L	502.56 ppb	16:31:34
3	Sc 361.383	904071.3	904071.3	102.91 %		16:33:03
3	Y 371.029	750598.7	750598.7	101.52 %		16:33:03
3	Ag 328.068†	106463.7	103012.7	496.56 ug/L	496.56 ppb	16:33:08
3	As 188.979†	1049.8	1044.6	516.48 ug/L	516.48 ppb	16:33:28
3	B 249.677†	19728.1	19638.8	487.20 ug/L	487.20 ppb	16:33:08
3	Ba 233.527†	62218.7	60467.9	506.68 ug/L	506.68 ppb	16:33:08
3	Be 313.107†	1297388.4	1264584.1	501.42 ug/L	501.42 ppb	16:33:03
3	Cd 226.502†	41350.9	40360.2	519.89 ug/L	519.89 ppb	16:33:08
3	Co 228.616†	23194.1	22589.8	522.06 ug/L	522.06 ppb	16:33:08
3	Cr 267.716†	43037.8	41742.4	505.59 ug/L	505.59 ppb	16:33:08
3	Cu 324.752†	168179.6	157224.9	481.94 ug/L	481.94 ppb	16:33:08
3	Mn 257.610†	436010.8	423242.0	507.48 ug/L	507.48 ppb	16:33:03
3	Mo 202.031†	6617.1	6422.6	502.84 ug/L	502.84 ppb	16:33:28
3	Ni 231.604†	19144.9	18530.9	514.15 ug/L	514.15 ppb	16:33:08
3	P 214.914†	4170.7	3856.9	2487.5 ug/L	2487.5 ppb	16:33:28
3	Pb 220.353†	3827.4	3771.7	513.18 ug/L	513.18 ppb	16:33:28
3	S 181.975 Axial†	697.5	646.6	1038.8 ug/L	1038.8 ppb	16:33:28
3	Sb 206.836†	1410.5	1335.9	521.09 ug/L	521.09 ppb	16:33:28
3	Se 196.026†	704.2	703.6	530.73 ug/L	530.73 ppb	16:33:28
3	Si 251.611†	76155.2	73480.3	2497.3 ug/L	2497.3 ppb	16:33:08
3	Sn 189.927†	2636.6	2548.7	513.83 ug/L	513.83 ppb	16:33:28
3	Ti 334.940†	312898.7	305227.3	484.75 ug/L	484.75 ppb	16:33:08
3	Tl 190.801†	1484.2	1469.9	508.21 ug/L	508.21 ppb	16:33:28
3	U 409.014†	15339.6	17331.5	477.68 ug/L	477.68 ppb	16:33:08
3	V 292.402†	68142.1	67564.3	503.77 ug/L	503.77 ppb	16:33:08
3	Zn 213.857†	49025.7	47051.1	504.54 ug/L	504.54 ppb	16:33:08
3	SiO2†	75233.0	72576.6	5254.2 ug/L	5254.2 ppb	16:33:44

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902815.7	102.76 %	0.520			0.51%
Sc Radial	4230.1	96.2 %	1.44			1.49%
Y 371.029	750316.4	101.48 %	0.475			0.47%
Y RADIAL	4627.9	95.91 %	1.368			1.43%
Ag 328.068†	103580.4	499.26 ug/L	2.343	499.26 ppb	2.343	0.47%
QC value within limits for Ag 328.068 Recovery = 99.85%						
Al 396.153Radial†	5589.0	4862.4 ug/L	44.94	4862.4 ppb	44.94	0.92%
QC value within limits for Al 396.153Radial Recovery = 97.25%						
As 188.979†	1048.4	518.32 ug/L	1.723	518.32 ppb	1.723	0.33%
QC value within limits for As 188.979 Recovery = 103.66%						
B 249.677†	19688.9	488.46 ug/L	1.497	488.46 ppb	1.497	0.31%
QC value within limits for B 249.677 Recovery = 97.69%						
Ba 233.527†	60623.5	507.98 ug/L	1.190	507.98 ppb	1.190	0.23%
QC value within limits for Ba 233.527 Recovery = 101.60%						
Be 313.107†	1265639.0	501.84 ug/L	0.583	501.84 ppb	0.583	0.12%
QC value within limits for Be 313.107 Recovery = 100.37%						
Ca 317.933Radial†	2567.6	5098.7 ug/L	67.80	5098.7 ppb	67.80	1.33%

QC value within limits for Ca 317.933 Radial Recovery = 101.97%							
Cd 226.502†	40377.2	520.12 ug/L	0.330	520.12 ppb	0.330	0.06%	
QC value within limits for Cd 226.502 Recovery = 104.02%							
Co 228.616†	22656.0	523.59 ug/L	1.329	523.59 ppb	1.329	0.25%	
QC value within limits for Co 228.616 Recovery = 104.72%							
Cr 267.716†	41872.0	507.15 ug/L	1.356	507.15 ppb	1.356	0.27%	
QC value within limits for Cr 267.716 Recovery = 101.43%							
Cu 324.752†	158466.8	485.74 ug/L	3.486	485.74 ppb	3.486	0.72%	
QC value within limits for Cu 324.752 Recovery = 97.15%							
Fe 238.204 Radial†	422.7	5141.1 ug/L	96.37	5141.1 ppb	96.37	1.87%	
QC value within limits for Fe 238.204 Radial Recovery = 102.82%							
K 766.490 Radial†	26895.1	5164.1 ug/L	37.25	5164.1 ppb	37.25	0.72%	
QC value within limits for K 766.490 Radial Recovery = 103.28%							
Mg 279.077 IEC†	116.1	5265.6 ug/L	70.22	5265.6 ppb	70.22	1.33%	
QC value within limits for Mg 279.077 IEC Recovery = 105.31%							
Mn 257.610†	422880.3	507.04 ug/L	0.383	507.04 ppb	0.383	0.08%	
QC value within limits for Mn 257.610 Recovery = 101.41%							
Mo 202.031†	6457.7	505.57 ug/L	2.759	505.57 ppb	2.759	0.55%	
QC value within limits for Mo 202.031 Recovery = 101.11%							
Na 589.592 Radial†	35606.7	10271 ug/L	70.9	10271 ppb	70.9	0.69%	
QC value within limits for Na 589.592 Radial Recovery = 102.71%							
Ni 231.604†	18549.1	514.66 ug/L	0.479	514.66 ppb	0.479	0.09%	
QC value within limits for Ni 231.604 Recovery = 102.93%							
P 214.914†	3866.2	2493.1 ug/L	14.59	2493.1 ppb	14.59	0.59%	
QC value within limits for P 214.914 Recovery = 99.72%							
Pb 220.353†	3796.0	516.49 ug/L	3.776	516.49 ppb	3.776	0.73%	
QC value within limits for Pb 220.353 Recovery = 103.30%							
S 181.975 Axial†	645.4	1036.8 ug/L	2.03	1036.8 ppb	2.03	0.20%	
QC value within limits for S 181.975 Axial Recovery = 103.68%							
Sb 206.836†	1343.5	524.04 ug/L	2.779	524.04 ppb	2.779	0.53%	
QC value within limits for Sb 206.836 Recovery = 104.81%							
Se 196.026†	714.3	538.27 ug/L	6.771	538.27 ppb	6.771	1.26%	
QC value within limits for Se 196.026 Recovery = 107.65%							
Si 251.611†	73722.1	2505.5 ug/L	8.11	2505.5 ppb	8.11	0.32%	
QC value within limits for Si 251.611 Recovery = 100.22%							
Sn 189.927†	2560.9	516.28 ug/L	3.417	516.28 ppb	3.417	0.66%	
QC value within limits for Sn 189.927 Recovery = 103.26%							
Sr 421.552†	78011.1	504.96 ug/L	3.122	504.96 ppb	3.122	0.62%	
QC value within limits for Sr 421.552 Recovery = 100.99%							
Ti 334.940†	306641.3	486.98 ug/L	1.945	486.98 ppb	1.945	0.40%	
QC value within limits for Ti 334.940 Recovery = 97.40%							
Tl 190.801†	1478.3	511.11 ug/L	2.653	511.11 ppb	2.653	0.52%	
QC value within limits for Tl 190.801 Recovery = 102.22%							
U 409.014†	17474.1	481.63 ug/L	3.906	481.63 ppb	3.906	0.81%	
QC value within limits for U 409.014 Recovery = 96.33%							
V 292.402†	67847.7	505.91 ug/L	1.997	505.91 ppb	1.997	0.39%	
QC value within limits for V 292.402 Recovery = 101.18%							
Zn 213.857†	47176.5	505.90 ug/L	1.180	505.90 ppb	1.180	0.23%	
QC value within limits for Zn 213.857 Recovery = 101.18%							
SiO2†	73092.6	5291.6 ug/L	40.00	5291.6 ppb	40.00	0.76%	
QC value within limits for SiO2 Recovery = 98.95%							
All analyte(s) passed QC.							

Sequence No.: 17

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 16:35:53

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	4258.8	4258.8	96.9 %		16:37:46
1	Y RADIAL	4695.1	4695.1	97.31 %		16:37:46
1	Al 396.153Radial†	-114.5	-13.9	-12.186 ug/L	-12.186 ppb	16:38:06
1	Ca 317.933Radial†	18.5	-0.7	-1.3287 ug/L	-1.3287 ppb	16:38:06
1	Fe 238.204 Radial†	7.7	-3.1	-38.126 ug/L	-38.126 ppb	16:38:06
1	K 766.490 Radial†	2536.0	130.0	24.970 ug/L	24.970 ppb	16:37:46
1	Mg 279.077 IEC†	1.4	-1.4	-65.186 ug/L	-65.186 ppb	16:38:06
1	Na 589.592 Radial†	-537.6	139.2	40.151 ug/L	40.151 ppb	16:37:46
1	Sr 421.552†	23.9	11.2	0.0723 ug/L	0.0723 ppb	16:37:46
1	Sc 361.383	900330.2	900330.2	102.48 %		16:39:03
1	Y 371.029	758376.3	758376.3	102.57 %		16:39:03
1	Ag 328.068†	152.9	-293.7	-1.4194 ug/L	-1.4194 ppb	16:39:08
1	As 188.979†	-14.2	10.6	5.1672 ug/L	5.1672 ppb	16:39:28
1	B 249.677†	-328.6	147.5	3.6831 ug/L	3.6831 ppb	16:39:28
1	Ba 233.527†	-1.0	6.2	0.0503 ug/L	0.0503 ppb	16:39:28
1	Be 313.107†	-3845.7	99.6	0.0391 ug/L	0.0391 ppb	16:39:08
1	Cd 226.502†	-168.6	13.1	0.1727 ug/L	0.1727 ppb	16:39:28
1	Co 228.616†	-70.5	-17.8	-0.4089 ug/L	-0.4089 ppb	16:39:28
1	Cr 267.716†	62.3	-18.6	-0.2286 ug/L	-0.2286 ppb	16:39:28
1	Cu 324.752†	6011.8	-336.7	-1.0345 ug/L	-1.0345 ppb	16:39:08
1	Mn 257.610†	421.0	-38.9	-0.0477 ug/L	-0.0477 ppb	16:39:28
1	Mo 202.031†	9.4	1.6	0.1217 ug/L	0.1217 ppb	16:39:28
1	Ni 231.604†	80.6	5.7	0.1572 ug/L	0.1572 ppb	16:39:28
1	P 214.914†	198.2	-2.6	-1.4608 ug/L	-1.4608 ppb	16:39:28
1	Pb 220.353†	-62.9	-8.9	-1.2077 ug/L	-1.2077 ppb	16:39:28
1	S 181.975 Axial†	38.1	6.0	9.5898 ug/L	9.5898 ppb	16:39:28
1	Sb 206.836†	39.6	3.9	1.5086 ug/L	1.5086 ppb	16:39:28
1	Se 196.026†	-29.1	-9.0	-6.7040 ug/L	-6.7040 ppb	16:39:28
1	Si 251.611†	533.5	-2.7	-0.0927 ug/L	-0.0927 ppb	16:39:28
1	Sn 189.927†	23.3	9.3	1.8719 ug/L	1.8719 ppb	16:39:28
1	Ti 334.940†	-1294.0	-93.4	-0.1435 ug/L	-0.1435 ppb	16:39:08
1	Tl 190.801†	-39.0	-10.5	-3.6055 ug/L	-3.6055 ppb	16:39:28
1	U 409.014†	-2456.2	28.5	0.7942 ug/L	0.7942 ppb	16:39:03
1	V 292.402†	-1387.7	-6.7	-0.0411 ug/L	-0.0411 ppb	16:39:08
1	Zn 213.857†	573.7	-29.6	-0.3148 ug/L	-0.3148 ppb	16:39:28
1	SiO2†	547.2	3.3	0.2343 ug/L	0.2343 ppb	16:40:34
2	Sc Radial	4290.3	4290.3	97.6 %		16:38:11
2	Y RADIAL	4705.7	4705.7	97.52 %		16:38:11
2	Al 396.153Radial†	-102.6	-0.9	-0.7393 ug/L	-0.7393 ppb	16:38:31
2	Ca 317.933Radial†	23.0	3.8	7.5632 ug/L	7.5632 ppb	16:38:31
2	Fe 238.204 Radial†	13.2	2.4	29.127 ug/L	29.127 ppb	16:38:31
2	K 766.490 Radial†	2627.3	204.2	39.250 ug/L	39.250 ppb	16:38:11
2	Mg 279.077 IEC†	1.0	-1.8	-81.627 ug/L	-81.627 ppb	16:38:31
2	Na 589.592 Radial†	-546.7	133.9	38.623 ug/L	38.623 ppb	16:38:11
2	Sr 421.552†	21.7	8.8	0.0568 ug/L	0.0568 ppb	16:38:11
2	Sc 361.383	906537.2	906537.2	103.19 %		16:39:33
2	Y 371.029	762836.2	762836.2	103.18 %		16:39:33
2	Ag 328.068†	213.0	-236.5	-1.1254 ug/L	-1.1254 ppb	16:39:38
2	As 188.979†	-23.2	2.0	0.9694 ug/L	0.9694 ppb	16:39:58
2	B 249.677†	-404.6	76.0	1.8901 ug/L	1.8901 ppb	16:39:58
2	Ba 233.527†	-10.0	-2.6	-0.0213 ug/L	-0.0213 ppb	16:39:58
2	Be 313.107†	-3951.6	22.6	0.0091 ug/L	0.0091 ppb	16:39:38
2	Cd 226.502†	-171.4	11.5	0.1453 ug/L	0.1453 ppb	16:39:58
2	Co 228.616†	-52.0	0.6	0.0139 ug/L	0.0139 ppb	16:39:58
2	Cr 267.716†	56.8	-24.3	-0.2919 ug/L	-0.2919 ppb	16:39:58
2	Cu 324.752†	6048.7	-341.1	-1.0440 ug/L	-1.0440 ppb	16:39:38
2	Mn 257.610†	412.8	-49.7	-0.0534 ug/L	-0.0534 ppb	16:39:58
2	Mo 202.031†	5.3	-2.4	-0.1840 ug/L	-0.1840 ppb	16:39:58
2	Ni 231.604†	75.2	-0.2	-0.0052 ug/L	-0.0052 ppb	16:39:58

2	P 214.914†	211.1	8.6	5.9397 ug/L	5.9397 ppb	16:39:58
2	Pb 220.353†	-55.2	-1.0	-0.1364 ug/L	-0.1364 ppb	16:39:58
2	S 181.975 Axial†	40.4	7.9	12.771 ug/L	12.771 ppb	16:39:58
2	Sb 206.836†	49.6	13.3	5.0142 ug/L	5.0142 ppb	16:39:58
2	Se 196.026†	-17.7	2.2	1.6823 ug/L	1.6823 ppb	16:39:58
2	Si 251.611†	524.1	-15.4	-0.5226 ug/L	-0.5226 ppb	16:39:58
2	Sn 189.927†	16.6	2.6	0.5321 ug/L	0.5321 ppb	16:39:58
2	Ti 334.940†	-1177.3	28.4	0.0530 ug/L	0.0530 ppb	16:39:38
2	Tl 190.801†	-32.1	-3.5	-1.1907 ug/L	-1.1907 ppb	16:39:58
2	U 409.014†	-2508.0	-5.2	-0.1465 ug/L	-0.1465 ppb	16:39:33
2	V 292.402†	-1444.8	-52.7	-0.3961 ug/L	-0.3961 ppb	16:39:38
2	Zn 213.857†	573.5	-33.7	-0.3680 ug/L	-0.3680 ppb	16:39:58
2	SiO2†	548.4	0.8	0.0609 ug/L	0.0609 ppb	16:40:39
3	Sc Radial	4261.2	4261.2	96.9 %		16:38:36
3	Y RADIAL	4646.2	4646.2	96.29 %		16:38:36
3	Al 396.153Radial†	-102.9	-2.0	-1.7492 ug/L	-1.7492 ppb	16:38:56
3	Ca 317.933Radial†	18.4	-0.8	-1.5142 ug/L	-1.5142 ppb	16:38:56
3	Fe 238.204 Radial†	11.3	0.5	6.2923 ug/L	6.2923 ppb	16:38:56
3	K 766.490 Radial†	2523.2	115.2	22.142 ug/L	22.142 ppb	16:38:36
3	Mg 279.077 IEC†	4.4	1.7	74.938 ug/L	74.938 ppb	16:38:56
3	Na 589.592 Radial†	-561.9	114.4	33.000 ug/L	33.000 ppb	16:38:36
3	Sr 421.552†	12.5	-0.6	-0.0039 ug/L	-0.0039 ppb	16:38:36
3	Sc 361.383	895719.1	895719.1	101.96 %		16:40:03
3	Y 371.029	753224.9	753224.9	101.88 %		16:40:03
3	Ag 328.068†	208.3	-238.6	-1.1370 ug/L	-1.1370 ppb	16:40:08
3	As 188.979†	-15.6	9.1	4.4785 ug/L	4.4785 ppb	16:40:28
3	B 249.677†	-375.3	100.0	2.4919 ug/L	2.4919 ppb	16:40:28
3	Ba 233.527†	-9.5	-2.2	-0.0178 ug/L	-0.0178 ppb	16:40:28
3	Be 313.107†	-3782.8	142.0	0.0558 ug/L	0.0558 ppb	16:40:08
3	Cd 226.502†	-172.8	8.2	0.1036 ug/L	0.1036 ppb	16:40:28
3	Co 228.616†	-62.3	-10.1	-0.2307 ug/L	-0.2307 ppb	16:40:28
3	Cr 267.716†	81.8	0.9	0.0131 ug/L	0.0131 ppb	16:40:28
3	Cu 324.752†	5954.3	-362.9	-1.1096 ug/L	-1.1096 ppb	16:40:08
3	Mn 257.610†	420.3	-37.5	-0.0474 ug/L	-0.0474 ppb	16:40:28
3	Mo 202.031†	17.9	10.0	0.7822 ug/L	0.7822 ppb	16:40:28
3	Ni 231.604†	67.1	-7.2	-0.2006 ug/L	-0.2006 ppb	16:40:28
3	P 214.914†	206.0	6.1	4.2949 ug/L	4.2949 ppb	16:40:28
3	Pb 220.353†	-46.8	6.6	0.8930 ug/L	0.8930 ppb	16:40:28
3	S 181.975 Axial†	30.0	-1.7	-2.7750 ug/L	-2.7750 ppb	16:40:28
3	Sb 206.836†	50.7	15.0	5.6804 ug/L	5.6804 ppb	16:40:28
3	Se 196.026†	-22.1	-2.3	-1.6796 ug/L	-1.6796 ppb	16:40:28
3	Si 251.611†	545.6	11.8	0.3937 ug/L	0.3937 ppb	16:40:28
3	Sn 189.927†	20.7	6.8	1.3778 ug/L	1.3778 ppb	16:40:28
3	Ti 334.940†	-1305.6	-111.3	-0.1812 ug/L	-0.1812 ppb	16:40:08
3	Tl 190.801†	-27.9	0.2	0.0769 ug/L	0.0769 ppb	16:40:28
3	U 409.014†	-2629.5	-153.8	-4.2540 ug/L	-4.2540 ppb	16:40:03
3	V 292.402†	-1354.5	19.0	0.1432 ug/L	0.1432 ppb	16:40:08
3	Zn 213.857†	548.4	-51.6	-0.5562 ug/L	-0.5562 ppb	16:40:28
3	SiO2†	524.7	-16.0	-1.1856 ug/L	-1.1856 ppb	16:40:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900862.2	102.54 %	0.618			0.60%
Sc Radial	4270.1	97.1 %	0.40			0.41%
Y 371.029	758145.8	102.54 %	0.651			0.63%
Y RADIAL	4682.3	97.04 %	0.658			0.68%
Ag 328.068†	-256.3	-1.2273 ug/L	0.16649	-1.2273 ppb	0.16649	13.57%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.6	-4.8915 ug/L	6.33741	-4.8915 ppb	6.33741	129.56%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	7.2	3.5384 ug/L	2.25129	3.5384 ppb	2.25129	63.63%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	107.8	2.6884 ug/L	0.91253	2.6884 ppb	0.91253	33.94%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.5	0.0037 ug/L	0.04036	0.0037 ppb	0.04036	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	88.1	0.0346 ug/L	0.02367	0.0346 ppb	0.02367	68.34%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.8	1.5734 ug/L	5.18814	1.5734 ppb	5.18814	329.73%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	10.9	0.1405 ug/L	0.03482	0.1405 ppb	0.03482	24.78%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-9.1	-0.2086 ug/L	0.21226	-0.2086 ppb	0.21226	101.77%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-14.0	-0.1692 ug/L	0.16099	-0.1692 ppb	0.16099	95.17%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-346.9	-1.0627 ug/L	0.04089	-1.0627 ppb	0.04089	3.85%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-0.1	-0.9022 ug/L	34.19898	-0.9022 ppb	34.19898	>999.9%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	149.8	28.787 ug/L	9.1702	28.787 ppb	9.1702	31.85%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-0.5	-23.958 ug/L	86.0405	-23.958 ppb	86.0405	359.13%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-42.0	-0.0495 ug/L	0.00336	-0.0495 ppb	0.00336	6.79%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	3.1	0.2400 ug/L	0.49384	0.2400 ppb	0.49384	205.80%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	129.2	37.258 ug/L	3.7655	37.258 ppb	3.7655	10.11%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-0.6	-0.0162 ug/L	0.17915	-0.0162 ppb	0.17915	>999.9%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	4.0	2.9246 ug/L	3.88587	2.9246 ppb	3.88587	132.87%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-1.1	-0.1504 ug/L	1.05046	-0.1504 ppb	1.05046	698.49%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	4.1	6.5288 ug/L	8.21281	6.5288 ppb	8.21281	125.79%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	10.7	4.0678 ug/L	2.24117	4.0678 ppb	2.24117	55.10%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-3.1	-2.2338 ug/L	4.22052	-2.2338 ppb	4.22052	188.94%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-2.1	-0.0739 ug/L	0.45843	-0.0739 ppb	0.45843	620.64%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	6.3	1.2606 ug/L	0.67756	1.2606 ppb	0.67756	53.75%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	6.5	0.0418 ug/L	0.04025	0.0418 ppb	0.04025	96.41%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-58.7	-0.0906 ug/L	0.12575	-0.0906 ppb	0.12575	138.84%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-4.6	-1.5731 ug/L	1.87076	-1.5731 ppb	1.87076	118.92%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-43.5	-1.2021 ug/L	2.68457	-1.2021 ppb	2.68457	223.32%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-13.4	-0.0980 ug/L	0.27413	-0.0980 ppb	0.27413	279.70%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-38.3	-0.4130 ug/L	0.12685	-0.4130 ppb	0.12685	30.71%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-4.0	-0.2968 ug/L	0.77459	-0.2968 ppb	0.77459	261.00%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

=====
Analysis Begun

Start Time: 2/22/2010 17:12:56

Plasma On Time: 2/22/2010 05:55:10

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\022210.sif

Batch ID:

Results Data Set: 022210

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

=====
Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 17:12:57

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4187.1	4187.1	95.3 %		17:14:49
1	Y RADIAL	4564.3	4564.3	94.60 %		17:14:49
1	Al 396.153Radial†	5211.0	5574.9	4850.0 ug/L	4850.0 ppb	17:14:49
1	Ca 317.933Radial†	2511.7	2617.1	5197.1 ug/L	5197.1 ppb	17:15:09
1	Fe 238.204 Radial†	426.7	436.9	5313.9 ug/L	5313.9 ppb	17:15:09
1	K 766.490 Radial†	28061.3	26972.1	5178.8 ug/L	5178.8 ppb	17:14:49
1	Mg 279.077 IEC†	119.8	122.9	5575.8 ug/L	5575.8 ppb	17:15:09
1	Na 589.592 Radial†	34110.4	36504.3	10530 ug/L	10530 ppb	17:14:49
1	Sr 421.552†	74978.0	78701.1	509.43 ug/L	509.43 ppb	17:14:49
1	Sc 361.383	898855.5	898855.5	102.31 %		17:16:06
1	Y 371.029	746367.2	746367.2	100.95 %		17:16:06
1	Ag 328.068†	107503.6	104629.4	504.34 ug/L	504.34 ppb	17:16:11
1	As 188.979†	1051.5	1052.2	520.26 ug/L	520.26 ppb	17:16:32
1	B 249.677†	19843.0	19862.3	492.73 ug/L	492.73 ppb	17:16:11
1	Ba 233.527†	62758.1	61345.9	514.04 ug/L	514.04 ppb	17:16:11
1	Be 313.107†	1293320.8	1267924.1	502.76 ug/L	502.76 ppb	17:16:06
1	Cd 226.502†	41501.5	40740.5	524.79 ug/L	524.79 ppb	17:16:11
1	Co 228.616†	23450.9	22971.6	530.87 ug/L	530.87 ppb	17:16:11
1	Cr 267.716†	43259.2	42201.5	511.15 ug/L	511.15 ppb	17:16:11
1	Cu 324.752†	170302.0	160247.7	491.21 ug/L	491.21 ppb	17:16:11
1	Mn 257.610†	435416.3	425119.4	509.73 ug/L	509.73 ppb	17:16:06
1	Mo 202.031†	6640.6	6482.9	507.56 ug/L	507.56 ppb	17:16:32
1	Ni 231.604†	19175.7	18669.0	517.98 ug/L	517.98 ppb	17:16:11
1	P 214.914†	4174.7	3884.3	2503.9 ug/L	2503.9 ppb	17:16:32
1	Pb 220.353†	3848.2	3813.7	518.86 ug/L	518.86 ppb	17:16:32
1	S 181.975 Axial†	692.2	645.4	1036.8 ug/L	1036.8 ppb	17:16:32
1	Sb 206.836†	1416.6	1349.8	526.47 ug/L	526.47 ppb	17:16:32
1	Se 196.026†	714.4	717.6	541.21 ug/L	541.21 ppb	17:16:32
1	Si 251.611†	77012.2	74747.3	2540.4 ug/L	2540.4 ppb	17:16:11
1	Sn 189.927†	2643.0	2569.7	518.07 ug/L	518.07 ppb	17:16:32
1	Ti 334.940†	315819.2	309846.1	492.06 ug/L	492.06 ppb	17:16:11
1	Tl 190.801†	1504.4	1498.0	517.89 ug/L	517.89 ppb	17:16:32
1	U 409.014†	15601.8	17674.2	487.14 ug/L	487.14 ppb	17:16:11
1	V 292.402†	68496.7	68295.1	509.22 ug/L	509.22 ppb	17:16:11
1	Zn 213.857†	49399.8	47693.1	511.43 ug/L	511.43 ppb	17:16:11
1	SiO2†	76901.8	74631.9	5403.3 ug/L	5403.3 ppb	17:17:39
2	Sc Radial	4234.5	4234.5	96.3 %		17:15:14
2	Y RADIAL	4634.8	4634.8	96.06 %		17:15:14
2	Al 396.153Radial†	5288.9	5594.6	4867.3 ug/L	4867.3 ppb	17:15:14
2	Ca 317.933Radial†	2499.9	2575.3	5114.0 ug/L	5114.0 ppb	17:15:34
2	Fe 238.204 Radial†	425.8	430.9	5241.6 ug/L	5241.6 ppb	17:15:34
2	K 766.490 Radial†	28613.0	27215.1	5225.5 ug/L	5225.5 ppb	17:15:14
2	Mg 279.077 IEC†	118.7	120.4	5462.4 ug/L	5462.4 ppb	17:15:34
2	Na 589.592 Radial†	34343.5	36345.5	10484 ug/L	10484 ppb	17:15:14
2	Sr 421.552†	75797.5	78670.6	509.23 ug/L	509.23 ppb	17:15:14
2	Sc 361.383	899773.3	899773.3	102.42 %		17:16:37
2	Y 371.029	745858.9	745858.9	100.88 %		17:16:37

2	Ag 328.068†	107567.2	104584.4	504.10 ug/L	504.10 ppb	17:16:43
2	As 188.979†	1059.9	1059.3	523.76 ug/L	523.76 ppb	17:17:03
2	B 249.677†	19895.3	19893.6	493.53 ug/L	493.53 ppb	17:16:43
2	Ba 233.527†	62623.8	61152.2	512.41 ug/L	512.41 ppb	17:16:43
2	Be 313.107†	1292452.8	1265787.1	501.91 ug/L	501.91 ppb	17:16:37
2	Cd 226.502†	41380.8	40581.3	522.74 ug/L	522.74 ppb	17:16:43
2	Co 228.616†	23425.1	22923.0	529.75 ug/L	529.75 ppb	17:16:43
2	Cr 267.716†	43335.5	42232.9	511.52 ug/L	511.52 ppb	17:16:43
2	Cu 324.752†	170825.7	160589.2	492.25 ug/L	492.25 ppb	17:16:43
2	Mn 257.610†	436620.1	425860.7	510.62 ug/L	510.62 ppb	17:16:37
2	Mo 202.031†	6639.5	6475.2	506.95 ug/L	506.95 ppb	17:17:03
2	Ni 231.604†	19133.4	18608.6	516.30 ug/L	516.30 ppb	17:16:43
2	P 214.914†	4198.8	3903.7	2516.8 ug/L	2516.8 ppb	17:17:03
2	Pb 220.353†	3853.2	3814.7	519.01 ug/L	519.01 ppb	17:17:03
2	S 181.975 Axial†	691.1	643.6	1034.0 ug/L	1034.0 ppb	17:17:03
2	Sb 206.836†	1409.8	1341.8	523.41 ug/L	523.41 ppb	17:17:03
2	Se 196.026†	717.6	720.0	542.74 ug/L	542.74 ppb	17:17:03
2	Si 251.611†	76954.0	74613.7	2535.9 ug/L	2535.9 ppb	17:16:43
2	Sn 189.927†	2637.5	2561.7	516.45 ug/L	516.45 ppb	17:17:03
2	Ti 334.940†	316117.0	309822.0	492.02 ug/L	492.02 ppb	17:16:43
2	Tl 190.801†	1510.0	1502.0	519.26 ug/L	519.26 ppb	17:17:03
2	U 409.014†	15803.0	17855.1	492.15 ug/L	492.15 ppb	17:16:43
2	V 292.402†	68532.7	68262.0	508.98 ug/L	508.98 ppb	17:16:43
2	Zn 213.857†	49383.1	47627.6	510.74 ug/L	510.74 ppb	17:16:43
2	SiO2†	76416.8	74081.7	5363.4 ug/L	5363.4 ppb	17:17:44
3	Sc Radial	4232.5	4232.5	96.3 %		17:15:39
3	Y RADIAL	4593.8	4593.8	95.21 %		17:15:39
3	Al 396.153Radial†	5247.4	5554.0	4831.9 ug/L	4831.9 ppb	17:15:39
3	Ca 317.933Radial†	2519.4	2596.8	5156.7 ug/L	5156.7 ppb	17:15:59
3	Fe 238.204 Radial†	426.1	431.4	5246.7 ug/L	5246.7 ppb	17:15:59
3	K 766.490 Radial†	28294.2	26897.8	5164.6 ug/L	5164.6 ppb	17:15:39
3	Mg 279.077 IEC†	115.3	116.9	5302.5 ug/L	5302.5 ppb	17:15:59
3	Na 589.592 Radial†	34127.1	36137.3	10424 ug/L	10424 ppb	17:15:39
3	Sr 421.552†	75242.8	78131.1	505.74 ug/L	505.74 ppb	17:15:39
3	Sc 361.383	904294.2	904294.2	102.93 %		17:17:08
3	Y 371.029	750093.8	750093.8	101.45 %		17:17:08
3	Ag 328.068†	107526.3	104019.5	501.40 ug/L	501.40 ppb	17:17:14
3	As 188.979†	1047.6	1042.2	515.35 ug/L	515.35 ppb	17:17:34
3	B 249.677†	19909.6	19810.4	491.46 ug/L	491.46 ppb	17:17:14
3	Ba 233.527†	62817.5	61034.7	511.43 ug/L	511.43 ppb	17:17:14
3	Be 313.107†	1300272.1	1267074.8	502.41 ug/L	502.41 ppb	17:17:08
3	Cd 226.502†	41531.6	40525.9	522.03 ug/L	522.03 ppb	17:17:14
3	Co 228.616†	23400.9	22785.2	526.57 ug/L	526.57 ppb	17:17:14
3	Cr 267.716†	43402.4	42086.3	509.75 ug/L	509.75 ppb	17:17:14
3	Cu 324.752†	170232.9	159179.5	487.93 ug/L	487.93 ppb	17:17:14
3	Mn 257.610†	437263.9	424354.9	508.82 ug/L	508.82 ppb	17:17:08
3	Mo 202.031†	6645.8	6448.9	504.90 ug/L	504.90 ppb	17:17:34
3	Ni 231.604†	19218.8	18598.2	516.02 ug/L	516.02 ppb	17:17:14
3	P 214.914†	4164.8	3850.1	2481.7 ug/L	2481.7 ppb	17:17:34
3	Pb 220.353†	3844.7	3787.6	515.33 ug/L	515.33 ppb	17:17:34
3	S 181.975 Axial†	695.0	644.0	1034.6 ug/L	1034.6 ppb	17:17:34
3	Sb 206.836†	1416.1	1341.0	523.08 ug/L	523.08 ppb	17:17:34
3	Se 196.026†	714.3	713.3	537.87 ug/L	537.87 ppb	17:17:34
3	Si 251.611†	76889.9	74175.8	2521.0 ug/L	2521.0 ppb	17:17:14
3	Sn 189.927†	2646.2	2557.3	515.57 ug/L	515.57 ppb	17:17:34
3	Ti 334.940†	316343.8	308499.3	489.94 ug/L	489.94 ppb	17:17:14
3	Tl 190.801†	1500.7	1485.5	513.61 ug/L	513.61 ppb	17:17:34
3	U 409.014†	15430.1	17415.7	480.00 ug/L	480.00 ppb	17:17:14
3	V 292.402†	68723.9	68113.2	507.84 ug/L	507.84 ppb	17:17:14
3	Zn 213.857†	49365.5	47369.4	507.96 ug/L	507.96 ppb	17:17:14
3	SiO2†	76436.4	73727.7	5337.7 ug/L	5337.7 ppb	17:17:49

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900974.3	102.56 %	0.331			0.32%
Sc Radial	4218.0	96.0 %	0.61			0.64%
Y 371.029	747440.0	101.09 %	0.313			0.31%
Y RADIAL	4597.6	95.29 %	0.734			0.77%
Ag 328.068†	104411.1	503.28 ug/L	1.633	503.28 ppb	1.633	0.32%

QC value within limits for Ag 328.068 Recovery = 100.66%							
Al 396.153Radial†	5574.5	4849.7 ug/L	17.68	4849.7 ppb	17.68	0.36%	
QC value within limits for Al 396.153Radial Recovery = 96.99%							
As 188.979†	1051.2	519.79 ug/L	4.226	519.79 ppb	4.226	0.81%	
QC value within limits for As 188.979 Recovery = 103.96%							
B 249.677†	19855.4	492.57 ug/L	1.043	492.57 ppb	1.043	0.21%	
QC value within limits for B 249.677 Recovery = 98.51%							
Ba 233.527†	61177.6	512.63 ug/L	1.316	512.63 ppb	1.316	0.26%	
QC value within limits for Ba 233.527 Recovery = 102.53%							
Be 313.107†	1266928.7	502.36 ug/L	0.425	502.36 ppb	0.425	0.08%	
QC value within limits for Be 313.107 Recovery = 100.47%							
Ca 317.933Radial†	2596.4	5155.9 ug/L	41.55	5155.9 ppb	41.55	0.81%	
QC value within limits for Ca 317.933Radial Recovery = 103.12%							
Cd 226.502†	40615.9	523.19 ug/L	1.433	523.19 ppb	1.433	0.27%	
QC value within limits for Cd 226.502 Recovery = 104.64%							
Co 228.616†	22893.2	529.06 ug/L	2.235	529.06 ppb	2.235	0.42%	
QC value within limits for Co 228.616 Recovery = 105.81%							
Cr 267.716†	42173.6	510.81 ug/L	0.932	510.81 ppb	0.932	0.18%	
QC value within limits for Cr 267.716 Recovery = 102.16%							
Cu 324.752†	160005.5	490.46 ug/L	2.251	490.46 ppb	2.251	0.46%	
QC value within limits for Cu 324.752 Recovery = 98.09%							
Fe 238.204 Radial†	433.1	5267.4 ug/L	40.35	5267.4 ppb	40.35	0.77%	
QC value within limits for Fe 238.204 Radial Recovery = 105.35%							
K 766.490 Radial†	27028.3	5189.6 ug/L	31.91	5189.6 ppb	31.91	0.61%	
QC value within limits for K 766.490 Radial Recovery = 103.79%							
Mg 279.077 IEC†	120.1	5446.9 ug/L	137.32	5446.9 ppb	137.32	2.52%	
QC value within limits for Mg 279.077 IEC Recovery = 108.94%							
Mn 257.610†	425111.7	509.72 ug/L	0.899	509.72 ppb	0.899	0.18%	
QC value within limits for Mn 257.610 Recovery = 101.94%							
Mo 202.031†	6469.0	506.47 ug/L	1.396	506.47 ppb	1.396	0.28%	
QC value within limits for Mo 202.031 Recovery = 101.29%							
Na 589.592 Radial†	36329.0	10479 ug/L	53.1	10479 ppb	53.1	0.51%	
QC value within limits for Na 589.592 Radial Recovery = 104.79%							
Ni 231.604†	18625.3	516.77 ug/L	1.061	516.77 ppb	1.061	0.21%	
QC value within limits for Ni 231.604 Recovery = 103.35%							
P 214.914†	3879.4	2500.8 ug/L	17.72	2500.8 ppb	17.72	0.71%	
QC value within limits for P 214.914 Recovery = 100.03%							
Pb 220.353†	3805.3	517.73 ug/L	2.084	517.73 ppb	2.084	0.40%	
QC value within limits for Pb 220.353 Recovery = 103.55%							
S 181.975 Axial†	644.3	1035.2 ug/L	1.49	1035.2 ppb	1.49	0.14%	
QC value within limits for S 181.975 Axial Recovery = 103.52%							
Sb 206.836†	1344.2	524.32 ug/L	1.871	524.32 ppb	1.871	0.36%	
QC value within limits for Sb 206.836 Recovery = 104.86%							
Se 196.026†	717.0	540.61 ug/L	2.490	540.61 ppb	2.490	0.46%	
QC value within limits for Se 196.026 Recovery = 108.12%							
Si 251.611†	74512.2	2532.4 ug/L	10.17	2532.4 ppb	10.17	0.40%	
QC value within limits for Si 251.611 Recovery = 101.30%							
Sn 189.927†	2562.9	516.70 ug/L	1.269	516.70 ppb	1.269	0.25%	
QC value within limits for Sn 189.927 Recovery = 103.34%							
Sr 421.552†	78500.9	508.14 ug/L	2.075	508.14 ppb	2.075	0.41%	
QC value within limits for Sr 421.552 Recovery = 101.63%							
Ti 334.940†	309389.2	491.34 ug/L	1.211	491.34 ppb	1.211	0.25%	
QC value within limits for Ti 334.940 Recovery = 98.27%							
Tl 190.801†	1495.2	516.92 ug/L	2.948	516.92 ppb	2.948	0.57%	
QC value within limits for Tl 190.801 Recovery = 103.38%							
U 409.014†	17648.4	486.43 ug/L	6.107	486.43 ppb	6.107	1.26%	
QC value within limits for U 409.014 Recovery = 97.29%							
V 292.402†	68223.4	508.68 ug/L	0.740	508.68 ppb	0.740	0.15%	
QC value within limits for V 292.402 Recovery = 101.74%							
Zn 213.857†	47563.4	510.05 ug/L	1.841	510.05 ppb	1.841	0.36%	
QC value within limits for Zn 213.857 Recovery = 102.01%							
SiO2†	74147.1	5368.1 ug/L	33.04	5368.1 ppb	33.04	0.62%	
QC value within limits for SiO2 Recovery = 100.39%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 17:19:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4198.0	4198.0	95.5 %		17:21:52
1	Y RADIAL	4605.6	4605.6	95.45 %		17:21:52
1	Al 396.153Radial†	-103.8	-4.5	-3.8723 ug/L	-3.8723 ppb	17:22:12
1	Ca 317.933Radial†	23.9	5.3	10.473 ug/L	10.473 ppb	17:22:12
1	Fe 238.204 Radial†	10.0	-0.6	-7.6995 ug/L	-7.6995 ppb	17:22:12
1	K 766.490 Radial†	2659.4	297.1	57.100 ug/L	57.100 ppb	17:21:52
1	Mg 279.077 IEC†	2.5	-0.2	-10.856 ug/L	-10.856 ppb	17:22:12
1	Na 589.592 Radial†	-562.0	105.6	30.460 ug/L	30.460 ppb	17:21:52
1	Sr 421.552†	44.9	33.6	0.2171 ug/L	0.2171 ppb	17:21:52
1	Sc 361.383	911585.0	911585.0	103.76 %		17:23:09
1	Y 371.029	765784.7	765784.7	103.57 %		17:23:09
1	Ag 328.068†	262.0	-190.5	-0.9129 ug/L	-0.9129 ppb	17:23:14
1	As 188.979†	-18.1	7.1	3.4580 ug/L	3.4580 ppb	17:23:34
1	B 249.677†	-377.3	104.4	2.6053 ug/L	2.6053 ppb	17:23:34
1	Ba 233.527†	-8.9	-1.4	-0.0133 ug/L	-0.0133 ppb	17:23:34
1	Be 313.107†	-3938.1	56.9	0.0224 ug/L	0.0224 ppb	17:23:14
1	Cd 226.502†	-188.8	-4.4	-0.0565 ug/L	-0.0565 ppb	17:23:34
1	Co 228.616†	-65.0	-11.6	-0.2698 ug/L	-0.2698 ppb	17:23:34
1	Cr 267.716†	72.5	-9.5	-0.1138 ug/L	-0.1138 ppb	17:23:34
1	Cu 324.752†	6084.3	-339.2	-1.0376 ug/L	-1.0376 ppb	17:23:14
1	Mn 257.610†	404.7	-59.7	-0.0718 ug/L	-0.0718 ppb	17:23:34
1	Mo 202.031†	-1.6	-9.1	-0.7091 ug/L	-0.7091 ppb	17:23:34
1	Ni 231.604†	65.0	-10.4	-0.2880 ug/L	-0.2880 ppb	17:23:34
1	P 214.914†	200.5	-2.8	-1.6336 ug/L	-1.6336 ppb	17:23:34
1	Pb 220.353†	-63.8	-9.0	-1.2169 ug/L	-1.2169 ppb	17:23:34
1	S 181.975 Axial†	34.0	1.6	2.5622 ug/L	2.5622 ppb	17:23:34
1	Sb 206.836†	35.2	-0.8	-0.2918 ug/L	-0.2918 ppb	17:23:34
1	Se 196.026†	-24.6	-4.3	-3.1776 ug/L	-3.1776 ppb	17:23:34
1	Si 251.611†	506.7	-34.9	-1.1807 ug/L	-1.1807 ppb	17:23:34
1	Sn 189.927†	17.9	3.7	0.7562 ug/L	0.7562 ppb	17:23:34
1	Ti 334.940†	-1248.1	-33.6	-0.0489 ug/L	-0.0489 ppb	17:23:14
1	Tl 190.801†	-30.3	-1.6	-0.5331 ug/L	-0.5331 ppb	17:23:34
1	U 409.014†	-2697.6	-174.5	-4.8248 ug/L	-4.8248 ppb	17:23:09
1	V 292.402†	-1465.8	-65.2	-0.4979 ug/L	-0.4979 ppb	17:23:14
1	Zn 213.857†	585.0	-25.7	-0.2737 ug/L	-0.2737 ppb	17:23:34
1	SiO2†	516.3	-33.1	-2.3829 ug/L	-2.3829 ppb	17:24:40
2	Sc Radial	4345.2	4345.2	98.9 %		17:22:17
2	Y RADIAL	4743.7	4743.7	98.31 %		17:22:17
2	Al 396.153Radial†	-119.1	-16.2	-14.179 ug/L	-14.179 ppb	17:22:37
2	Ca 317.933Radial†	22.4	2.9	5.7762 ug/L	5.7762 ppb	17:22:37
2	Fe 238.204 Radial†	10.3	-0.7	-7.9387 ug/L	-7.9387 ppb	17:22:37
2	K 766.490 Radial†	2595.1	137.6	26.451 ug/L	26.451 ppb	17:22:17
2	Mg 279.077 IEC†	1.0	-1.8	-83.383 ug/L	-83.383 ppb	17:22:37
2	Na 589.592 Radial†	-611.7	75.2	21.697 ug/L	21.697 ppb	17:22:17
2	Sr 421.552†	61.6	48.9	0.3163 ug/L	0.3163 ppb	17:22:17
2	Sc 361.383	909535.8	909535.8	103.53 %		17:23:39
2	Y 371.029	764163.5	764163.5	103.35 %		17:23:39
2	Ag 328.068†	197.7	-252.0	-1.2098 ug/L	-1.2098 ppb	17:23:44
2	As 188.979†	-20.6	4.6	2.2410 ug/L	2.2410 ppb	17:24:04
2	B 249.677†	-392.0	89.5	2.2325 ug/L	2.2325 ppb	17:24:04
2	Ba 233.527†	-4.7	2.6	0.0215 ug/L	0.0215 ppb	17:24:04
2	Be 313.107†	-3921.8	64.1	0.0250 ug/L	0.0250 ppb	17:23:44
2	Cd 226.502†	-164.2	19.0	0.2455 ug/L	0.2455 ppb	17:24:04
2	Co 228.616†	-67.2	-13.8	-0.3194 ug/L	-0.3194 ppb	17:24:04
2	Cr 267.716†	63.4	-18.2	-0.2204 ug/L	-0.2204 ppb	17:24:04
2	Cu 324.752†	6005.2	-402.4	-1.2344 ug/L	-1.2344 ppb	17:23:44
2	Mn 257.610†	411.3	-52.4	-0.0602 ug/L	-0.0602 ppb	17:24:04
2	Mo 202.031†	5.2	-2.5	-0.1947 ug/L	-0.1947 ppb	17:24:04
2	Ni 231.604†	71.1	-4.3	-0.1202 ug/L	-0.1202 ppb	17:24:04

2	P 214.914†	210.6	7.5	5.2611 ug/L	5.2611 ppb	17:24:04
2	Pb 220.353†	-49.3	4.9	0.6584 ug/L	0.6584 ppb	17:24:04
2	S 181.975 Axial†	36.7	4.2	6.8186 ug/L	6.8186 ppb	17:24:04
2	Sb 206.836†	42.8	6.6	2.4975 ug/L	2.4975 ppb	17:24:04
2	Se 196.026†	-21.8	-1.7	-1.2937 ug/L	-1.2937 ppb	17:24:04
2	Si 251.611†	507.1	-33.4	-1.1359 ug/L	-1.1359 ppb	17:24:04
2	Sn 189.927†	23.7	9.4	1.8867 ug/L	1.8867 ppb	17:24:04
2	Ti 334.940†	-1319.8	-105.5	-0.1603 ug/L	-0.1603 ppb	17:23:44
2	Tl 190.801†	-29.9	-1.3	-0.4479 ug/L	-0.4479 ppb	17:24:04
2	U 409.014†	-2482.1	27.8	0.7695 ug/L	0.7695 ppb	17:23:39
2	V 292.402†	-1382.6	12.0	0.0872 ug/L	0.0872 ppb	17:23:44
2	Zn 213.857†	609.0	-1.2	-0.0094 ug/L	-0.0094 ppb	17:24:04
2	SiO2†	523.6	-24.9	-1.8055 ug/L	-1.8055 ppb	17:24:45
3	Sc Radial	4295.1	4295.1	97.7 %		17:22:42
3	Y RADIAL	4684.2	4684.2	97.08 %		17:22:42
3	Al 396.153Radial†	-94.1	7.9	6.9031 ug/L	6.9031 ppb	17:23:02
3	Ca 317.933Radial†	20.8	1.5	3.0207 ug/L	3.0207 ppb	17:23:02
3	Fe 238.204 Radial†	9.6	-1.3	-15.947 ug/L	-15.947 ppb	17:23:02
3	K 766.490 Radial†	2496.5	67.4	12.948 ug/L	12.948 ppb	17:22:42
3	Mg 279.077 IEC†	-0.5	-3.4	-153.63 ug/L	-153.63 ppb	17:23:02
3	Na 589.592 Radial†	-576.4	104.1	30.026 ug/L	30.026 ppb	17:22:42
3	Sr 421.552†	10.7	-2.5	-0.0164 ug/L	-0.0164 ppb	17:22:42
3	Sc 361.383	915439.0	915439.0	104.20 %		17:24:09
3	Y 371.029	769867.1	769867.1	104.13 %		17:24:09
3	Ag 328.068†	273.8	-180.2	-0.8689 ug/L	-0.8689 ppb	17:24:14
3	As 188.979†	-24.9	0.6	0.2853 ug/L	0.2853 ppb	17:24:34
3	B 249.677†	-399.3	84.9	2.1186 ug/L	2.1186 ppb	17:24:34
3	Ba 233.527†	-17.4	-9.5	-0.0813 ug/L	-0.0813 ppb	17:24:34
3	Be 313.107†	-3903.8	105.8	0.0416 ug/L	0.0416 ppb	17:24:14
3	Cd 226.502†	-169.7	14.7	0.1910 ug/L	0.1910 ppb	17:24:34
3	Co 228.616†	-65.5	-11.8	-0.2709 ug/L	-0.2709 ppb	17:24:34
3	Cr 267.716†	71.4	-10.8	-0.1325 ug/L	-0.1325 ppb	17:24:34
3	Cu 324.752†	6056.4	-390.7	-1.1977 ug/L	-1.1977 ppb	17:24:14
3	Mn 257.610†	408.0	-58.2	-0.0651 ug/L	-0.0651 ppb	17:24:34
3	Mo 202.031†	12.2	4.1	0.3213 ug/L	0.3213 ppb	17:24:34
3	Ni 231.604†	73.4	-2.6	-0.0712 ug/L	-0.0712 ppb	17:24:34
3	P 214.914†	197.7	-6.3	-3.9583 ug/L	-3.9583 ppb	17:24:34
3	Pb 220.353†	-57.1	-2.3	-0.3069 ug/L	-0.3069 ppb	17:24:34
3	S 181.975 Axial†	35.3	2.7	4.2728 ug/L	4.2728 ppb	17:24:34
3	Sb 206.836†	40.0	3.6	1.3625 ug/L	1.3625 ppb	17:24:34
3	Se 196.026†	-15.7	4.3	3.0804 ug/L	3.0804 ppb	17:24:34
3	Si 251.611†	503.7	-39.8	-1.3616 ug/L	-1.3616 ppb	17:24:34
3	Sn 189.927†	11.5	-2.5	-0.4980 ug/L	-0.4980 ppb	17:24:34
3	Ti 334.940†	-1282.9	-61.9	-0.0846 ug/L	-0.0846 ppb	17:24:14
3	Tl 190.801†	-34.7	-5.7	-1.9458 ug/L	-1.9458 ppb	17:24:34
3	U 409.014†	-2586.2	-56.7	-1.5654 ug/L	-1.5654 ppb	17:24:09
3	V 292.402†	-1478.5	-71.4	-0.5245 ug/L	-0.5245 ppb	17:24:14
3	Zn 213.857†	582.6	-30.4	-0.3243 ug/L	-0.3243 ppb	17:24:34
3	SiO2†	521.7	-30.0	-2.1862 ug/L	-2.1862 ppb	17:24:50

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912186.6	103.83 %	0.341			0.33%
Sc Radial	4279.5	97.4 %	1.70			1.75%
Y 371.029	766605.1	103.69 %	0.398			0.38%
Y RADIAL	4677.8	96.95 %	1.436			1.48%
Ag 328.068†	-207.6	-0.9972 ug/L	0.18540	-0.9972 ppb	0.18540	18.59%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.3	-3.7161 ug/L	10.54199	-3.7161 ppb	10.54199	283.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.1	1.9948 ug/L	1.60063	1.9948 ppb	1.60063	80.24%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	92.9	2.3188 ug/L	0.25458	2.3188 ppb	0.25458	10.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.8	-0.0244 ug/L	0.05230	-0.0244 ppb	0.05230	214.42%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	75.6	0.0297 ug/L	0.01045	0.0297 ppb	0.01045	35.24%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.2	6.4234 ug/L	3.76818	6.4234 ppb	3.76818	58.66%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	9.8	0.1267 ug/L	0.16094	0.1267 ppb	0.16094	127.05%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-12.4	-0.2867 ug/L	0.02835	-0.2867 ppb	0.02835	9.89%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-12.8	-0.1556 ug/L	0.05695	-0.1556 ppb	0.05695	36.61%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-377.5	-1.1565 ug/L	0.10466	-1.1565 ppb	0.10466	9.05%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-0.9	-10.529 ug/L	4.6943	-10.529 ppb	4.6943	44.59%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	167.4	32.167 ug/L	22.6241	32.167 ppb	22.6241	70.33%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-1.8	-82.624 ug/L	71.3911	-82.624 ppb	71.3911	86.40%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-56.8	-0.0657 ug/L	0.00584	-0.0657 ppb	0.00584	8.89%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	-2.5	-0.1942 ug/L	0.51518	-0.1942 ppb	0.51518	265.33%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	95.0	27.394 ug/L	4.9388	27.394 ppb	4.9388	18.03%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-5.8	-0.1598 ug/L	0.11368	-0.1598 ppb	0.11368	71.14%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-0.5	-0.1103 ug/L	4.79474	-0.1103 ppb	4.79474	>999.9%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-2.1	-0.2885 ug/L	0.93776	-0.2885 ppb	0.93776	325.08%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	2.8	4.5512 ug/L	2.14180	4.5512 ppb	2.14180	47.06%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	3.1	1.1894 ug/L	1.40268	1.1894 ppb	1.40268	117.93%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-0.6	-0.4636 ug/L	3.21055	-0.4636 ppb	3.21055	692.50%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-36.1	-1.2261 ug/L	0.11946	-1.2261 ppb	0.11946	9.74%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	3.5	0.7150 ug/L	1.19291	0.7150 ppb	1.19291	166.84%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	26.6	0.1723 ug/L	0.17082	0.1723 ppb	0.17082	99.13%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-67.0	-0.0979 ug/L	0.05689	-0.0979 ppb	0.05689	58.09%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-2.8	-0.9756 ug/L	0.84131	-0.9756 ppb	0.84131	86.23%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-67.8	-1.8736 ug/L	2.80988	-1.8736 ppb	2.80988	149.98%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-41.5	-0.3117 ug/L	0.34574	-0.3117 ppb	0.34574	110.90%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-19.1	-0.2025 ug/L	0.16911	-0.2025 ppb	0.16911	83.52%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-29.3	-2.1249 ug/L	0.29356	-2.1249 ppb	0.29356	13.82%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/22/2010 17:49:18

Plasma On Time: 2/22/2010 05:55:10

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\022210.sif

Batch ID:

Results Data Set: 022210

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

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 17:49:19

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	4245.3	4245.3	96.6 %		17:51:11
1	Y RADIAL	4632.4	4632.4	96.01 %		17:51:11
1	Al 396.153Radial†	5240.0	5529.9	4810.2 ug/L	4810.2 ppb	17:51:11
1	Ca 317.933Radial†	2557.5	2628.4	5219.5 ug/L	5219.5 ppb	17:51:31
1	Fe 238.204 Radial†	442.4	447.0	5436.6 ug/L	5436.6 ppb	17:51:31
1	K 766.490 Radial†	28499.7	27022.0	5188.2 ug/L	5188.2 ppb	17:51:11
1	Mg 279.077 IEC†	118.7	120.0	5445.3 ug/L	5445.3 ppb	17:51:31
1	Na 589.592 Radial†	36057.6	38029.4	10970 ug/L	10970 ppb	17:51:11
1	Sr 421.552†	77336.0	80063.1	518.25 ug/L	518.25 ppb	17:51:11
1	Sc 361.383	883940.3	883940.3	100.62 %		17:52:29
1	Y 371.029	734348.3	734348.3	99.322 %		17:52:29
1	Ag 328.068†	108436.7	107329.7	517.36 ug/L	517.36 ppb	17:52:34
1	As 188.979†	1060.5	1078.5	533.28 ug/L	533.28 ppb	17:52:54
1	B 249.677†	20029.6	20375.1	505.46 ug/L	505.46 ppb	17:52:34
1	Ba 233.527†	63192.2	62812.4	526.33 ug/L	526.33 ppb	17:52:34
1	Be 313.107†	1277398.0	1273428.2	504.96 ug/L	504.96 ppb	17:52:29
1	Cd 226.502†	41836.7	41758.1	537.90 ug/L	537.90 ppb	17:52:34
1	Co 228.616†	23597.0	23503.5	543.16 ug/L	543.16 ppb	17:52:34
1	Cr 267.716†	43680.0	43333.2	524.86 ug/L	524.86 ppb	17:52:34
1	Cu 324.752†	171912.7	164657.1	504.72 ug/L	504.72 ppb	17:52:34
1	Mn 257.610†	429938.5	426856.1	511.83 ug/L	511.83 ppb	17:52:29
1	Mo 202.031†	6664.2	6615.8	517.96 ug/L	517.96 ppb	17:52:54
1	Ni 231.604†	19369.8	19178.2	532.11 ug/L	532.11 ppb	17:52:34
1	P 214.914†	4187.1	3965.5	2555.6 ug/L	2555.6 ppb	17:52:54
1	Pb 220.353†	3859.8	3888.6	529.03 ug/L	529.03 ppb	17:52:54
1	S 181.975 Axial†	693.8	658.4	1057.8 ug/L	1057.8 ppb	17:52:54
1	Sb 206.836†	1416.0	1372.6	535.39 ug/L	535.39 ppb	17:52:54
1	Se 196.026†	722.7	737.6	556.17 ug/L	556.17 ppb	17:52:54
1	Si 251.611†	77631.1	76632.5	2604.5 ug/L	2604.5 ppb	17:52:34
1	Sn 189.927†	2638.4	2608.7	525.92 ug/L	525.92 ppb	17:52:54
1	Ti 334.940†	319135.2	318350.3	505.57 ug/L	505.57 ppb	17:52:34
1	Tl 190.801†	1499.4	1517.9	524.76 ug/L	524.76 ppb	17:52:54
1	U 409.014†	15829.0	18157.4	500.46 ug/L	500.46 ppb	17:52:34
1	V 292.402†	69296.1	70219.2	523.51 ug/L	523.51 ppb	17:52:34
1	Zn 213.857†	49793.5	48899.1	524.36 ug/L	524.36 ppb	17:52:34
1	SiO2†	76594.8	75595.1	5472.9 ug/L	5472.9 ppb	17:54:02
2	Sc Radial	4313.8	4313.8	98.1 %		17:51:37
2	Y RADIAL	4671.9	4671.9	96.82 %		17:51:37
2	Al 396.153Radial†	5335.3	5540.9	4820.0 ug/L	4820.0 ppb	17:51:37
2	Ca 317.933Radial†	2571.9	2600.9	5164.9 ug/L	5164.9 ppb	17:51:57
2	Fe 238.204 Radial†	441.7	439.0	5339.1 ug/L	5339.1 ppb	17:51:57
2	K 766.490 Radial†	28780.8	26839.6	5153.2 ug/L	5153.2 ppb	17:51:37
2	Mg 279.077 IEC†	119.7	119.2	5405.8 ug/L	5405.8 ppb	17:51:57
2	Na 589.592 Radial†	36504.6	37891.7	10930 ug/L	10930 ppb	17:51:37
2	Sr 421.552†	78484.9	79961.5	517.59 ug/L	517.59 ppb	17:51:37
2	Sc 361.383	895312.7	895312.7	101.91 %		17:53:00
2	Y 371.029	742062.1	742062.1	100.37 %		17:53:00

2	Ag 328.068†	107362.7	104907.0	505.69 ug/L	505.69 ppb	17:53:05
2	As 188.979†	1048.6	1053.3	520.85 ug/L	520.85 ppb	17:53:25
2	B 249.677†	19896.3	19991.4	495.94 ug/L	495.94 ppb	17:53:05
2	Ba 233.527†	62583.6	61417.4	514.64 ug/L	514.64 ppb	17:53:05
2	Be 313.107†	1285372.4	1265126.8	501.65 ug/L	501.65 ppb	17:53:00
2	Cd 226.502†	41328.5	40731.4	524.67 ug/L	524.67 ppb	17:53:05
2	Co 228.616†	23369.4	22982.3	531.13 ug/L	531.13 ppb	17:53:05
2	Cr 267.716†	43245.2	42355.1	513.01 ug/L	513.01 ppb	17:53:05
2	Cu 324.752†	170399.5	161002.0	493.52 ug/L	493.52 ppb	17:53:05
2	Mn 257.610†	434226.0	425635.5	510.36 ug/L	510.36 ppb	17:53:00
2	Mo 202.031†	6687.2	6554.3	513.14 ug/L	513.14 ppb	17:53:25
2	Ni 231.604†	19067.3	18636.8	517.09 ug/L	517.09 ppb	17:53:05
2	P 214.914†	4197.9	3923.2	2529.5 ug/L	2529.5 ppb	17:53:25
2	Pb 220.353†	3853.0	3833.2	521.52 ug/L	521.52 ppb	17:53:25
2	S 181.975 Axial†	697.1	652.9	1048.9 ug/L	1048.9 ppb	17:53:25
2	Sb 206.836†	1417.8	1356.5	529.19 ug/L	529.19 ppb	17:53:25
2	Se 196.026†	727.7	733.4	552.81 ug/L	552.81 ppb	17:53:25
2	Si 251.611†	76719.3	74757.7	2540.7 ug/L	2540.7 ppb	17:53:05
2	Sn 189.927†	2662.2	2598.8	523.93 ug/L	523.93 ppb	17:53:25
2	Ti 334.940†	315738.0	310987.9	493.88 ug/L	493.88 ppb	17:53:05
2	Tl 190.801†	1499.2	1498.7	518.15 ug/L	518.15 ppb	17:53:25
2	U 409.014†	15683.1	17814.4	491.01 ug/L	491.01 ppb	17:53:05
2	V 292.402†	68431.1	68495.6	510.77 ug/L	510.77 ppb	17:53:05
2	Zn 213.857†	49353.3	47838.6	513.01 ug/L	513.01 ppb	17:53:05
2	SiO2†	76602.1	74635.3	5403.4 ug/L	5403.4 ppb	17:54:07
3	Sc Radial	4268.0	4268.0	97.1 %		17:52:02
3	Y RADIAL	4628.3	4628.3	95.92 %		17:52:02
3	Al 396.153Radial†	5294.8	5557.5	4834.8 ug/L	4834.8 ppb	17:52:02
3	Ca 317.933Radial†	2563.5	2620.4	5203.6 ug/L	5203.6 ppb	17:52:22
3	Fe 238.204 Radial†	438.8	440.8	5361.7 ug/L	5361.7 ppb	17:52:22
3	K 766.490 Radial†	28681.3	27052.2	5194.0 ug/L	5194.0 ppb	17:52:02
3	Mg 279.077 IEC†	117.5	118.2	5360.8 ug/L	5360.8 ppb	17:52:22
3	Na 589.592 Radial†	36411.1	38195.1	11017 ug/L	11017 ppb	17:52:02
3	Sr 421.552†	78095.0	80419.1	520.55 ug/L	520.55 ppb	17:52:02
3	Sc 361.383	900827.9	900827.9	102.54 %		17:53:31
3	Y 371.029	747388.6	747388.6	101.09 %		17:53:31
3	Ag 328.068†	109066.9	105924.0	510.58 ug/L	510.58 ppb	17:53:36
3	As 188.979†	1064.0	1062.1	525.22 ug/L	525.22 ppb	17:53:56
3	B 249.677†	20237.4	20204.5	501.24 ug/L	501.24 ppb	17:53:36
3	Ba 233.527†	63377.2	61815.4	517.97 ug/L	517.97 ppb	17:53:36
3	Be 313.107†	1286309.3	1258318.4	498.97 ug/L	498.97 ppb	17:53:31
3	Cd 226.502†	41898.9	41039.3	528.64 ug/L	528.64 ppb	17:53:36
3	Co 228.616†	23663.2	23128.5	534.49 ug/L	534.49 ppb	17:53:36
3	Cr 267.716†	43855.5	42690.4	517.07 ug/L	517.07 ppb	17:53:36
3	Cu 324.752†	173241.3	162749.8	498.88 ug/L	498.88 ppb	17:53:36
3	Mn 257.610†	433979.2	422786.1	506.95 ug/L	506.95 ppb	17:53:31
3	Mo 202.031†	6674.6	6501.8	509.04 ug/L	509.04 ppb	17:53:56
3	Ni 231.604†	19406.7	18853.2	523.09 ug/L	523.09 ppb	17:53:36
3	P 214.914†	4185.1	3885.5	2503.1 ug/L	2503.1 ppb	17:53:56
3	Pb 220.353†	3866.9	3823.7	520.22 ug/L	520.22 ppb	17:53:56
3	S 181.975 Axial†	695.3	646.9	1039.4 ug/L	1039.4 ppb	17:53:56
3	Sb 206.836†	1415.3	1345.5	524.84 ug/L	524.84 ppb	17:53:56
3	Se 196.026†	716.1	717.7	541.45 ug/L	541.45 ppb	17:53:56
3	Si 251.611†	77944.3	75491.5	2565.7 ug/L	2565.7 ppb	17:53:36
3	Sn 189.927†	2637.4	2558.6	515.83 ug/L	515.83 ppb	17:53:56
3	Ti 334.940†	320342.5	313581.6	498.01 ug/L	498.01 ppb	17:53:36
3	Tl 190.801†	1504.0	1494.4	516.67 ug/L	516.67 ppb	17:53:56
3	U 409.014†	15778.9	17813.6	490.97 ug/L	490.97 ppb	17:53:36
3	V 292.402†	69504.1	69131.0	515.38 ug/L	515.38 ppb	17:53:36
3	Zn 213.857†	49785.1	47963.1	514.31 ug/L	514.31 ppb	17:53:36
3	SiO2†	76828.1	74395.5	5386.1 ug/L	5386.1 ppb	17:54:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893360.3	101.69 %	0.980			0.96%
Sc Radial	4275.7	97.3 %	0.79			0.82%
Y 371.029	741266.3	100.26 %	0.887			0.88%
Y RADIAL	4644.2	96.25 %	0.498			0.52%
Ag 328.068†	106053.6	511.21 ug/L	5.864	511.21 ppb	5.864	1.15%

QC value within limits for Ag 328.068 Recovery = 102.24%							
Al	396.153Radial†	5542.8	4821.6 ug/L	12.39	4821.6 ppb	12.39	0.26%
QC value within limits for Al 396.153Radial Recovery = 96.43%							
As	188.979†	1064.6	526.45 ug/L	6.303	526.45 ppb	6.303	1.20%
QC value within limits for As 188.979 Recovery = 105.29%							
B	249.677†	20190.3	500.88 ug/L	4.767	500.88 ppb	4.767	0.95%
QC value within limits for B 249.677 Recovery = 100.18%							
Ba	233.527†	62015.1	519.65 ug/L	6.022	519.65 ppb	6.022	1.16%
QC value within limits for Ba 233.527 Recovery = 103.93%							
Be	313.107†	1265624.4	501.86 ug/L	3.003	501.86 ppb	3.003	0.60%
QC value within limits for Be 313.107 Recovery = 100.37%							
Ca	317.933Radial†	2616.6	5196.0 ug/L	28.09	5196.0 ppb	28.09	0.54%
QC value within limits for Ca 317.933Radial Recovery = 103.92%							
Cd	226.502†	41176.3	530.40 ug/L	6.789	530.40 ppb	6.789	1.28%
QC value within limits for Cd 226.502 Recovery = 106.08%							
Co	228.616†	23204.8	536.26 ug/L	6.207	536.26 ppb	6.207	1.16%
QC value within limits for Co 228.616 Recovery = 107.25%							
Cr	267.716†	42792.9	518.31 ug/L	6.020	518.31 ppb	6.020	1.16%
QC value within limits for Cr 267.716 Recovery = 103.66%							
Cu	324.752†	162803.0	499.04 ug/L	5.604	499.04 ppb	5.604	1.12%
QC value within limits for Cu 324.752 Recovery = 99.81%							
Fe	238.204 Radial†	442.3	5379.1 ug/L	51.05	5379.1 ppb	51.05	0.95%
QC value within limits for Fe 238.204 Radial Recovery = 107.58%							
K	766.490 Radial†	26971.3	5178.4 ug/L	22.09	5178.4 ppb	22.09	0.43%
QC value within limits for K 766.490 Radial Recovery = 103.57%							
Mg	279.077 IEC†	119.1	5404.0 ug/L	42.29	5404.0 ppb	42.29	0.78%
QC value within limits for Mg 279.077 IEC Recovery = 108.08%							
Mn	257.610†	425092.6	509.71 ug/L	2.504	509.71 ppb	2.504	0.49%
QC value within limits for Mn 257.610 Recovery = 101.94%							
Mo	202.031†	6557.3	513.38 ug/L	4.467	513.38 ppb	4.467	0.87%
QC value within limits for Mo 202.031 Recovery = 102.68%							
Na	589.592 Radial†	38038.7	10972 ug/L	43.8	10972 ppb	43.8	0.40%
QC value within limits for Na 589.592 Radial Recovery = 109.72%							
Ni	231.604†	18889.4	524.10 ug/L	7.562	524.10 ppb	7.562	1.44%
QC value within limits for Ni 231.604 Recovery = 104.82%							
P	214.914†	3924.7	2529.4 ug/L	26.22	2529.4 ppb	26.22	1.04%
QC value within limits for P 214.914 Recovery = 101.18%							
Pb	220.353†	3848.5	523.59 ug/L	4.759	523.59 ppb	4.759	0.91%
QC value within limits for Pb 220.353 Recovery = 104.72%							
S	181.975 Axial†	652.7	1048.7 ug/L	9.20	1048.7 ppb	9.20	0.88%
QC value within limits for S 181.975 Axial Recovery = 104.87%							
Sb	206.836†	1358.2	529.81 ug/L	5.303	529.81 ppb	5.303	1.00%
QC value within limits for Sb 206.836 Recovery = 105.96%							
Se	196.026†	729.6	550.14 ug/L	7.717	550.14 ppb	7.717	1.40%
QC value greater than the upper limit for Se 196.026 Recovery = 110.03%							
Si	251.611†	75627.2	2570.3 ug/L	32.15	2570.3 ppb	32.15	1.25%
QC value within limits for Si 251.611 Recovery = 102.81%							
Sn	189.927†	2588.7	521.89 ug/L	5.347	521.89 ppb	5.347	1.02%
QC value within limits for Sn 189.927 Recovery = 104.38%							
Sr	421.552†	80147.9	518.80 ug/L	1.555	518.80 ppb	1.555	0.30%
QC value within limits for Sr 421.552 Recovery = 103.76%							
Ti	334.940†	314306.6	499.15 ug/L	5.929	499.15 ppb	5.929	1.19%
QC value within limits for Ti 334.940 Recovery = 99.83%							
Tl	190.801†	1503.7	519.86 ug/L	4.308	519.86 ppb	4.308	0.83%
QC value within limits for Tl 190.801 Recovery = 103.97%							
U	409.014†	17928.4	494.14 ug/L	5.466	494.14 ppb	5.466	1.11%
QC value within limits for U 409.014 Recovery = 98.83%							
V	292.402†	69281.9	516.55 ug/L	6.449	516.55 ppb	6.449	1.25%
QC value within limits for V 292.402 Recovery = 103.31%							
Zn	213.857†	48233.6	517.22 ug/L	6.214	517.22 ppb	6.214	1.20%
QC value within limits for Zn 213.857 Recovery = 103.44%							
SiO2†		74875.3	5420.8 ug/L	45.96	5420.8 ppb	45.96	0.85%
QC value within limits for SiO2 Recovery = 101.37%							
QC Failed. Continue with analysis.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 17:56:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4333.7	4333.7	98.6 %		17:58:14
1	Y RADIAL	4707.1	4707.1	97.55 %		17:58:14
1	Al 396.153Radial†	-109.2	-6.5	-5.7370 ug/L	-5.7370 ppb	17:58:34
1	Ca 317.933Radial†	25.3	5.9	11.725 ug/L	11.725 ppb	17:58:34
1	Fe 238.204 Radial†	12.6	1.6	19.529 ug/L	19.529 ppb	17:58:34
1	K 766.490 Radial†	2409.1	-44.0	-8.4678 ug/L	-8.4678 ppb	17:58:14
1	Mg 279.077 IEC†	2.4	-0.4	-17.447 ug/L	-17.447 ppb	17:58:34
1	Na 589.592 Radial†	-610.1	75.2	21.677 ug/L	21.677 ppb	17:58:14
1	Sr 421.552†	30.3	17.3	0.1116 ug/L	0.1116 ppb	17:58:14
1	Sc 361.383	923829.0	923829.0	105.16 %		17:59:31
1	Y 371.029	776616.8	776616.8	105.04 %		17:59:31
1	Ag 328.068†	204.8	-248.2	-1.1848 ug/L	-1.1848 ppb	17:59:36
1	As 188.979†	-27.4	-1.6	-0.8005 ug/L	-0.8005 ppb	17:59:56
1	B 249.677†	-370.3	116.0	2.8890 ug/L	2.8890 ppb	17:59:56
1	Ba 233.527†	3.7	10.7	0.0899 ug/L	0.0899 ppb	17:59:56
1	Be 313.107†	-3867.8	174.1	0.0689 ug/L	0.0689 ppb	17:59:36
1	Cd 226.502†	-170.5	15.5	0.1976 ug/L	0.1976 ppb	17:59:56
1	Co 228.616†	-66.5	-12.2	-0.2821 ug/L	-0.2821 ppb	17:59:56
1	Cr 267.716†	99.0	14.8	0.1801 ug/L	0.1801 ppb	17:59:56
1	Cu 324.752†	5937.5	-556.5	-1.7061 ug/L	-1.7061 ppb	17:59:36
1	Mn 257.610†	408.6	-61.2	-0.0707 ug/L	-0.0707 ppb	17:59:56
1	Mo 202.031†	12.4	4.2	0.3310 ug/L	0.3310 ppb	17:59:56
1	Ni 231.604†	72.7	-3.9	-0.1070 ug/L	-0.1070 ppb	17:59:56
1	P 214.914†	205.3	-0.7	-0.1701 ug/L	-0.1701 ppb	17:59:56
1	Pb 220.353†	-50.2	4.8	0.6506 ug/L	0.6506 ppb	17:59:56
1	S 181.975 Axial†	39.2	6.1	9.8231 ug/L	9.8231 ppb	17:59:56
1	Sb 206.836†	42.7	5.8	2.1994 ug/L	2.1994 ppb	17:59:56
1	Se 196.026†	-21.7	-1.3	-0.9116 ug/L	-0.9116 ppb	17:59:56
1	Si 251.611†	511.8	-36.6	-1.2494 ug/L	-1.2494 ppb	17:59:56
1	Sn 189.927†	12.3	-1.8	-0.3680 ug/L	-0.3680 ppb	17:59:56
1	Ti 334.940†	-1219.2	9.9	0.0176 ug/L	0.0176 ppb	17:59:36
1	Tl 190.801†	-29.6	-0.5	-0.1740 ug/L	-0.1740 ppb	17:59:56
1	U 409.014†	-2463.9	82.3	2.2725 ug/L	2.2725 ppb	17:59:31
1	V 292.402†	-1414.1	2.7	0.0260 ug/L	0.0260 ppb	17:59:36
1	Zn 213.857†	580.2	-37.7	-0.4085 ug/L	-0.4085 ppb	17:59:56
1	SiO2†	537.9	-19.2	-1.4010 ug/L	-1.4010 ppb	18:01:02
2	Sc Radial	4309.4	4309.4	98.0 %		17:58:39
2	Y RADIAL	4692.9	4692.9	97.26 %		17:58:39
2	Al 396.153Radial†	-115.5	-13.6	-11.920 ug/L	-11.920 ppb	17:58:59
2	Ca 317.933Radial†	21.5	2.1	4.2683 ug/L	4.2683 ppb	17:58:59
2	Fe 238.204 Radial†	11.2	0.3	3.7212 ug/L	3.7212 ppb	17:58:59
2	K 766.490 Radial†	2447.3	8.8	1.6704 ug/L	1.6704 ppb	17:58:39
2	Mg 279.077 IEC†	1.1	-1.7	-77.238 ug/L	-77.238 ppb	17:58:59
2	Na 589.592 Radial†	-578.4	104.1	30.021 ug/L	30.021 ppb	17:58:39
2	Sr 421.552†	10.7	-2.6	-0.0166 ug/L	-0.0166 ppb	17:58:39
2	Sc 361.383	913587.0	913587.0	103.99 %		18:00:01
2	Y 371.029	767040.5	767040.5	103.74 %		18:00:01
2	Ag 328.068†	156.8	-292.2	-1.3950 ug/L	-1.3950 ppb	18:00:06
2	As 188.979†	-19.3	5.9	2.9100 ug/L	2.9100 ppb	18:00:26
2	B 249.677†	-387.0	96.0	2.3927 ug/L	2.3927 ppb	18:00:26
2	Ba 233.527†	5.3	12.2	0.1017 ug/L	0.1017 ppb	18:00:26
2	Be 313.107†	-4011.7	-5.5	-0.0024 ug/L	-0.0024 ppb	18:00:06
2	Cd 226.502†	-170.5	13.7	0.1746 ug/L	0.1746 ppb	18:00:26
2	Co 228.616†	-66.3	-12.7	-0.2913 ug/L	-0.2913 ppb	18:00:26
2	Cr 267.716†	65.8	-16.1	-0.1927 ug/L	-0.1927 ppb	18:00:26
2	Cu 324.752†	6150.2	-288.7	-0.8817 ug/L	-0.8817 ppb	18:00:06
2	Mn 257.610†	404.3	-60.9	-0.0695 ug/L	-0.0695 ppb	18:00:26
2	Mo 202.031†	14.8	6.7	0.5256 ug/L	0.5256 ppb	18:00:26
2	Ni 231.604†	64.0	-11.5	-0.3197 ug/L	-0.3197 ppb	18:00:26

2	P 214.914†	198.2	-5.4	-3.4355 ug/L	-3.4355 ppb	18:00:26
2	Pb 220.353†	-41.2	12.9	1.7466 ug/L	1.7466 ppb	18:00:26
2	S 181.975 Axial†	31.2	-1.2	-1.9699 ug/L	-1.9699 ppb	18:00:26
2	Sb 206.836†	30.6	-5.3	-1.9824 ug/L	-1.9824 ppb	18:00:26
2	Se 196.026†	-29.7	-9.3	-6.7247 ug/L	-6.7247 ppb	18:00:26
2	Si 251.611†	512.3	-30.7	-1.0513 ug/L	-1.0513 ppb	18:00:26
2	Sn 189.927†	16.8	2.6	0.5318 ug/L	0.5318 ppb	18:00:26
2	Ti 334.940†	-1269.3	-51.3	-0.0721 ug/L	-0.0721 ppb	18:00:06
2	Tl 190.801†	-18.7	9.6	3.2900 ug/L	3.2900 ppb	18:00:26
2	U 409.014†	-2734.4	-204.1	-5.6464 ug/L	-5.6464 ppb	18:00:01
2	V 292.402†	-1441.6	-38.8	-0.2905 ug/L	-0.2905 ppb	18:00:06
2	Zn 213.857†	587.7	-24.3	-0.2605 ug/L	-0.2605 ppb	18:00:26
2	SiO2†	552.5	0.6	0.0305 ug/L	0.0305 ppb	18:01:07
3	Sc Radial	4248.0	4248.0	96.6 %		17:59:04
3	Y RADIAL	4690.2	4690.2	97.20 %		17:59:04
3	Al 396.153Radial†	-115.6	-15.4	-13.432 ug/L	-13.432 ppb	17:59:24
3	Ca 317.933Radial†	24.1	5.2	10.251 ug/L	10.251 ppb	17:59:24
3	Fe 238.204 Radial†	11.4	0.7	8.6978 ug/L	8.6978 ppb	17:59:24
3	K 766.490 Radial†	2598.2	200.9	38.616 ug/L	38.616 ppb	17:59:04
3	Mg 279.077 IEC†	-1.1	-4.0	-182.47 ug/L	-182.47 ppb	17:59:24
3	Na 589.592 Radial†	-602.7	70.4	20.315 ug/L	20.315 ppb	17:59:04
3	Sr 421.552†	14.8	1.8	0.0118 ug/L	0.0118 ppb	17:59:04
3	Sc 361.383	911256.4	911256.4	103.73 %		18:00:31
3	Y 371.029	766558.9	766558.9	103.68 %		18:00:31
3	Ag 328.068†	240.9	-210.7	-1.0077 ug/L	-1.0077 ppb	18:00:36
3	As 188.979†	-25.7	-0.3	-0.1349 ug/L	-0.1349 ppb	18:00:56
3	B 249.677†	-396.4	85.9	2.1415 ug/L	2.1415 ppb	18:00:56
3	Ba 233.527†	-11.5	-4.0	-0.0343 ug/L	-0.0343 ppb	18:00:56
3	Be 313.107†	-3853.4	137.2	0.0542 ug/L	0.0542 ppb	18:00:36
3	Cd 226.502†	-169.1	14.6	0.1872 ug/L	0.1872 ppb	18:00:56
3	Co 228.616†	-73.9	-20.2	-0.4670 ug/L	-0.4670 ppb	18:00:56
3	Cr 267.716†	52.5	-28.8	-0.3470 ug/L	-0.3470 ppb	18:00:56
3	Cu 324.752†	6020.1	-399.0	-1.2217 ug/L	-1.2217 ppb	18:00:36
3	Mn 257.610†	411.8	-52.8	-0.0549 ug/L	-0.0549 ppb	18:00:56
3	Mo 202.031†	9.5	1.6	0.1273 ug/L	0.1273 ppb	18:00:56
3	Ni 231.604†	73.3	-2.3	-0.0645 ug/L	-0.0645 ppb	18:00:56
3	P 214.914†	200.4	-2.8	-1.6494 ug/L	-1.6494 ppb	18:00:56
3	Pb 220.353†	-69.2	-14.2	-1.9336 ug/L	-1.9336 ppb	18:00:56
3	S 181.975 Axial†	34.8	2.4	3.7938 ug/L	3.7938 ppb	18:00:56
3	Sb 206.836†	41.1	4.9	1.8421 ug/L	1.8421 ppb	18:00:56
3	Se 196.026†	-17.0	3.0	2.1870 ug/L	2.1870 ppb	18:00:56
3	Si 251.611†	521.7	-20.3	-0.6929 ug/L	-0.6929 ppb	18:00:56
3	Sn 189.927†	10.4	-3.4	-0.6903 ug/L	-0.6903 ppb	18:00:56
3	Ti 334.940†	-1237.5	-23.7	-0.0206 ug/L	-0.0206 ppb	18:00:36
3	Tl 190.801†	-24.6	3.9	1.3373 ug/L	1.3373 ppb	18:00:56
3	U 409.014†	-2570.2	-52.6	-1.4559 ug/L	-1.4559 ppb	18:00:31
3	V 292.402†	-1471.8	-71.5	-0.5314 ug/L	-0.5314 ppb	18:00:36
3	Zn 213.857†	585.7	-24.8	-0.2679 ug/L	-0.2679 ppb	18:00:56
3	SiO2†	529.9	-19.9	-1.4450 ug/L	-1.4450 ppb	18:01:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916224.1	104.29 %	0.761			0.73%
Sc Radial	4297.0	97.8 %	1.00			1.03%
Y 371.029	770072.1	104.15 %	0.767			0.74%
Y RADIAL	4696.7	97.34 %	0.188			0.19%
Ag 328.068†	-250.4	-1.1958 ug/L	0.19388	-1.1958 ppb	0.19388	16.21%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-11.8	-10.363 ug/L	4.0769	-10.363 ppb	4.0769	39.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.3	0.6582 ug/L	1.97831	0.6582 ppb	1.97831	300.58%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	99.3	2.4744 ug/L	0.38038	2.4744 ppb	0.38038	15.37%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.3	0.0524 ug/L	0.07536	0.0524 ppb	0.07536	143.72%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	101.9	0.0402 ug/L	0.03764	0.0402 ppb	0.03764	93.52%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	4.4	8.7483 ug/L	3.94913	8.7483 ppb	3.94913	45.14%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	14.6	0.1864 ug/L	0.01151	0.1864 ppb	0.01151	6.18%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-15.0	-0.3468 ug/L	0.10420	-0.3468 ppb	0.10420	30.05%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-10.0	-0.1199 ug/L	0.27101	-0.1199 ppb	0.27101	226.08%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-414.8	-1.2699 ug/L	0.41430	-1.2699 ppb	0.41430	32.63%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.9	10.649 ug/L	8.0827	10.649 ppb	8.0827	75.90%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	55.2	10.606 ug/L	24.7812	10.606 ppb	24.7812	233.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-2.0	-92.385 ug/L	83.5473	-92.385 ppb	83.5473	90.43%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-58.3	-0.0650 ug/L	0.00881	-0.0650 ppb	0.00881	13.55%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.2	0.3280 ug/L	0.19918	0.3280 ppb	0.19918	60.73%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	83.2	24.004 ug/L	5.2548	24.004 ppb	5.2548	21.89%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-5.9	-0.1637 ug/L	0.13673	-0.1637 ppb	0.13673	83.52%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-3.0	-1.7517 ug/L	1.63507	-1.7517 ppb	1.63507	93.34%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	1.2	0.1545 ug/L	1.88958	0.1545 ppb	1.88958	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.4	3.8824 ug/L	5.89701	3.8824 ppb	5.89701	151.89%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	1.8	0.6864 ug/L	2.31812	0.6864 ppb	2.31812	337.74%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-2.5	-1.8164 ug/L	4.52424	-1.8164 ppb	4.52424	249.07%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-29.2	-0.9979 ug/L	0.28210	-0.9979 ppb	0.28210	28.27%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-0.9	-0.1755 ug/L	0.63341	-0.1755 ppb	0.63341	360.93%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	5.5	0.0356 ug/L	0.06733	0.0356 ppb	0.06733	189.11%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-21.7	-0.0250 ug/L	0.04501	-0.0250 ppb	0.04501	179.82%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	4.3	1.4844 ug/L	1.73669	1.4844 ppb	1.73669	116.99%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-58.2	-1.6100 ug/L	3.96171	-1.6100 ppb	3.96171	246.08%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-35.8	-0.2653 ug/L	0.27955	-0.2653 ppb	0.27955	105.37%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-29.0	-0.3123 ug/L	0.08337	-0.3123 ppb	0.08337	26.69%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-12.8	-0.9385 ug/L	0.83946	-0.9385 ppb	0.83946	89.45%
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: 2/22/2010 18:51:21

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	4353.7	4353.7	99.0 %		18:53:13
1	Y RADIAL	4739.4	4739.4	98.22 %		18:53:13
1	Al 396.153Radial†	5370.7	5526.8	4807.5 ug/L	4807.5 ppb	18:53:13
1	Ca 317.933Radial†	2593.5	2598.8	5160.7 ug/L	5160.7 ppb	18:53:33
1	Fe 238.204 Radial†	440.0	433.2	5268.8 ug/L	5268.8 ppb	18:53:33
1	K 766.490 Radial†	28880.9	26672.4	5121.3 ug/L	5121.3 ppb	18:53:13
1	Mg 279.077 IEC†	118.2	116.5	5285.7 ug/L	5285.7 ppb	18:53:33
1	Na 589.592 Radial†	34681.6	35710.8	10301 ug/L	10301 ppb	18:53:13
1	Sr 421.552†	76689.0	77416.7	501.12 ug/L	501.12 ppb	18:53:13
1	Sc 361.383	908642.4	908642.4	103.43 %		18:54:30
1	Y 371.029	753196.9	753196.9	101.87 %		18:54:30
1	Ag 328.068†	109304.1	105238.5	507.27 ug/L	507.27 ppb	18:54:35
1	As 188.979†	1095.9	1084.1	535.90 ug/L	535.90 ppb	18:54:55
1	B 249.677†	20372.4	20165.3	500.28 ug/L	500.28 ppb	18:54:35
1	Ba 233.527†	63832.5	61724.1	517.21 ug/L	517.21 ppb	18:54:35
1	Be 313.107†	1320461.2	1280549.8	507.76 ug/L	507.76 ppb	18:54:30
1	Cd 226.502†	42304.0	41079.6	529.16 ug/L	529.16 ppb	18:54:35
1	Co 228.616†	23882.3	23141.9	534.82 ug/L	534.82 ppb	18:54:35
1	Cr 267.716†	44019.2	42480.9	514.53 ug/L	514.53 ppb	18:54:35
1	Cu 324.752†	173734.4	161773.5	495.88 ug/L	495.88 ppb	18:54:35
1	Mn 257.610†	444171.2	429000.4	514.39 ug/L	514.39 ppb	18:54:30
1	Mo 202.031†	6850.7	6616.1	517.98 ug/L	517.98 ppb	18:54:55
1	Ni 231.604†	19515.3	18795.5	521.49 ug/L	521.49 ppb	18:54:35
1	P 214.914†	4318.0	3978.9	2566.4 ug/L	2566.4 ppb	18:54:55
1	Pb 220.353†	3945.0	3866.8	526.09 ug/L	526.09 ppb	18:54:55
1	S 181.975 Axial†	714.9	660.0	1060.3 ug/L	1060.3 ppb	18:54:55
1	Sb 206.836†	1457.1	1374.1	536.02 ug/L	536.02 ppb	18:54:55
1	Se 196.026†	738.6	733.4	552.61 ug/L	552.61 ppb	18:54:55
1	Si 251.611†	78380.6	75259.6	2557.7 ug/L	2557.7 ppb	18:54:35
1	Sn 189.927†	2734.6	2630.5	530.31 ug/L	530.31 ppb	18:54:55
1	Ti 334.940†	321985.4	312483.2	496.26 ug/L	496.26 ppb	18:54:35
1	Tl 190.801†	1528.8	1505.7	520.57 ug/L	520.57 ppb	18:54:55
1	U 409.014†	15925.5	17823.0	491.25 ug/L	491.25 ppb	18:54:35
1	V 292.402†	69993.0	69020.7	514.71 ug/L	514.71 ppb	18:54:35
1	Zn 213.857†	50311.9	48054.9	515.33 ug/L	515.33 ppb	18:54:35
1	SiO2†	78027.8	74911.0	5423.3 ug/L	5423.3 ppb	18:56:03
2	Sc Radial	4261.1	4261.1	96.9 %		18:53:38
2	Y RADIAL	4660.1	4660.1	96.58 %		18:53:38
2	Al 396.153Radial†	5428.9	5704.6	4962.8 ug/L	4962.8 ppb	18:53:38
2	Ca 317.933Radial†	2569.1	2630.5	5223.6 ug/L	5223.6 ppb	18:53:58
2	Fe 238.204 Radial†	437.5	440.2	5354.0 ug/L	5354.0 ppb	18:53:58
2	K 766.490 Radial†	29180.0	27614.3	5302.2 ug/L	5302.2 ppb	18:53:38
2	Mg 279.077 IEC†	116.5	117.3	5323.0 ug/L	5323.0 ppb	18:53:58
2	Na 589.592 Radial†	35113.8	36917.2	10649 ug/L	10649 ppb	18:53:38
2	Sr 421.552†	77660.7	80100.6	518.49 ug/L	518.49 ppb	18:53:38
2	Sc 361.383	889333.9	889333.9	101.23 %		18:55:01
2	Y 371.029	736740.6	736740.6	99.646 %		18:55:01
2	Ag 328.068†	109862.5	108084.6	520.97 ug/L	520.97 ppb	18:55:06
2	As 188.979†	1060.2	1071.8	530.02 ug/L	530.02 ppb	18:55:26
2	B 249.677†	20598.0	20815.8	516.43 ug/L	516.43 ppb	18:55:06
2	Ba 233.527†	64489.9	63713.4	533.87 ug/L	533.87 ppb	18:55:06
2	Be 313.107†	1305446.0	1293435.7	512.89 ug/L	512.89 ppb	18:55:01
2	Cd 226.502†	42731.0	42389.4	546.04 ug/L	546.04 ppb	18:55:06
2	Co 228.616†	24089.0	23847.3	551.10 ug/L	551.10 ppb	18:55:06
2	Cr 267.716†	44517.9	43897.6	531.68 ug/L	531.68 ppb	18:55:06
2	Cu 324.752†	174386.9	166065.0	509.03 ug/L	509.03 ppb	18:55:06
2	Mn 257.610†	440509.4	434707.0	521.23 ug/L	521.23 ppb	18:55:01
2	Mo 202.031†	6737.0	6647.6	520.44 ug/L	520.44 ppb	18:55:26
2	Ni 231.604†	19723.8	19411.1	538.57 ug/L	538.57 ppb	18:55:06

2	P 214.914†	4243.1	3995.5	2575.0 ug/L	2575.0 ppb	18:55:26
2	Pb 220.353†	3890.6	3895.8	530.06 ug/L	530.06 ppb	18:55:26
2	S 181.975 Axial†	704.3	664.6	1067.7 ug/L	1067.7 ppb	18:55:26
2	Sb 206.836†	1431.3	1379.2	538.03 ug/L	538.03 ppb	18:55:26
2	Se 196.026†	716.1	726.7	548.03 ug/L	548.03 ppb	18:55:26
2	Si 251.611†	79091.0	77606.7	2637.7 ug/L	2637.7 ppb	18:55:06
2	Sn 189.927†	2690.4	2644.2	533.08 ug/L	533.08 ppb	18:55:26
2	Ti 334.940†	324509.3	321735.4	510.96 ug/L	510.96 ppb	18:55:06
2	Tl 190.801†	1516.8	1526.0	527.59 ug/L	527.59 ppb	18:55:26
2	U 409.014†	15998.7	18229.6	502.45 ug/L	502.45 ppb	18:55:06
2	V 292.402†	70358.8	70851.4	528.20 ug/L	528.20 ppb	18:55:06
2	Zn 213.857†	50628.7	49424.0	530.01 ug/L	530.01 ppb	18:55:06
2	SiO2†	78282.5	76800.5	5560.3 ug/L	5560.3 ppb	18:56:08
3	Sc Radial	4387.4	4387.4	99.8 %		18:54:03
3	Y RADIAL	4756.9	4756.9	98.59 %		18:54:03
3	Al 396.153Radial†	5398.5	5513.1	4795.7 ug/L	4795.7 ppb	18:54:03
3	Ca 317.933Radial†	2558.2	2543.3	5050.5 ug/L	5050.5 ppb	18:54:23
3	Fe 238.204 Radial†	430.6	420.3	5112.3 ug/L	5112.3 ppb	18:54:23
3	K 766.490 Radial†	29075.6	26643.6	5115.8 ug/L	5115.8 ppb	18:54:03
3	Mg 279.077 IEC†	117.6	114.9	5213.5 ug/L	5213.5 ppb	18:54:23
3	Na 589.592 Radial†	34762.9	35523.3	10247 ug/L	10247 ppb	18:54:03
3	Sr 421.552†	77028.1	77161.8	499.47 ug/L	499.47 ppb	18:54:03
3	Sc 361.383	906594.2	906594.2	103.19 %		18:55:32
3	Y 371.029	751345.6	751345.6	101.62 %		18:55:32
3	Ag 328.068†	108429.0	104629.2	504.29 ug/L	504.29 ppb	18:55:37
3	As 188.979†	1069.6	1061.0	524.54 ug/L	524.54 ppb	18:55:58
3	B 249.677†	20270.7	20111.2	498.96 ug/L	498.96 ppb	18:55:37
3	Ba 233.527†	63544.2	61584.1	516.02 ug/L	516.02 ppb	18:55:37
3	Be 313.107†	1300974.3	1264550.5	501.42 ug/L	501.42 ppb	18:55:32
3	Cd 226.502†	42152.6	41025.3	528.48 ug/L	528.48 ppb	18:55:37
3	Co 228.616†	23712.3	23029.2	532.22 ug/L	532.22 ppb	18:55:37
3	Cr 267.716†	43885.0	42447.0	514.10 ug/L	514.10 ppb	18:55:37
3	Cu 324.752†	171784.5	160263.4	491.24 ug/L	491.24 ppb	18:55:37
3	Mn 257.610†	438876.9	424840.3	509.39 ug/L	509.39 ppb	18:55:32
3	Mo 202.031†	6769.3	6552.2	512.96 ug/L	512.96 ppb	18:55:58
3	Ni 231.604†	19512.8	18835.7	522.61 ug/L	522.61 ppb	18:55:37
3	P 214.914†	4272.3	3944.0	2544.1 ug/L	2544.1 ppb	18:55:58
3	Pb 220.353†	3932.1	3862.9	525.57 ug/L	525.57 ppb	18:55:58
3	S 181.975 Axial†	707.0	653.9	1050.6 ug/L	1050.6 ppb	18:55:58
3	Sb 206.836†	1459.9	1380.0	538.04 ug/L	538.04 ppb	18:55:58
3	Se 196.026†	739.9	736.3	554.17 ug/L	554.17 ppb	18:55:58
3	Si 251.611†	77872.2	74938.1	2546.8 ug/L	2546.8 ppb	18:55:37
3	Sn 189.927†	2697.4	2600.4	524.23 ug/L	524.23 ppb	18:55:58
3	Ti 334.940†	319330.5	310613.9	493.29 ug/L	493.29 ppb	18:55:37
3	Tl 190.801†	1530.7	1510.9	522.32 ug/L	522.32 ppb	18:55:58
3	U 409.014†	15747.5	17685.3	487.46 ug/L	487.46 ppb	18:55:37
3	V 292.402†	69370.0	68569.9	511.34 ug/L	511.34 ppb	18:55:37
3	Zn 213.857†	50021.8	47883.7	513.50 ug/L	513.50 ppb	18:55:37
3	SiO2†	78113.2	75164.3	5441.8 ug/L	5441.8 ppb	18:56:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901523.5	102.62 %		1.207			1.18%
Sc Radial	4334.1	98.6 %		1.49			1.51%
Y 371.029	747094.4	101.05 %		1.219			1.21%
Y RADIAL	4718.8	97.80 %		1.069			1.09%
Ag 328.068†	105984.1	510.84 ug/L		8.895	510.84 ppb	8.895	1.74%
QC value within limits for Ag 328.068 Recovery = 102.17%							
Al 396.153Radial†	5581.5	4855.3 ug/L		93.28	4855.3 ppb	93.28	1.92%
QC value within limits for Al 396.153Radial Recovery = 97.11%							
As 188.979†	1072.3	530.16 ug/L		5.684	530.16 ppb	5.684	1.07%
QC value within limits for As 188.979 Recovery = 106.03%							
B 249.677†	20364.1	505.22 ug/L		9.730	505.22 ppb	9.730	1.93%
QC value within limits for B 249.677 Recovery = 101.04%							
Ba 233.527†	62340.5	522.37 ug/L		9.978	522.37 ppb	9.978	1.91%
QC value within limits for Ba 233.527 Recovery = 104.47%							
Be 313.107†	1279512.0	507.36 ug/L		5.745	507.36 ppb	5.745	1.13%
QC value within limits for Be 313.107 Recovery = 101.47%							
Ca 317.933Radial†	2590.9	5144.9 ug/L		87.64	5144.9 ppb	87.64	1.70%

QC value within limits for Ca 317.933 Radial Recovery = 102.90%							
Cd	226.502†	41498.1	534.56 ug/L	9.949	534.56 ppb	9.949	1.86%
QC value within limits for Cd 226.502 Recovery = 106.91%							
Co	228.616†	23339.5	539.38 ug/L	10.232	539.38 ppb	10.232	1.90%
QC value within limits for Co 228.616 Recovery = 107.88%							
Cr	267.716†	42941.8	520.10 ug/L	10.026	520.10 ppb	10.026	1.93%
QC value within limits for Cr 267.716 Recovery = 104.02%							
Cu	324.752†	162700.7	498.72 ug/L	9.228	498.72 ppb	9.228	1.85%
QC value within limits for Cu 324.752 Recovery = 99.74%							
Fe	238.204 Radial†	431.2	5245.1 ug/L	122.61	5245.1 ppb	122.61	2.34%
QC value within limits for Fe 238.204 Radial Recovery = 104.90%							
K	766.490 Radial†	26976.8	5179.7 ug/L	106.06	5179.7 ppb	106.06	2.05%
QC value within limits for K 766.490 Radial Recovery = 103.59%							
Mg	279.077 IEC†	116.3	5274.1 ug/L	55.63	5274.1 ppb	55.63	1.05%
QC value within limits for Mg 279.077 IEC Recovery = 105.48%							
Mn	257.610†	429515.9	515.00 ug/L	5.945	515.00 ppb	5.945	1.15%
QC value within limits for Mn 257.610 Recovery = 103.00%							
Mo	202.031†	6605.3	517.13 ug/L	3.812	517.13 ppb	3.812	0.74%
QC value within limits for Mo 202.031 Recovery = 103.43%							
Na	589.592 Radial†	36050.4	10399 ug/L	218.2	10399 ppb	218.2	2.10%
QC value within limits for Na 589.592 Radial Recovery = 103.99%							
Ni	231.604†	19014.1	527.56 ug/L	9.556	527.56 ppb	9.556	1.81%
QC value within limits for Ni 231.604 Recovery = 105.51%							
P	214.914†	3972.8	2561.8 ug/L	15.93	2561.8 ppb	15.93	0.62%
QC value within limits for P 214.914 Recovery = 102.47%							
Pb	220.353†	3875.2	527.24 ug/L	2.455	527.24 ppb	2.455	0.47%
QC value within limits for Pb 220.353 Recovery = 105.45%							
S	181.975 Axial†	659.5	1059.6 ug/L	8.57	1059.6 ppb	8.57	0.81%
QC value within limits for S 181.975 Axial Recovery = 105.96%							
Sb	206.836†	1377.7	537.36 ug/L	1.165	537.36 ppb	1.165	0.22%
QC value within limits for Sb 206.836 Recovery = 107.47%							
Se	196.026†	732.2	551.60 ug/L	3.191	551.60 ppb	3.191	0.58%
QC value greater than the upper limit for Se 196.026 Recovery = 110.32%							
Si	251.611†	75934.8	2580.7 ug/L	49.59	2580.7 ppb	49.59	1.92%
QC value within limits for Si 251.611 Recovery = 103.23%							
Sn	189.927†	2625.0	529.21 ug/L	4.527	529.21 ppb	4.527	0.86%
QC value within limits for Sn 189.927 Recovery = 105.84%							
Sr	421.552†	78226.4	506.36 ug/L	10.539	506.36 ppb	10.539	2.08%
QC value within limits for Sr 421.552 Recovery = 101.27%							
Ti	334.940†	314944.2	500.17 ug/L	9.460	500.17 ppb	9.460	1.89%
QC value within limits for Ti 334.940 Recovery = 100.03%							
Tl	190.801†	1514.2	523.49 ug/L	3.655	523.49 ppb	3.655	0.70%
QC value within limits for Tl 190.801 Recovery = 104.70%							
U	409.014†	17912.6	493.72 ug/L	7.794	493.72 ppb	7.794	1.58%
QC value within limits for U 409.014 Recovery = 98.74%							
V	292.402†	69480.7	518.08 ug/L	8.923	518.08 ppb	8.923	1.72%
QC value within limits for V 292.402 Recovery = 103.62%							
Zn	213.857†	48454.2	519.61 ug/L	9.050	519.61 ppb	9.050	1.74%
QC value within limits for Zn 213.857 Recovery = 103.92%							
SiO2†		75625.3	5475.1 ug/L	74.38	5475.1 ppb	74.38	1.36%
QC value within limits for SiO2 Recovery = 102.39%							
QC Failed. Continue with analysis.							

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

Autosampler Location: 6
 Date Collected: 2/22/2010 18:58:23
 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	4284.4	4284.4	97.5 %		19:00:15
1	Y RADIAL	4704.8	4704.8	97.51 %		19:00:15
1	Al 396.153Radial†	-127.8	-26.9	-23.515 ug/L	-23.515 ppb	19:00:15
1	Ca 317.933Radial†	17.5	-1.8	-3.5933 ug/L	-3.5933 ppb	19:00:35
1	Fe 238.204 Radial†	10.4	-0.4	-5.0869 ug/L	-5.0869 ppb	19:00:35
1	K 766.490 Radial†	2496.2	73.5	14.118 ug/L	14.118 ppb	19:00:15
1	Mg 279.077 IEC†	0.1	-2.7	-123.84 ug/L	-123.84 ppb	19:00:35
1	Na 589.592 Radial†	-618.8	59.1	17.053 ug/L	17.053 ppb	19:00:15
1	Sr 421.552†	23.2	10.3	0.0668 ug/L	0.0668 ppb	19:00:15
1	Sc 361.383	914037.8	914037.8	104.04 %		19:01:32
1	Y 371.029	768155.2	768155.2	103.89 %		19:01:32
1	Ag 328.068†	236.4	-215.8	-1.0307 ug/L	-1.0307 ppb	19:01:37
1	As 188.979†	-24.2	1.2	0.5983 ug/L	0.5983 ppb	19:01:57
1	B 249.677†	-352.0	129.8	3.2356 ug/L	3.2356 ppb	19:01:57
1	Ba 233.527†	-2.6	4.7	0.0399 ug/L	0.0399 ppb	19:01:57
1	Be 313.107†	-3998.5	9.0	0.0036 ug/L	0.0036 ppb	19:01:37
1	Cd 226.502†	-192.5	-7.4	-0.0958 ug/L	-0.0958 ppb	19:01:57
1	Co 228.616†	-58.7	-5.4	-0.1248 ug/L	-0.1248 ppb	19:01:57
1	Cr 267.716†	79.2	-3.2	-0.0373 ug/L	-0.0373 ppb	19:01:57
1	Cu 324.752†	6066.3	-372.3	-1.1397 ug/L	-1.1397 ppb	19:01:37
1	Mn 257.610†	430.2	-36.3	-0.0389 ug/L	-0.0389 ppb	19:01:57
1	Mo 202.031†	10.4	2.4	0.1893 ug/L	0.1893 ppb	19:01:57
1	Ni 231.604†	69.8	-6.0	-0.1654 ug/L	-0.1654 ppb	19:01:57
1	P 214.914†	202.1	-1.8	-0.9524 ug/L	-0.9524 ppb	19:01:57
1	Pb 220.353†	-56.8	-2.1	-0.2896 ug/L	-0.2896 ppb	19:01:57
1	S 181.975 Axial†	42.2	9.4	15.152 ug/L	15.152 ppb	19:01:57
1	Sb 206.836†	42.7	6.3	2.3663 ug/L	2.3663 ppb	19:01:57
1	Se 196.026†	-28.6	-8.2	-5.9618 ug/L	-5.9618 ppb	19:01:57
1	Si 251.611†	545.7	1.2	0.0392 ug/L	0.0392 ppb	19:01:57
1	Sn 189.927†	11.0	-2.9	-0.5883 ug/L	-0.5883 ppb	19:01:57
1	Ti 334.940†	-1204.6	11.5	0.0293 ug/L	0.0293 ppb	19:01:37
1	Tl 190.801†	-28.1	0.6	0.1922 ug/L	0.1922 ppb	19:01:57
1	U 409.014†	-2645.0	-117.0	-3.2349 ug/L	-3.2349 ppb	19:01:32
1	V 292.402†	-1341.0	58.6	0.4260 ug/L	0.4260 ppb	19:01:37
1	Zn 213.857†	574.7	-37.1	-0.3986 ug/L	-0.3986 ppb	19:01:57
1	SiO2†	570.6	17.7	1.2807 ug/L	1.2807 ppb	19:03:03
2	Sc Radial	4336.5	4336.5	98.7 %		19:00:40
2	Y RADIAL	4771.5	4771.5	98.89 %		19:00:40
2	Al 396.153Radial†	-110.2	-7.5	-6.5369 ug/L	-6.5369 ppb	19:00:40
2	Ca 317.933Radial†	18.9	-0.6	-1.1503 ug/L	-1.1503 ppb	19:01:00
2	Fe 238.204 Radial†	14.4	3.5	42.684 ug/L	42.684 ppb	19:01:00
2	K 766.490 Radial†	2624.8	173.1	33.264 ug/L	33.264 ppb	19:00:40
2	Mg 279.077 IEC†	3.3	0.4	20.105 ug/L	20.105 ppb	19:01:00
2	Na 589.592 Radial†	-562.3	124.1	35.789 ug/L	35.789 ppb	19:00:40
2	Sr 421.552†	-2.2	-15.8	-0.1020 ug/L	-0.1020 ppb	19:00:40
2	Sc 361.383	904863.8	904863.8	103.00 %		19:02:02
2	Y 371.029	760195.5	760195.5	102.82 %		19:02:02
2	Ag 328.068†	264.0	-186.7	-0.8797 ug/L	-0.8797 ppb	19:02:07
2	As 188.979†	-19.0	6.0	2.9663 ug/L	2.9663 ppb	19:02:27
2	B 249.677†	-369.4	109.4	2.7202 ug/L	2.7202 ppb	19:02:27
2	Ba 233.527†	-15.0	-7.4	-0.0603 ug/L	-0.0603 ppb	19:02:27
2	Be 313.107†	-3960.6	6.9	0.0026 ug/L	0.0026 ppb	19:02:07
2	Cd 226.502†	-176.6	6.2	0.0744 ug/L	0.0744 ppb	19:02:27
2	Co 228.616†	-52.9	-0.3	-0.0081 ug/L	-0.0081 ppb	19:02:27
2	Cr 267.716†	54.4	-26.5	-0.3156 ug/L	-0.3156 ppb	19:02:27
2	Cu 324.752†	6044.8	-334.0	-1.0207 ug/L	-1.0207 ppb	19:02:07
2	Mn 257.610†	417.2	-44.7	-0.0501 ug/L	-0.0501 ppb	19:02:27
2	Mo 202.031†	9.5	1.7	0.1354 ug/L	0.1354 ppb	19:02:27
2	Ni 231.604†	46.9	-27.5	-0.7625 ug/L	-0.7625 ppb	19:02:27

2	P 214.914†	199.8	-2.1	-1.2073 ug/L	-1.2073 ppb	19:02:27
2	Pb 220.353†	-58.9	-4.7	-0.6363 ug/L	-0.6363 ppb	19:02:27
2	S 181.975 Axial†	37.6	5.3	8.5438 ug/L	8.5438 ppb	19:02:27
2	Sb 206.836†	39.8	3.9	1.4717 ug/L	1.4717 ppb	19:02:27
2	Se 196.026†	-21.3	-1.3	-0.8101 ug/L	-0.8101 ppb	19:02:27
2	Si 251.611†	534.9	-3.9	-0.1343 ug/L	-0.1343 ppb	19:02:27
2	Sn 189.927†	13.9	0.0	0.0071 ug/L	0.0071 ppb	19:02:27
2	Ti 334.940†	-1248.6	-42.9	-0.0692 ug/L	-0.0692 ppb	19:02:07
2	Tl 190.801†	-20.3	7.9	2.7119 ug/L	2.7119 ppb	19:02:27
2	U 409.014†	-2553.0	-53.4	-1.4820 ug/L	-1.4820 ppb	19:02:02
2	V 292.402†	-1382.8	4.9	0.0293 ug/L	0.0293 ppb	19:02:07
2	Zn 213.857†	561.9	-44.0	-0.4761 ug/L	-0.4761 ppb	19:02:27
2	SiO2†	534.9	-11.3	-0.8263 ug/L	-0.8263 ppb	19:03:08
3	Sc Radial	4242.6	4242.6	96.5 %		19:01:05
3	Y RADIAL	4659.6	4659.6	96.57 %		19:01:05
3	Al 396.153Radial†	-110.7	-10.5	-9.2186 ug/L	-9.2186 ppb	19:01:05
3	Ca 317.933Radial†	24.7	5.9	11.626 ug/L	11.626 ppb	19:01:25
3	Fe 238.204 Radial†	13.8	3.2	39.161 ug/L	39.161 ppb	19:01:25
3	K 766.490 Radial†	2591.8	197.8	38.013 ug/L	38.013 ppb	19:01:05
3	Mg 279.077 IEC†	1.1	-1.8	-79.752 ug/L	-79.752 ppb	19:01:25
3	Na 589.592 Radial†	-609.4	62.7	18.078 ug/L	18.078 ppb	19:01:05
3	Sr 421.552†	30.2	17.8	0.1151 ug/L	0.1151 ppb	19:01:05
3	Sc 361.383	907972.1	907972.1	103.35 %		19:02:32
3	Y 371.029	762293.6	762293.6	103.10 %		19:02:32
3	Ag 328.068†	241.8	-209.0	-0.9890 ug/L	-0.9890 ppb	19:02:38
3	As 188.979†	-23.8	1.4	0.6876 ug/L	0.6876 ppb	19:02:58
3	B 249.677†	-372.5	107.7	2.6770 ug/L	2.6770 ppb	19:02:58
3	Ba 233.527†	-11.9	-4.3	-0.0357 ug/L	-0.0357 ppb	19:02:58
3	Be 313.107†	-3915.3	63.9	0.0249 ug/L	0.0249 ppb	19:02:38
3	Cd 226.502†	-181.7	1.8	0.0192 ug/L	0.0192 ppb	19:02:58
3	Co 228.616†	-48.9	3.7	0.0875 ug/L	0.0875 ppb	19:02:58
3	Cr 267.716†	69.4	-12.2	-0.1433 ug/L	-0.1433 ppb	19:02:58
3	Cu 324.752†	5930.4	-464.8	-1.4219 ug/L	-1.4219 ppb	19:02:38
3	Mn 257.610†	417.8	-45.5	-0.0474 ug/L	-0.0474 ppb	19:02:58
3	Mo 202.031†	17.6	9.5	0.7434 ug/L	0.7434 ppb	19:02:58
3	Ni 231.604†	65.2	-9.9	-0.2753 ug/L	-0.2753 ppb	19:02:58
3	P 214.914†	200.6	-1.9	-1.0402 ug/L	-1.0402 ppb	19:02:58
3	Pb 220.353†	-56.1	-1.8	-0.2451 ug/L	-0.2451 ppb	19:02:58
3	S 181.975 Axial†	40.1	7.6	12.210 ug/L	12.210 ppb	19:02:58
3	Sb 206.836†	40.1	4.0	1.5242 ug/L	1.5242 ppb	19:02:58
3	Se 196.026†	-26.0	-5.8	-4.1066 ug/L	-4.1066 ppb	19:02:58
3	Si 251.611†	536.5	-4.2	-0.1520 ug/L	-0.1520 ppb	19:02:58
3	Sn 189.927†	10.8	-3.0	-0.6057 ug/L	-0.6057 ppb	19:02:58
3	Ti 334.940†	-1330.0	-117.6	-0.1781 ug/L	-0.1781 ppb	19:02:38
3	Tl 190.801†	-22.7	5.6	1.9248 ug/L	1.9248 ppb	19:02:58
3	U 409.014†	-2552.9	-44.8	-1.2434 ug/L	-1.2434 ppb	19:02:32
3	V 292.402†	-1425.7	-32.0	-0.2345 ug/L	-0.2345 ppb	19:02:38
3	Zn 213.857†	552.8	-54.6	-0.5934 ug/L	-0.5934 ppb	19:02:58
3	SiO2†	546.7	-1.7	-0.1465 ug/L	-0.1465 ppb	19:03:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908957.9	103.46 %	0.531			0.51%
Sc Radial	4287.8	97.5 %	1.07			1.10%
Y 371.029	763548.1	103.27 %	0.558			0.54%
Y RADIAL	4712.0	97.66 %	1.167			1.20%
Ag 328.068†	-203.8	-0.9665 ug/L	0.07800	-0.9665 ppb	0.07800	8.07%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-15.0	-13.090 ug/L	9.1274	-13.090 ppb	9.1274	69.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.9	1.4174 ug/L	1.34213	1.4174 ppb	1.34213	94.69%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	115.6	2.8776 ug/L	0.31079	2.8776 ppb	0.31079	10.80%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.4	-0.0187 ug/L	0.05222	-0.0187 ppb	0.05222	279.02%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	26.6	0.0103 ug/L	0.01258	0.0103 ppb	0.01258	121.72%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.2	2.2941 ug/L	8.17339	2.2941 ppb	8.17339	356.28%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd	226.502†	0.2	-0.0007 ug/L	0.08683	-0.0007 ppb 0.08683 >999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co	228.616†	-0.7	-0.0151 ug/L	0.10631	-0.0151 ppb 0.10631 702.90%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr	267.716†	-14.0	-0.1654 ug/L	0.14047	-0.1654 ppb 0.14047 84.93%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu	324.752†	-390.4	-1.1941 ug/L	0.20602	-1.1941 ppb 0.20602 17.25%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe	238.204 Radial†	2.1	25.586 ug/L	26.6216	25.586 ppb 26.6216 104.05%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K	766.490 Radial†	148.1	28.465 ug/L	12.6498	28.465 ppb 12.6498 44.44%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg	279.077 IEC†	-1.3	-61.161 ug/L	73.7501	-61.161 ppb 73.7501 120.58%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn	257.610†	-42.2	-0.0455 ug/L	0.00585	-0.0455 ppb 0.00585 12.86%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo	202.031†	4.5	0.3560 ug/L	0.33659	0.3560 ppb 0.33659 94.54%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na	589.592 Radial†	82.0	23.640 ug/L	10.5341	23.640 ppb 10.5341 44.56%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni	231.604†	-14.4	-0.4011 ug/L	0.31777	-0.4011 ppb 0.31777 79.23%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P	214.914†	-1.9	-1.0666 ug/L	0.12952	-1.0666 ppb 0.12952 12.14%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb	220.353†	-2.8	-0.3904 ug/L	0.21417	-0.3904 ppb 0.21417 54.86%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S	181.975 Axial†	7.4	11.969 ug/L	3.3109	11.969 ppb 3.3109 27.66%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb	206.836†	4.7	1.7874 ug/L	0.50203	1.7874 ppb 0.50203 28.09%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se	196.026†	-5.1	-3.6262 ug/L	2.60923	-3.6262 ppb 2.60923 71.96%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si	251.611†	-2.3	-0.0824 ug/L	0.10569	-0.0824 ppb 0.10569 128.32%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn	189.927†	-2.0	-0.3956 ug/L	0.34893	-0.3956 ppb 0.34893 88.19%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr	421.552†	4.1	0.0267 ug/L	0.11398	0.0267 ppb 0.11398 427.67%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti	334.940†	-49.7	-0.0727 ug/L	0.10375	-0.0727 ppb 0.10375 142.77%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl	190.801†	4.7	1.6096 ug/L	1.28912	1.6096 ppb 1.28912 80.09%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U	409.014†	-71.7	-1.9867 ug/L	1.08747	-1.9867 ppb 1.08747 54.74%
QC value within limits for U 409.014 Recovery = Not calculated					
V	292.402†	10.5	0.0736 ug/L	0.33245	0.0736 ppb 0.33245 451.61%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn	213.857†	-45.2	-0.4894 ug/L	0.09810	-0.4894 ppb 0.09810 20.05%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†		1.5	0.1026 ug/L	1.07537	0.1026 ppb 1.07537 >999.9%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 2/22/2010 20:08:20
 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	4291.0	4291.0	97.6 %		20:10:12
1	Y RADIAL	4618.5	4618.5	95.72 %		20:10:12
1	Al 396.153Radial†	5377.1	5612.6	4882.4 ug/L	4882.4 ppb	20:10:12
1	Ca 317.933Radial†	2611.3	2655.3	5272.9 ug/L	5272.9 ppb	20:10:32
1	Fe 238.204 Radial†	437.4	436.9	5315.0 ug/L	5315.0 ppb	20:10:32
1	K 766.490 Radial†	29088.0	27310.5	5244.0 ug/L	5244.0 ppb	20:10:12
1	Mg 279.077 IEC†	119.9	120.0	5444.3 ug/L	5444.3 ppb	20:10:32
1	Na 589.592 Radial†	33381.3	34890.2	10064 ug/L	10064 ppb	20:10:12
1	Sr 421.552†	74894.9	76709.6	496.54 ug/L	496.54 ppb	20:10:12
1	Sc 361.383	916592.6	916592.6	104.33 %		20:11:30
1	Y 371.029	756878.1	756878.1	102.37 %		20:11:30
1	Ag 328.068†	111173.4	106113.6	511.49 ug/L	511.49 ppb	20:11:35
1	As 188.979†	1117.0	1095.0	541.44 ug/L	541.44 ppb	20:11:55
1	B 249.677†	20830.1	20433.1	506.91 ug/L	506.91 ppb	20:11:35
1	Ba 233.527†	65657.7	62938.2	527.37 ug/L	527.37 ppb	20:11:35
1	Be 313.107†	1348982.1	1296812.7	514.23 ug/L	514.23 ppb	20:11:30
1	Cd 226.502†	43743.4	42104.4	542.37 ug/L	542.37 ppb	20:11:35
1	Co 228.616†	24633.3	23661.3	546.80 ug/L	546.80 ppb	20:11:35
1	Cr 267.716†	45206.9	43250.1	523.84 ug/L	523.84 ppb	20:11:35
1	Cu 324.752†	175857.3	162351.2	497.65 ug/L	497.65 ppb	20:11:35
1	Mn 257.610†	456008.7	436621.4	523.52 ug/L	523.52 ppb	20:11:30
1	Mo 202.031†	6937.1	6641.5	519.96 ug/L	519.96 ppb	20:11:55
1	Ni 231.604†	20103.5	19195.6	532.59 ug/L	532.59 ppb	20:11:35
1	P 214.914†	4431.4	4051.4	2614.7 ug/L	2614.7 ppb	20:11:55
1	Pb 220.353†	4048.6	3933.0	535.09 ug/L	535.09 ppb	20:11:55
1	S 181.975 Axial†	734.2	672.5	1080.5 ug/L	1080.5 ppb	20:11:55
1	Sb 206.836†	1494.9	1398.1	545.13 ug/L	545.13 ppb	20:11:55
1	Se 196.026†	752.3	740.4	557.86 ug/L	557.86 ppb	20:11:55
1	Si 251.611†	80687.6	76813.4	2610.6 ug/L	2610.6 ppb	20:11:35
1	Sn 189.927†	2783.1	2654.0	535.06 ug/L	535.06 ppb	20:11:55
1	Ti 334.940†	335815.1	323038.4	513.03 ug/L	513.03 ppb	20:11:30
1	Tl 190.801†	1558.3	1521.2	526.03 ug/L	526.03 ppb	20:11:55
1	U 409.014†	16018.7	17778.7	490.00 ug/L	490.00 ppb	20:11:35
1	V 292.402†	71283.9	69671.0	519.49 ug/L	519.49 ppb	20:11:35
1	Zn 213.857†	51799.0	49058.4	526.11 ug/L	526.11 ppb	20:11:35
1	SiO2†	79955.6	76104.4	5509.8 ug/L	5509.8 ppb	20:13:03
2	Sc Radial	4170.7	4170.7	94.9 %		20:10:37
2	Y RADIAL	4536.0	4536.0	94.01 %		20:10:37
2	Al 396.153Radial†	5372.0	5766.0	5016.7 ug/L	5016.7 ppb	20:10:37
2	Ca 317.933Radial†	2606.4	2727.3	5415.7 ug/L	5415.7 ppb	20:10:57
2	Fe 238.204 Radial†	436.7	449.1	5462.6 ug/L	5462.6 ppb	20:10:57
2	K 766.490 Radial†	29014.1	28091.8	5394.1 ug/L	5394.1 ppb	20:10:37
2	Mg 279.077 IEC†	119.5	123.1	5584.1 ug/L	5584.1 ppb	20:10:57
2	Na 589.592 Radial†	33059.7	35537.4	10251 ug/L	10251 ppb	20:10:37
2	Sr 421.552†	74896.1	78923.4	510.87 ug/L	510.87 ppb	20:10:37
2	Sc 361.383	915868.2	915868.2	104.25 %		20:12:01
2	Y 371.029	756705.0	756705.0	102.35 %		20:12:01
2	Ag 328.068†	109809.2	104889.2	505.65 ug/L	505.65 ppb	20:12:06
2	As 188.979†	1117.4	1096.3	542.09 ug/L	542.09 ppb	20:12:26
2	B 249.677†	20544.4	20174.8	500.48 ug/L	500.48 ppb	20:12:06
2	Ba 233.527†	64713.3	62082.0	520.20 ug/L	520.20 ppb	20:12:06
2	Be 313.107†	1346693.7	1295640.2	513.77 ug/L	513.77 ppb	20:12:01
2	Cd 226.502†	43041.0	41463.8	534.10 ug/L	534.10 ppb	20:12:06
2	Co 228.616†	24216.0	23279.7	537.97 ug/L	537.97 ppb	20:12:06
2	Cr 267.716†	44612.2	42714.0	517.37 ug/L	517.37 ppb	20:12:06
2	Cu 324.752†	173835.7	160545.4	492.13 ug/L	492.13 ppb	20:12:06
2	Mn 257.610†	455838.1	436803.5	523.75 ug/L	523.75 ppb	20:12:01
2	Mo 202.031†	6890.3	6601.8	516.88 ug/L	516.88 ppb	20:12:26
2	Ni 231.604†	19869.3	18986.2	526.78 ug/L	526.78 ppb	20:12:06

2	P 214.914†	4385.8	4011.0	2588.6 ug/L	2588.6 ppb	20:12:26
2	Pb 220.353†	4042.0	3929.7	534.65 ug/L	534.65 ppb	20:12:26
2	S 181.975 Axial†	735.5	674.3	1083.4 ug/L	1083.4 ppb	20:12:26
2	Sb 206.836†	1485.9	1390.6	542.14 ug/L	542.14 ppb	20:12:26
2	Se 196.026†	752.2	740.9	558.68 ug/L	558.68 ppb	20:12:26
2	Si 251.611†	79410.5	75649.6	2571.0 ug/L	2571.0 ppb	20:12:06
2	Sn 189.927†	2754.2	2628.4	529.92 ug/L	529.92 ppb	20:12:26
2	Ti 334.940†	335582.7	323070.0	513.10 ug/L	513.10 ppb	20:12:01
2	Tl 190.801†	1556.3	1520.4	525.80 ug/L	525.80 ppb	20:12:26
2	U 409.014†	15614.8	17403.4	479.62 ug/L	479.62 ppb	20:12:06
2	V 292.402†	70334.0	68813.9	513.11 ug/L	513.11 ppb	20:12:06
2	Zn 213.857†	51021.6	48352.0	518.49 ug/L	518.49 ppb	20:12:06
2	SiO2†	80623.5	76805.7	5560.8 ug/L	5560.8 ppb	20:13:08
3	Sc Radial	4369.9	4369.9	99.4 %		20:11:02
3	Y RADIAL	4739.4	4739.4	98.22 %		20:11:02
3	Al 396.153Radial†	5552.8	5689.8	4949.9 ug/L	4949.9 ppb	20:11:02
3	Ca 317.933Radial†	2566.4	2561.8	5087.3 ug/L	5087.3 ppb	20:11:22
3	Fe 238.204 Radial†	437.9	429.3	5222.7 ug/L	5222.7 ppb	20:11:22
3	K 766.490 Radial†	29723.8	27411.8	5263.5 ug/L	5263.5 ppb	20:11:02
3	Mg 279.077 IEC†	117.6	115.5	5238.1 ug/L	5238.1 ppb	20:11:22
3	Na 589.592 Radial†	34157.7	35053.5	10111 ug/L	10111 ppb	20:11:02
3	Sr 421.552†	77385.8	77829.5	503.79 ug/L	503.79 ppb	20:11:02
3	Sc 361.383	911009.2	911009.2	103.70 %		20:12:32
3	Y 371.029	754458.6	754458.6	102.04 %		20:12:32
3	Ag 328.068†	110459.2	106077.9	511.29 ug/L	511.29 ppb	20:12:37
3	As 188.979†	1099.3	1084.5	536.24 ug/L	536.24 ppb	20:12:57
3	B 249.677†	20585.5	20319.7	504.11 ug/L	504.11 ppb	20:12:37
3	Ba 233.527†	64965.7	62656.5	525.01 ug/L	525.01 ppb	20:12:37
3	Be 313.107†	1341166.7	1297200.2	514.38 ug/L	514.38 ppb	20:12:32
3	Cd 226.502†	43292.7	41926.8	540.09 ug/L	540.09 ppb	20:12:37
3	Co 228.616†	24366.4	23548.6	544.20 ug/L	544.20 ppb	20:12:37
3	Cr 267.716†	44867.4	43188.3	523.09 ug/L	523.09 ppb	20:12:37
3	Cu 324.752†	174749.2	162315.7	497.54 ug/L	497.54 ppb	20:12:37
3	Mn 257.610†	451573.9	435023.5	521.60 ug/L	521.60 ppb	20:12:32
3	Mo 202.031†	6905.5	6651.8	520.76 ug/L	520.76 ppb	20:12:57
3	Ni 231.604†	20002.3	19216.1	533.16 ug/L	533.16 ppb	20:12:37
3	P 214.914†	4365.4	4013.7	2589.6 ug/L	2589.6 ppb	20:12:57
3	Pb 220.353†	4017.1	3926.3	534.21 ug/L	534.21 ppb	20:12:57
3	S 181.975 Axial†	737.4	679.9	1092.3 ug/L	1092.3 ppb	20:12:57
3	Sb 206.836†	1483.5	1395.9	544.30 ug/L	544.30 ppb	20:12:57
3	Se 196.026†	739.6	732.6	551.83 ug/L	551.83 ppb	20:12:57
3	Si 251.611†	79844.1	76474.0	2599.1 ug/L	2599.1 ppb	20:12:37
3	Sn 189.927†	2764.2	2652.1	534.65 ug/L	534.65 ppb	20:12:57
3	Ti 334.940†	332975.4	322272.6	511.81 ug/L	511.81 ppb	20:12:32
3	Tl 190.801†	1550.1	1522.5	526.45 ug/L	526.45 ppb	20:12:57
3	U 409.014†	15940.6	17797.5	490.53 ug/L	490.53 ppb	20:12:37
3	V 292.402†	70865.7	69686.5	519.63 ug/L	519.63 ppb	20:12:37
3	Zn 213.857†	51322.8	48903.5	524.44 ug/L	524.44 ppb	20:12:37
3	SiO2†	79691.4	76319.3	5525.4 ug/L	5525.4 ppb	20:13:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914490.0	104.09 %	0.346			0.33%
Sc Radial	4277.2	97.3 %	2.28			2.35%
Y 371.029	756013.9	102.25 %	0.183			0.18%
Y RADIAL	4631.3	95.98 %	2.120			2.21%
Ag 328.068†	105693.6	509.48 ug/L	3.315	509.48 ppb	3.315	0.65%
QC value within limits for Ag 328.068 Recovery = 101.90%						
Al 396.153Radial†	5689.5	4949.6 ug/L	67.17	4949.6 ppb	67.17	1.36%
QC value within limits for Al 396.153Radial Recovery = 98.99%						
As 188.979†	1091.9	539.93 ug/L	3.204	539.93 ppb	3.204	0.59%
QC value within limits for As 188.979 Recovery = 107.99%						
B 249.677†	20309.2	503.83 ug/L	3.227	503.83 ppb	3.227	0.64%
QC value within limits for B 249.677 Recovery = 100.77%						
Ba 233.527†	62558.9	524.19 ug/L	3.652	524.19 ppb	3.652	0.70%
QC value within limits for Ba 233.527 Recovery = 104.84%						
Be 313.107†	1296551.0	514.13 ug/L	0.320	514.13 ppb	0.320	0.06%
QC value within limits for Be 313.107 Recovery = 102.83%						
Ca 317.933Radial†	2648.1	5258.6 ug/L	164.71	5258.6 ppb	164.71	3.13%

QC value within limits for Ca 317.933 Radial Recovery = 105.17%							
Cd	226.502†	41831.7	538.85 ug/L	4.274	538.85 ppb	4.274	0.79%
QC value within limits for Cd 226.502 Recovery = 107.77%							
Co	228.616†	23496.6	542.99 ug/L	4.536	542.99 ppb	4.536	0.84%
QC value within limits for Co 228.616 Recovery = 108.60%							
Cr	267.716†	43050.8	521.43 ug/L	3.538	521.43 ppb	3.538	0.68%
QC value within limits for Cr 267.716 Recovery = 104.29%							
Cu	324.752†	161737.4	495.77 ug/L	3.156	495.77 ppb	3.156	0.64%
QC value within limits for Cu 324.752 Recovery = 99.15%							
Fe	238.204 Radial†	438.5	5333.4 ug/L	121.00	5333.4 ppb	121.00	2.27%
QC value within limits for Fe 238.204 Radial Recovery = 106.67%							
K	766.490 Radial†	27604.7	5300.5 ug/L	81.61	5300.5 ppb	81.61	1.54%
QC value within limits for K 766.490 Radial Recovery = 106.01%							
Mg	279.077 IEC†	119.5	5422.2 ug/L	174.06	5422.2 ppb	174.06	3.21%
QC value within limits for Mg 279.077 IEC Recovery = 108.44%							
Mn	257.610†	436149.5	522.96 ug/L	1.177	522.96 ppb	1.177	0.23%
QC value within limits for Mn 257.610 Recovery = 104.59%							
Mo	202.031†	6631.7	519.20 ug/L	2.051	519.20 ppb	2.051	0.39%
QC value within limits for Mo 202.031 Recovery = 103.84%							
Na	589.592 Radial†	35160.4	10142 ug/L	97.1	10142 ppb	97.1	0.96%
QC value within limits for Na 589.592 Radial Recovery = 101.42%							
Ni	231.604†	19132.6	530.84 ug/L	3.530	530.84 ppb	3.530	0.67%
QC value within limits for Ni 231.604 Recovery = 106.17%							
P	214.914†	4025.4	2597.6 ug/L	14.80	2597.6 ppb	14.80	0.57%
QC value within limits for P 214.914 Recovery = 103.90%							
Pb	220.353†	3929.7	534.65 ug/L	0.440	534.65 ppb	0.440	0.08%
QC value within limits for Pb 220.353 Recovery = 106.93%							
S	181.975 Axial†	675.6	1085.4 ug/L	6.19	1085.4 ppb	6.19	0.57%
QC value within limits for S 181.975 Axial Recovery = 108.54%							
Sb	206.836†	1394.9	543.86 ug/L	1.545	543.86 ppb	1.545	0.28%
QC value within limits for Sb 206.836 Recovery = 108.77%							
Se	196.026†	738.0	556.12 ug/L	3.739	556.12 ppb	3.739	0.67%
QC value greater than the upper limit for Se 196.026 Recovery = 111.22%							
Si	251.611†	76312.4	2593.6 ug/L	20.37	2593.6 ppb	20.37	0.79%
QC value within limits for Si 251.611 Recovery = 103.74%							
Sn	189.927†	2644.9	533.21 ug/L	2.856	533.21 ppb	2.856	0.54%
QC value within limits for Sn 189.927 Recovery = 106.64%							
Sr	421.552†	77820.8	503.73 ug/L	7.165	503.73 ppb	7.165	1.42%
QC value within limits for Sr 421.552 Recovery = 100.75%							
Ti	334.940†	322793.7	512.65 ug/L	0.726	512.65 ppb	0.726	0.14%
QC value within limits for Ti 334.940 Recovery = 102.53%							
Tl	190.801†	1521.4	526.09 ug/L	0.329	526.09 ppb	0.329	0.06%
QC value within limits for Tl 190.801 Recovery = 105.22%							
U	409.014†	17659.9	486.71 ug/L	6.154	486.71 ppb	6.154	1.26%
QC value within limits for U 409.014 Recovery = 97.34%							
V	292.402†	69390.5	517.41 ug/L	3.727	517.41 ppb	3.727	0.72%
QC value within limits for V 292.402 Recovery = 103.48%							
Zn	213.857†	48771.3	523.01 ug/L	4.008	523.01 ppb	4.008	0.77%
QC value within limits for Zn 213.857 Recovery = 104.60%							
SiO2†		76409.8	5532.0 ug/L	26.13	5532.0 ppb	26.13	0.47%
QC value within limits for SiO2 Recovery = 103.45%							
QC Failed. Continue with analysis.							

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/22/2010 20:15:24

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	4281.4	4281.4	97.4 %			20:17:15
1	Y RADIAL	4659.7	4659.7	96.57 %			20:17:15
1	Al 396.153Radial†	-102.0	-0.5	-0.5150 ug/L	-0.5150 ppb		20:17:15
1	Ca 317.933Radial†	18.1	-1.2	-2.3402 ug/L	-2.3402 ppb		20:17:35
1	Fe 238.204 Radial†	11.0	0.2	2.0565 ug/L	2.0565 ppb		20:17:35
1	K 766.490 Radial†	2681.4	265.4	51.006 ug/L	51.006 ppb		20:17:15
1	Mg 279.077 IEC†	2.7	-0.0	-1.7263 ug/L	-1.7263 ppb		20:17:35
1	Na 589.592 Radial†	-585.3	93.1	26.846 ug/L	26.846 ppb		20:17:15
1	Sr 421.552†	21.6	8.7	0.0564 ug/L	0.0564 ppb		20:17:15
1	Sc 361.383	919969.2	919969.2	104.72 %			20:18:32
1	Y 371.029	770714.7	770714.7	104.24 %			20:18:32
1	Ag 328.068†	243.7	-210.3	-1.0049 ug/L	-1.0049 ppb		20:18:37
1	As 188.979†	-25.6	0.1	0.0224 ug/L	0.0224 ppb		20:18:57
1	B 249.677†	-393.0	92.8	2.3133 ug/L	2.3133 ppb		20:18:57
1	Ba 233.527†	-9.1	-1.5	-0.0130 ug/L	-0.0130 ppb		20:18:57
1	Be 313.107†	-4058.4	-23.4	-0.0095 ug/L	-0.0095 ppb		20:18:37
1	Cd 226.502†	-178.3	7.4	0.0940 ug/L	0.0940 ppb		20:18:57
1	Co 228.616†	-67.6	-13.5	-0.3094 ug/L	-0.3094 ppb		20:18:57
1	Cr 267.716†	62.5	-19.7	-0.2370 ug/L	-0.2370 ppb		20:18:57
1	Cu 324.752†	5990.7	-482.0	-1.4759 ug/L	-1.4759 ppb		20:18:37
1	Mn 257.610†	432.2	-37.1	-0.0441 ug/L	-0.0441 ppb		20:18:57
1	Mo 202.031†	22.1	13.6	1.0645 ug/L	1.0645 ppb		20:18:57
1	Ni 231.604†	56.4	-19.1	-0.5309 ug/L	-0.5309 ppb		20:18:57
1	P 214.914†	207.2	1.9	1.5436 ug/L	1.5436 ppb		20:18:57
1	Pb 220.353†	-33.1	20.9	2.8317 ug/L	2.8317 ppb		20:18:57
1	S 181.975 Axial†	40.0	7.0	11.244 ug/L	11.244 ppb		20:18:57
1	Sb 206.836†	43.1	6.4	2.4117 ug/L	2.4117 ppb		20:18:57
1	Se 196.026†	-25.9	-5.4	-3.9089 ug/L	-3.9089 ppb		20:18:57
1	Si 251.611†	628.8	77.2	2.6175 ug/L	2.6175 ppb		20:18:57
1	Sn 189.927†	5.4	-8.3	-1.6754 ug/L	-1.6754 ppb		20:18:57
1	Ti 334.940†	-1289.5	-62.1	-0.0976 ug/L	-0.0976 ppb		20:18:37
1	Tl 190.801†	-21.7	6.9	2.3755 ug/L	2.3755 ppb		20:18:57
1	U 409.014†	-2642.2	-97.9	-2.7073 ug/L	-2.7073 ppb		20:18:32
1	V 292.402†	-1434.2	-22.1	-0.1530 ug/L	-0.1530 ppb		20:18:37
1	Zn 213.857†	558.2	-56.4	-0.6059 ug/L	-0.6059 ppb		20:18:57
1	SiO2†	643.3	83.6	6.0406 ug/L	6.0406 ppb		20:20:03
2	Sc Radial	4367.3	4367.3	99.4 %			20:17:40
2	Y RADIAL	4788.2	4788.2	99.23 %			20:17:40
2	Al 396.153Radial†	-106.0	-2.4	-2.1185 ug/L	-2.1185 ppb		20:17:40
2	Ca 317.933Radial†	22.5	2.8	5.6516 ug/L	5.6516 ppb		20:18:00
2	Fe 238.204 Radial†	11.7	0.7	8.1748 ug/L	8.1748 ppb		20:18:00
2	K 766.490 Radial†	2572.5	101.7	19.543 ug/L	19.543 ppb		20:17:40
2	Mg 279.077 IEC†	1.6	-1.3	-57.667 ug/L	-57.667 ppb		20:18:00
2	Na 589.592 Radial†	-629.7	60.2	17.376 ug/L	17.376 ppb		20:17:40
2	Sr 421.552†	2.0	-11.5	-0.0744 ug/L	-0.0744 ppb		20:17:40
2	Sc 361.383	912192.6	912192.6	103.83 %			20:19:02
2	Y 371.029	765094.4	765094.4	103.48 %			20:19:02
2	Ag 328.068†	305.9	-148.3	-0.7064 ug/L	-0.7064 ppb		20:19:07
2	As 188.979†	-17.0	8.0	3.9464 ug/L	3.9464 ppb		20:19:27
2	B 249.677†	-376.4	105.6	2.6318 ug/L	2.6318 ppb		20:19:27
2	Ba 233.527†	16.8	23.3	0.1949 ug/L	0.1949 ppb		20:19:27
2	Be 313.107†	-3937.5	60.0	0.0235 ug/L	0.0235 ppb		20:19:07
2	Cd 226.502†	-183.9	0.5	0.0047 ug/L	0.0047 ppb		20:19:27
2	Co 228.616†	-60.2	-7.0	-0.1615 ug/L	-0.1615 ppb		20:19:27
2	Cr 267.716†	64.3	-17.5	-0.2095 ug/L	-0.2095 ppb		20:19:27
2	Cu 324.752†	6004.6	-419.9	-1.2852 ug/L	-1.2852 ppb		20:19:07
2	Mn 257.610†	439.4	-26.6	-0.0287 ug/L	-0.0287 ppb		20:19:27
2	Mo 202.031†	5.9	-1.9	-0.1468 ug/L	-0.1468 ppb		20:19:27
2	Ni 231.604†	59.4	-15.8	-0.4382 ug/L	-0.4382 ppb		20:19:27

2	P 214.914†	200.4	-3.0	-1.7416 ug/L	-1.7416 ppb	20:19:27
2	Pb 220.353†	-49.8	4.5	0.6123 ug/L	0.6123 ppb	20:19:27
2	S 181.975 Axial†	38.1	5.5	8.9124 ug/L	8.9124 ppb	20:19:27
2	Sb 206.836†	28.5	-7.3	-2.7321 ug/L	-2.7321 ppb	20:19:27
2	Se 196.026†	-30.0	-9.5	-6.8898 ug/L	-6.8898 ppb	20:19:27
2	Si 251.611†	638.0	91.2	3.1100 ug/L	3.1100 ppb	20:19:27
2	Sn 189.927†	15.9	1.8	0.3706 ug/L	0.3706 ppb	20:19:27
2	Ti 334.940†	-1279.9	-63.3	-0.0939 ug/L	-0.0939 ppb	20:19:07
2	Tl 190.801†	-24.1	4.3	1.4939 ug/L	1.4939 ppb	20:19:27
2	U 409.014†	-2617.4	-95.5	-2.6414 ug/L	-2.6414 ppb	20:19:02
2	V 292.402†	-1414.1	-14.5	-0.1156 ug/L	-0.1156 ppb	20:19:07
2	Zn 213.857†	562.5	-47.7	-0.5134 ug/L	-0.5134 ppb	20:19:27
2	SiO2†	630.8	76.9	5.5826 ug/L	5.5826 ppb	20:20:08
3	Sc Radial	4299.3	4299.3	97.8 %		20:18:05
3	Y RADIAL	4722.3	4722.3	97.87 %		20:18:05
3	Al 396.153Radial†	-116.5	-14.9	-13.035 ug/L	-13.035 ppb	20:18:05
3	Ca 317.933Radial†	19.8	0.5	0.9467 ug/L	0.9467 ppb	20:18:25
3	Fe 238.204 Radial†	9.7	-1.2	-14.728 ug/L	-14.728 ppb	20:18:25
3	K 766.490 Radial†	2618.5	189.6	36.452 ug/L	36.452 ppb	20:18:05
3	Mg 279.077 IEC†	3.2	0.4	16.994 ug/L	16.994 ppb	20:18:25
3	Na 589.592 Radial†	-639.8	39.9	11.504 ug/L	11.504 ppb	20:18:05
3	Sr 421.552†	-10.4	-24.1	-0.1563 ug/L	-0.1563 ppb	20:18:05
3	Sc 361.383	923220.8	923220.8	105.09 %		20:19:33
3	Y 371.029	774626.8	774626.8	104.77 %		20:19:33
3	Ag 328.068†	317.9	-140.5	-0.6717 ug/L	-0.6717 ppb	20:19:38
3	As 188.979†	-21.6	3.9	1.8836 ug/L	1.8836 ppb	20:19:58
3	B 249.677†	-408.6	79.3	1.9796 ug/L	1.9796 ppb	20:19:58
3	Ba 233.527†	1.2	8.3	0.0686 ug/L	0.0686 ppb	20:19:58
3	Be 313.107†	-3875.9	163.9	0.0647 ug/L	0.0647 ppb	20:19:38
3	Cd 226.502†	-179.3	7.0	0.0893 ug/L	0.0893 ppb	20:19:58
3	Co 228.616†	-57.5	-3.7	-0.0827 ug/L	-0.0827 ppb	20:19:58
3	Cr 267.716†	67.5	-15.1	-0.1813 ug/L	-0.1813 ppb	20:19:58
3	Cu 324.752†	6039.7	-455.5	-1.3931 ug/L	-1.3931 ppb	20:19:38
3	Mn 257.610†	469.0	-3.4	-0.0063 ug/L	-0.0063 ppb	20:19:58
3	Mo 202.031†	17.7	9.3	0.7293 ug/L	0.7293 ppb	20:19:58
3	Ni 231.604†	47.3	-28.0	-0.7783 ug/L	-0.7783 ppb	20:19:58
3	P 214.914†	202.6	-3.2	-1.8349 ug/L	-1.8349 ppb	20:19:58
3	Pb 220.353†	-55.2	-0.0	0.0013 ug/L	0.0013 ppb	20:19:58
3	S 181.975 Axial†	37.1	4.1	6.5991 ug/L	6.5991 ppb	20:19:58
3	Sb 206.836†	38.0	1.4	0.5663 ug/L	0.5663 ppb	20:19:58
3	Se 196.026†	-21.7	-1.3	-0.9972 ug/L	-0.9972 ppb	20:19:58
3	Si 251.611†	633.3	79.4	2.6961 ug/L	2.6961 ppb	20:19:58
3	Sn 189.927†	18.1	3.7	0.7454 ug/L	0.7454 ppb	20:19:58
3	Ti 334.940†	-1282.3	-50.9	-0.0788 ug/L	-0.0788 ppb	20:19:38
3	Tl 190.801†	-30.3	-1.2	-0.4112 ug/L	-0.4112 ppb	20:19:58
3	U 409.014†	-2827.1	-264.9	-7.3261 ug/L	-7.3261 ppb	20:19:33
3	V 292.402†	-1428.2	-11.6	-0.0866 ug/L	-0.0866 ppb	20:19:38
3	Zn 213.857†	572.2	-45.0	-0.4781 ug/L	-0.4781 ppb	20:19:58
3	SiO2†	674.1	110.8	8.0235 ug/L	8.0235 ppb	20:20:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	918460.9	104.55 %		0.645			0.62%
Sc Radial	4316.0	98.2 %		1.03			1.05%
Y 371.029	770145.3	104.16 %		0.648			0.62%
Y RADIAL	4723.4	97.89 %		1.331			1.36%
Ag 328.068†	-166.4	-0.7944 ug/L		0.18318	-0.7944 ppb	0.18318	23.06%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.9	-5.2229 ug/L		6.81305	-5.2229 ppb	6.81305	130.45%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	4.0	1.9508 ug/L		1.96290	1.9508 ppb	1.96290	100.62%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	92.6	2.3083 ug/L		0.32612	2.3083 ppb	0.32612	14.13%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	10.0	0.0835 ug/L		0.10477	0.0835 ppb	0.10477	125.43%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	66.8	0.0262 ug/L		0.03715	0.0262 ppb	0.03715	141.61%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.7	1.4194 ug/L		4.01681	1.4194 ppb	4.01681	283.00%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	4.9	0.0627 ug/L	0.05023	0.0627 ppb	0.05023	80.13%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-8.1	-0.1845 ug/L	0.11509	-0.1845 ppb	0.11509	62.38%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-17.4	-0.2093 ug/L	0.02787	-0.2093 ppb	0.02787	13.32%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-452.5	-1.3847 ug/L	0.09562	-1.3847 ppb	0.09562	6.91%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-0.1	-1.4989 ug/L	11.85823	-1.4989 ppb	11.85823	791.12%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	185.6	35.667 ug/L	15.7459	35.667 ppb	15.7459	44.15%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-0.3	-14.133 ug/L	38.8457	-14.133 ppb	38.8457	274.86%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-22.4	-0.0264 ug/L	0.01904	-0.0264 ppb	0.01904	72.23%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	7.0	0.5490 ug/L	0.62547	0.5490 ppb	0.62547	113.93%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	64.4	18.575 ug/L	7.7410	18.575 ppb	7.7410	41.67%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-21.0	-0.5824 ug/L	0.17580	-0.5824 ppb	0.17580	30.18%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-1.4	-0.6776 ug/L	1.92421	-0.6776 ppb	1.92421	283.97%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	8.5	1.1485 ug/L	1.48943	1.1485 ppb	1.48943	129.69%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	5.5	8.9187 ug/L	2.32266	8.9187 ppb	2.32266	26.04%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	0.2	0.0820 ug/L	2.60587	0.0820 ppb	2.60587	>999.9%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-5.4	-3.9320 ug/L	2.94635	-3.9320 ppb	2.94635	74.93%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	82.6	2.8079 ug/L	0.26459	2.8079 ppb	0.26459	9.42%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	-0.9	-0.1865 ug/L	1.30301	-0.1865 ppb	1.30301	698.85%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	-9.0	-0.0581 ug/L	0.10725	-0.0581 ppb	0.10725	184.56%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-58.8	-0.0901 ug/L	0.00995	-0.0901 ppb	0.00995	11.04%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	3.4	1.1527 ug/L	1.42428	1.1527 ppb	1.42428	123.56%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-152.8	-4.2249 ug/L	2.68585	-4.2249 ppb	2.68585	63.57%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-16.1	-0.1184 ug/L	0.03330	-0.1184 ppb	0.03330	28.12%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-49.7	-0.5324 ug/L	0.06599	-0.5324 ppb	0.06599	12.39%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		90.4	6.5489 ug/L	1.29743	6.5489 ppb	1.29743	19.81%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 30

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/22/2010 21:10:54

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	4294.8	4294.8	97.7 %		21:12:46
1	Y RADIAL	4655.0	4655.0	96.47 %		21:12:46
1	Al 396.153Radial†	5308.7	5537.7	4817.1 ug/L	4817.1 ppb	21:12:46
1	Ca 317.933Radial†	2622.6	2664.4	5291.0 ug/L	5291.0 ppb	21:13:06
1	Fe 238.204 Radial†	441.6	440.8	5361.9 ug/L	5361.9 ppb	21:13:06
1	K 766.490 Radial†	28886.3	27077.5	5199.2 ug/L	5199.2 ppb	21:12:46
1	Mg 279.077 IEC†	122.0	122.0	5535.3 ug/L	5535.3 ppb	21:13:06
1	Na 589.592 Radial†	33348.6	34826.4	10046 ug/L	10046 ppb	21:12:46
1	Sr 421.552†	74373.6	76108.0	492.64 ug/L	492.64 ppb	21:12:46
1	Sc 361.383	927604.4	927604.4	105.59 %		21:14:04
1	Y 371.029	767196.1	767196.1	103.77 %		21:14:04
1	Ag 328.068†	110433.9	104148.2	502.06 ug/L	502.06 ppb	21:14:09
1	As 188.979†	1108.4	1074.2	531.18 ug/L	531.18 ppb	21:14:29
1	B 249.677†	20567.2	19947.1	494.82 ug/L	494.82 ppb	21:14:09
1	Ba 233.527†	64975.4	61544.8	515.70 ug/L	515.70 ppb	21:14:09
1	Be 313.107†	1350565.8	1282963.5	508.73 ug/L	508.73 ppb	21:14:04
1	Cd 226.502†	43503.1	41379.1	533.01 ug/L	533.01 ppb	21:14:09
1	Co 228.616†	24430.8	23189.3	535.89 ug/L	535.89 ppb	21:14:09
1	Cr 267.716†	44964.2	42505.9	514.84 ug/L	514.84 ppb	21:14:09
1	Cu 324.752†	174161.1	158743.8	486.60 ug/L	486.60 ppb	21:14:09
1	Mn 257.610†	454732.4	430224.1	515.85 ug/L	515.85 ppb	21:14:04
1	Mo 202.031†	6950.3	6575.1	514.77 ug/L	514.77 ppb	21:14:29
1	Ni 231.604†	20092.8	18956.8	525.97 ug/L	525.97 ppb	21:14:09
1	P 214.914†	4426.1	3996.0	2579.7 ug/L	2579.7 ppb	21:14:29
1	Pb 220.353†	4064.3	3901.8	530.83 ug/L	530.83 ppb	21:14:29
1	S 181.975 Axial†	730.4	660.6	1061.3 ug/L	1061.3 ppb	21:14:29
1	Sb 206.836†	1488.7	1375.2	536.33 ug/L	536.33 ppb	21:14:29
1	Se 196.026†	749.0	728.7	549.48 ug/L	549.48 ppb	21:14:29
1	Si 251.611†	80011.0	75254.6	2557.6 ug/L	2557.6 ppb	21:14:09
1	Sn 189.927†	2790.4	2629.2	530.07 ug/L	530.07 ppb	21:14:29
1	Ti 334.940†	334429.4	317905.1	504.88 ug/L	504.88 ppb	21:14:04
1	Tl 190.801†	1566.8	1511.5	522.65 ug/L	522.65 ppb	21:14:29
1	U 409.014†	15707.0	17301.3	476.81 ug/L	476.81 ppb	21:14:09
1	V 292.402†	70727.9	68333.4	509.56 ug/L	509.56 ppb	21:14:09
1	Zn 213.857†	51501.3	48187.0	516.73 ug/L	516.73 ppb	21:14:09
1	SiO2†	79789.5	75037.4	5432.5 ug/L	5432.5 ppb	21:15:37
2	Sc Radial	4241.6	4241.6	96.5 %		21:13:11
2	Y RADIAL	4615.1	4615.1	95.65 %		21:13:11
2	Al 396.153Radial†	5434.4	5736.2	4990.4 ug/L	4990.4 ppb	21:13:11
2	Ca 317.933Radial†	2610.3	2685.4	5332.7 ug/L	5332.7 ppb	21:13:31
2	Fe 238.204 Radial†	437.0	441.7	5372.7 ug/L	5372.7 ppb	21:13:31
2	K 766.490 Radial†	29332.6	27911.0	5359.3 ug/L	5359.3 ppb	21:13:11
2	Mg 279.077 IEC†	120.3	121.8	5526.2 ug/L	5526.2 ppb	21:13:31
2	Na 589.592 Radial†	33667.2	35584.8	10264 ug/L	10264 ppb	21:13:11
2	Sr 421.552†	75675.2	78411.9	507.56 ug/L	507.56 ppb	21:13:11
2	Sc 361.383	915038.1	915038.1	104.16 %		21:14:35
2	Y 371.029	757660.8	757660.8	102.48 %		21:14:35
2	Ag 328.068†	109512.0	104699.5	504.72 ug/L	504.72 ppb	21:14:40
2	As 188.979†	1105.6	1085.9	536.90 ug/L	536.90 ppb	21:15:00
2	B 249.677†	20495.5	20145.8	499.76 ug/L	499.76 ppb	21:14:40
2	Ba 233.527†	64594.6	62024.4	519.72 ug/L	519.72 ppb	21:14:40
2	Be 313.107†	1332523.8	1283207.5	508.83 ug/L	508.83 ppb	21:14:35
2	Cd 226.502†	43181.3	41636.0	536.32 ug/L	536.32 ppb	21:14:40
2	Co 228.616†	24242.8	23326.6	539.08 ug/L	539.08 ppb	21:14:40
2	Cr 267.716†	44762.5	42897.1	519.58 ug/L	519.58 ppb	21:14:40
2	Cu 324.752†	172760.8	159664.7	489.43 ug/L	489.43 ppb	21:14:40
2	Mn 257.610†	448540.9	430194.1	515.82 ug/L	515.82 ppb	21:14:35
2	Mo 202.031†	6938.7	6654.3	520.97 ug/L	520.97 ppb	21:15:00
2	Ni 231.604†	19981.9	19111.5	530.26 ug/L	530.26 ppb	21:14:40

2	P 214.914†	4401.5	4029.9	2601.9 ug/L	2601.9 ppb	21:15:00
2	Pb 220.353†	4036.4	3927.9	534.42 ug/L	534.42 ppb	21:15:00
2	S 181.975 Axial†	736.8	676.3	1086.5 ug/L	1086.5 ppb	21:15:00
2	Sb 206.836†	1471.1	1377.7	537.47 ug/L	537.47 ppb	21:15:00
2	Se 196.026†	747.8	737.3	555.76 ug/L	555.76 ppb	21:15:00
2	Si 251.611†	79253.4	75567.9	2568.2 ug/L	2568.2 ppb	21:14:40
2	Sn 189.927†	2775.0	2650.8	534.42 ug/L	534.42 ppb	21:15:00
2	Ti 334.940†	329347.8	317375.9	504.04 ug/L	504.04 ppb	21:14:35
2	Tl 190.801†	1555.4	1520.9	525.86 ug/L	525.86 ppb	21:15:00
2	U 409.014†	15628.7	17430.4	480.37 ug/L	480.37 ppb	21:14:40
2	V 292.402†	70479.5	69014.8	514.66 ug/L	514.66 ppb	21:14:40
2	Zn 213.857†	51034.4	48408.6	519.09 ug/L	519.09 ppb	21:14:40
2	SiO2†	79554.2	75849.3	5491.3 ug/L	5491.3 ppb	21:15:42
3	Sc Radial	4361.9	4361.9	99.2 %		21:13:36
3	Y RADIAL	4723.3	4723.3	97.89 %		21:13:36
3	Al 396.153Radial†	5494.4	5641.3	4907.4 ug/L	4907.4 ppb	21:13:36
3	Ca 317.933Radial†	2594.0	2594.4	5151.9 ug/L	5151.9 ppb	21:13:56
3	Fe 238.204 Radial†	438.9	431.2	5244.7 ug/L	5244.7 ppb	21:13:56
3	K 766.490 Radial†	29517.5	27259.2	5234.1 ug/L	5234.1 ppb	21:13:36
3	Mg 279.077 IEC†	123.3	121.4	5506.6 ug/L	5506.6 ppb	21:13:56
3	Na 589.592 Radial†	34296.4	35256.9	10170 ug/L	10170 ppb	21:13:36
3	Sr 421.552†	76736.3	77318.9	500.48 ug/L	500.48 ppb	21:13:36
3	Sc 361.383	912144.9	912144.9	103.83 %		21:15:06
3	Y 371.029	755798.0	755798.0	102.22 %		21:15:06
3	Ag 328.068†	109253.8	104784.2	505.10 ug/L	505.10 ppb	21:15:11
3	As 188.979†	1108.9	1092.5	540.09 ug/L	540.09 ppb	21:15:31
3	B 249.677†	20478.5	20191.9	500.94 ug/L	500.94 ppb	21:15:11
3	Ba 233.527†	64243.9	61883.4	518.54 ug/L	518.54 ppb	21:15:11
3	Be 313.107†	1330471.0	1285288.3	509.65 ug/L	509.65 ppb	21:15:06
3	Cd 226.502†	43013.9	41606.2	535.95 ug/L	535.95 ppb	21:15:11
3	Co 228.616†	24065.1	23229.2	536.84 ug/L	536.84 ppb	21:15:11
3	Cr 267.716†	44503.6	42784.1	518.20 ug/L	518.20 ppb	21:15:11
3	Cu 324.752†	172590.7	160026.9	490.53 ug/L	490.53 ppb	21:15:11
3	Mn 257.610†	446717.9	429804.2	515.34 ug/L	515.34 ppb	21:15:06
3	Mo 202.031†	6946.6	6683.1	523.21 ug/L	523.21 ppb	21:15:31
3	Ni 231.604†	19880.2	19074.4	529.23 ug/L	529.23 ppb	21:15:11
3	P 214.914†	4399.2	4041.1	2609.3 ug/L	2609.3 ppb	21:15:31
3	Pb 220.353†	4055.2	3958.2	538.54 ug/L	538.54 ppb	21:15:31
3	S 181.975 Axial†	737.2	678.9	1090.7 ug/L	1090.7 ppb	21:15:31
3	Sb 206.836†	1482.4	1393.0	543.33 ug/L	543.33 ppb	21:15:31
3	Se 196.026†	770.1	761.1	572.65 ug/L	572.65 ppb	21:15:31
3	Si 251.611†	78936.8	75504.3	2566.0 ug/L	2566.0 ppb	21:15:11
3	Sn 189.927†	2782.2	2666.1	537.48 ug/L	537.48 ppb	21:15:31
3	Ti 334.940†	328175.8	317250.1	503.82 ug/L	503.82 ppb	21:15:06
3	Tl 190.801†	1559.0	1529.2	528.69 ug/L	528.69 ppb	21:15:31
3	U 409.014†	15383.8	17242.1	475.18 ug/L	475.18 ppb	21:15:11
3	V 292.402†	70235.0	68993.9	514.55 ug/L	514.55 ppb	21:15:11
3	Zn 213.857†	50843.2	48379.9	518.81 ug/L	518.81 ppb	21:15:11
3	SiO2†	79108.6	75662.3	5477.7 ug/L	5477.7 ppb	21:15:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	918262.4	104.52 %	0.936			0.90%
Sc Radial	4299.4	97.8 %	1.37			1.40%
Y 371.029	760218.3	102.82 %	0.827			0.80%
Y RADIAL	4664.5	96.67 %	1.135			1.17%
Ag 328.068†	104544.0	503.96 ug/L	1.654	503.96 ppb	1.654	0.33%
QC value within limits for Ag 328.068 Recovery = 100.79%						
Al 396.153Radial†	5638.4	4905.0 ug/L	86.65	4905.0 ppb	86.65	1.77%
QC value within limits for Al 396.153Radial Recovery = 98.10%						
As 188.979†	1084.2	536.05 ug/L	4.512	536.05 ppb	4.512	0.84%
QC value within limits for As 188.979 Recovery = 107.21%						
B 249.677†	20094.9	498.51 ug/L	3.246	498.51 ppb	3.246	0.65%
QC value within limits for B 249.677 Recovery = 99.70%						
Ba 233.527†	61817.5	517.99 ug/L	2.066	517.99 ppb	2.066	0.40%
QC value within limits for Ba 233.527 Recovery = 103.60%						
Be 313.107†	1283819.8	509.07 ug/L	0.505	509.07 ppb	0.505	0.10%
QC value within limits for Be 313.107 Recovery = 101.81%						
Ca 317.933Radial†	2648.1	5258.5 ug/L	94.68	5258.5 ppb	94.68	1.80%

QC value within limits for Ca 317.933 Radial Recovery = 105.17%							
Cd	226.502†	41540.4	535.10 ug/L	1.814	535.10 ppb	1.814	0.34%
QC value within limits for Cd 226.502 Recovery = 107.02%							
Co	228.616†	23248.3	537.27 ug/L	1.638	537.27 ppb	1.638	0.30%
QC value within limits for Co 228.616 Recovery = 107.45%							
Cr	267.716†	42729.0	517.54 ug/L	2.436	517.54 ppb	2.436	0.47%
QC value within limits for Cr 267.716 Recovery = 103.51%							
Cu	324.752†	159478.5	488.85 ug/L	2.025	488.85 ppb	2.025	0.41%
QC value within limits for Cu 324.752 Recovery = 97.77%							
Fe	238.204 Radial†	437.9	5326.4 ug/L	70.97	5326.4 ppb	70.97	1.33%
QC value within limits for Fe 238.204 Radial Recovery = 106.53%							
K	766.490 Radial†	27415.9	5264.2 ug/L	84.21	5264.2 ppb	84.21	1.60%
QC value within limits for K 766.490 Radial Recovery = 105.28%							
Mg	279.077 IEC†	121.7	5522.7 ug/L	14.66	5522.7 ppb	14.66	0.27%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.45%							
Mn	257.610†	430074.1	515.67 ug/L	0.287	515.67 ppb	0.287	0.06%
QC value within limits for Mn 257.610 Recovery = 103.13%							
Mo	202.031†	6637.5	519.65 ug/L	4.371	519.65 ppb	4.371	0.84%
QC value within limits for Mo 202.031 Recovery = 103.93%							
Na	589.592 Radial†	35222.7	10160 ug/L	109.7	10160 ppb	109.7	1.08%
QC value within limits for Na 589.592 Radial Recovery = 101.60%							
Ni	231.604†	19047.6	528.49 ug/L	2.243	528.49 ppb	2.243	0.42%
QC value within limits for Ni 231.604 Recovery = 105.70%							
P	214.914†	4022.3	2596.9 ug/L	15.41	2596.9 ppb	15.41	0.59%
QC value within limits for P 214.914 Recovery = 103.88%							
Pb	220.353†	3929.3	534.59 ug/L	3.857	534.59 ppb	3.857	0.72%
QC value within limits for Pb 220.353 Recovery = 106.92%							
S	181.975 Axial†	671.9	1079.5 ug/L	15.91	1079.5 ppb	15.91	1.47%
QC value within limits for S 181.975 Axial Recovery = 107.95%							
Sb	206.836†	1382.0	539.05 ug/L	3.758	539.05 ppb	3.758	0.70%
QC value within limits for Sb 206.836 Recovery = 107.81%							
Se	196.026†	742.4	559.30 ug/L	11.981	559.30 ppb	11.981	2.14%
QC value greater than the upper limit for Se 196.026 Recovery = 111.86%							
Si	251.611†	75442.3	2563.9 ug/L	5.59	2563.9 ppb	5.59	0.22%
QC value within limits for Si 251.611 Recovery = 102.56%							
Sn	189.927†	2648.7	533.99 ug/L	3.723	533.99 ppb	3.723	0.70%
QC value within limits for Sn 189.927 Recovery = 106.80%							
Sr	421.552†	77279.6	500.23 ug/L	7.460	500.23 ppb	7.460	1.49%
QC value within limits for Sr 421.552 Recovery = 100.05%							
Ti	334.940†	317510.3	504.25 ug/L	0.558	504.25 ppb	0.558	0.11%
QC value within limits for Ti 334.940 Recovery = 100.85%							
Tl	190.801†	1520.5	525.73 ug/L	3.021	525.73 ppb	3.021	0.57%
QC value within limits for Tl 190.801 Recovery = 105.15%							
U	409.014†	17324.6	477.45 ug/L	2.655	477.45 ppb	2.655	0.56%
QC value within limits for U 409.014 Recovery = 95.49%							
V	292.402†	68780.7	512.93 ug/L	2.916	512.93 ppb	2.916	0.57%
QC value within limits for V 292.402 Recovery = 102.59%							
Zn	213.857†	48325.2	518.21 ug/L	1.291	518.21 ppb	1.291	0.25%
QC value within limits for Zn 213.857 Recovery = 103.64%							
SiO2†		75516.3	5467.2 ug/L	30.76	5467.2 ppb	30.76	0.56%
QC value within limits for SiO2 Recovery = 102.24%							
QC Failed. Continue with analysis.							

Sequence No.: 31
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 2/22/2010 21:17:57
 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	4356.5	4356.5	99.1 %		21:19:49
1	Y RADIAL	4785.7	4785.7	99.18 %		21:19:49
1	Al 396.153Radial†	-112.8	-9.6	-8.4323 ug/L	-8.4323 ppb	21:20:09
1	Ca 317.933Radial†	23.2	3.6	7.1401 ug/L	7.1401 ppb	21:20:09
1	Fe 238.204 Radial†	12.8	1.8	21.552 ug/L	21.552 ppb	21:20:09
1	K 766.490 Radial†	2632.4	168.5	32.388 ug/L	32.388 ppb	21:19:49
1	Mg 279.077 IEC†	1.5	-1.3	-60.860 ug/L	-60.860 ppb	21:20:09
1	Na 589.592 Radial†	-638.9	49.3	14.230 ug/L	14.230 ppb	21:19:49
1	Sr 421.552†	12.8	-0.6	-0.0039 ug/L	-0.0039 ppb	21:19:49
1	Sc 361.383	901996.6	901996.6	102.67 %		21:21:06
1	Y 371.029	759729.3	759729.3	102.76 %		21:21:06
1	Ag 328.068†	277.4	-172.7	-0.8157 ug/L	-0.8157 ppb	21:21:06
1	As 188.979†	-25.4	-0.3	-0.1392 ug/L	-0.1392 ppb	21:21:26
1	B 249.677†	-372.1	105.7	2.6329 ug/L	2.6329 ppb	21:21:26
1	Ba 233.527†	-1.6	5.6	0.0461 ug/L	0.0461 ppb	21:21:26
1	Be 313.107†	-3954.2	0.8	-0.0001 ug/L	-0.0001 ppb	21:21:06
1	Cd 226.502†	-177.4	4.8	0.0579 ug/L	0.0579 ppb	21:21:26
1	Co 228.616†	-67.1	-14.3	-0.3304 ug/L	-0.3304 ppb	21:21:26
1	Cr 267.716†	65.2	-15.8	-0.1866 ug/L	-0.1866 ppb	21:21:26
1	Cu 324.752†	5937.0	-420.4	-1.2826 ug/L	-1.2826 ppb	21:21:06
1	Mn 257.610†	432.5	-28.5	-0.0296 ug/L	-0.0296 ppb	21:21:26
1	Mo 202.031†	10.1	2.3	0.1796 ug/L	0.1796 ppb	21:21:26
1	Ni 231.604†	72.0	-2.9	-0.0809 ug/L	-0.0809 ppb	21:21:26
1	P 214.914†	195.0	-6.1	-3.8018 ug/L	-3.8018 ppb	21:21:26
1	Pb 220.353†	-57.4	-3.4	-0.4595 ug/L	-0.4595 ppb	21:21:26
1	S 181.975 Axial†	39.9	7.7	12.350 ug/L	12.350 ppb	21:21:26
1	Sb 206.836†	45.4	9.5	3.5852 ug/L	3.5852 ppb	21:21:26
1	Se 196.026†	-20.7	-0.8	-0.4977 ug/L	-0.4977 ppb	21:21:26
1	Si 251.611†	662.2	121.7	4.1443 ug/L	4.1443 ppb	21:21:26
1	Sn 189.927†	19.8	5.8	1.1695 ug/L	1.1695 ppb	21:21:26
1	Ti 334.940†	-1331.1	-127.1	-0.1921 ug/L	-0.1921 ppb	21:21:06
1	Tl 190.801†	-31.8	-3.4	-1.1570 ug/L	-1.1570 ppb	21:21:26
1	U 409.014†	-2811.9	-313.5	-8.6730 ug/L	-8.6730 ppb	21:21:06
1	V 292.402†	-1448.4	-63.3	-0.4836 ug/L	-0.4836 ppb	21:21:06
1	Zn 213.857†	571.8	-32.6	-0.3535 ug/L	-0.3535 ppb	21:21:26
1	SiO2†	660.5	112.6	8.1714 ug/L	8.1714 ppb	21:22:22
2	Sc Radial	4338.9	4338.9	98.7 %		21:20:14
2	Y RADIAL	4748.3	4748.3	98.41 %		21:20:14
2	Al 396.153Radial†	-119.2	-16.6	-14.516 ug/L	-14.516 ppb	21:20:34
2	Ca 317.933Radial†	17.7	-1.8	-3.6696 ug/L	-3.6696 ppb	21:20:34
2	Fe 238.204 Radial†	10.3	-0.7	-8.3331 ug/L	-8.3331 ppb	21:20:34
2	K 766.490 Radial†	2622.5	169.3	32.537 ug/L	32.537 ppb	21:20:14
2	Mg 279.077 IEC†	5.0	2.2	101.53 ug/L	101.53 ppb	21:20:34
2	Na 589.592 Radial†	-649.6	35.9	10.347 ug/L	10.347 ppb	21:20:14
2	Sr 421.552†	2.1	-11.4	-0.0735 ug/L	-0.0735 ppb	21:20:14
2	Sc 361.383	897894.7	897894.7	102.20 %		21:21:31
2	Y 371.029	755073.8	755073.8	102.13 %		21:21:31
2	Ag 328.068†	250.9	-197.4	-0.9419 ug/L	-0.9419 ppb	21:21:31
2	As 188.979†	-23.7	1.3	0.6154 ug/L	0.6154 ppb	21:21:51
2	B 249.677†	-354.8	121.0	3.0170 ug/L	3.0170 ppb	21:21:51
2	Ba 233.527†	-6.0	1.3	0.0088 ug/L	0.0088 ppb	21:21:51
2	Be 313.107†	-3918.9	17.8	0.0070 ug/L	0.0070 ppb	21:21:31
2	Cd 226.502†	-178.6	2.9	0.0359 ug/L	0.0359 ppb	21:21:51
2	Co 228.616†	-63.7	-11.3	-0.2610 ug/L	-0.2610 ppb	21:21:51
2	Cr 267.716†	61.8	-18.9	-0.2253 ug/L	-0.2253 ppb	21:21:51
2	Cu 324.752†	5978.2	-353.6	-1.0781 ug/L	-1.0781 ppb	21:21:31
2	Mn 257.610†	466.5	6.7	0.0031 ug/L	0.0031 ppb	21:21:51
2	Mo 202.031†	10.4	2.6	0.2020 ug/L	0.2020 ppb	21:21:51
2	Ni 231.604†	52.5	-21.6	-0.6004 ug/L	-0.6004 ppb	21:21:51

2	P 214.914†	205.1	4.6	3.3189 ug/L	3.3189 ppb	21:21:51
2	Pb 220.353†	-57.8	-4.0	-0.5469 ug/L	-0.5469 ppb	21:21:51
2	S 181.975 Axial†	38.2	6.2	9.9777 ug/L	9.9777 ppb	21:21:51
2	Sb 206.836†	48.9	13.1	4.9223 ug/L	4.9223 ppb	21:21:51
2	Se 196.026†	-26.0	-6.1	-4.4670 ug/L	-4.4670 ppb	21:21:51
2	Si 251.611†	664.3	126.7	4.3146 ug/L	4.3146 ppb	21:21:51
2	Sn 189.927†	8.1	-5.6	-1.1203 ug/L	-1.1203 ppb	21:21:51
2	Ti 334.940†	-1223.9	-28.2	-0.0485 ug/L	-0.0485 ppb	21:21:31
2	Tl 190.801†	-35.3	-6.9	-2.3765 ug/L	-2.3765 ppb	21:21:51
2	U 409.014†	-2896.3	-408.5	-11.299 ug/L	-11.299 ppb	21:21:31
2	V 292.402†	-1478.9	-99.5	-0.7476 ug/L	-0.7476 ppb	21:21:31
2	Zn 213.857†	586.9	-15.2	-0.1581 ug/L	-0.1581 ppb	21:21:51
2	SiO2†	627.8	83.6	6.0620 ug/L	6.0620 ppb	21:22:27
3	Sc Radial	4288.0	4288.0	97.5 %		21:20:39
3	Y RADIAL	4686.4	4686.4	97.12 %		21:20:39
3	Al 396.153Radial†	-105.4	-3.9	-3.4091 ug/L	-3.4091 ppb	21:20:59
3	Ca 317.933Radial†	19.7	0.5	0.9224 ug/L	0.9224 ppb	21:20:59
3	Fe 238.204 Radial†	9.0	-1.9	-23.479 ug/L	-23.479 ppb	21:20:59
3	K 766.490 Radial†	2706.4	286.8	55.140 ug/L	55.140 ppb	21:20:39
3	Mg 279.077 IEC†	3.2	0.4	19.992 ug/L	19.992 ppb	21:20:59
3	Na 589.592 Radial†	-632.0	46.1	13.300 ug/L	13.300 ppb	21:20:39
3	Sr 421.552†	29.3	16.5	0.1070 ug/L	0.1070 ppb	21:20:39
3	Sc 361.383	905764.6	905764.6	103.10 %		21:21:56
3	Y 371.029	762956.9	762956.9	103.19 %		21:21:56
3	Ag 328.068†	254.8	-195.8	-0.9414 ug/L	-0.9414 ppb	21:21:56
3	As 188.979†	-22.7	2.5	1.1991 ug/L	1.1991 ppb	21:22:17
3	B 249.677†	-391.2	88.7	2.2147 ug/L	2.2147 ppb	21:22:17
3	Ba 233.527†	-10.8	-3.4	-0.0300 ug/L	-0.0300 ppb	21:22:17
3	Be 313.107†	-3850.1	117.9	0.0464 ug/L	0.0464 ppb	21:21:56
3	Cd 226.502†	-169.8	13.0	0.1678 ug/L	0.1678 ppb	21:22:17
3	Co 228.616†	-63.9	-11.0	-0.2513 ug/L	-0.2513 ppb	21:22:17
3	Cr 267.716†	63.0	-18.2	-0.2204 ug/L	-0.2204 ppb	21:22:17
3	Cu 324.752†	6021.8	-362.2	-1.1076 ug/L	-1.1076 ppb	21:21:56
3	Mn 257.610†	439.1	-23.8	-0.0317 ug/L	-0.0317 ppb	21:22:17
3	Mo 202.031†	17.0	9.0	0.7016 ug/L	0.7016 ppb	21:22:17
3	Ni 231.604†	65.2	-9.7	-0.2703 ug/L	-0.2703 ppb	21:22:17
3	P 214.914†	212.6	10.3	7.1011 ug/L	7.1011 ppb	21:22:17
3	Pb 220.353†	-55.5	-1.3	-0.1781 ug/L	-0.1781 ppb	21:22:17
3	S 181.975 Axial†	38.1	5.7	9.2246 ug/L	9.2246 ppb	21:22:17
3	Sb 206.836†	35.1	-0.7	-0.2483 ug/L	-0.2483 ppb	21:22:17
3	Se 196.026†	-21.1	-1.1	-0.8803 ug/L	-0.8803 ppb	21:22:17
3	Si 251.611†	666.1	122.8	4.1765 ug/L	4.1765 ppb	21:22:17
3	Sn 189.927†	14.9	1.0	0.2002 ug/L	0.2002 ppb	21:22:17
3	Ti 334.940†	-1271.2	-63.7	-0.0995 ug/L	-0.0995 ppb	21:21:56
3	Tl 190.801†	-27.8	0.7	0.2344 ug/L	0.2344 ppb	21:22:17
3	U 409.014†	-2764.0	-255.6	-7.0661 ug/L	-7.0661 ppb	21:21:56
3	V 292.402†	-1454.6	-63.4	-0.4663 ug/L	-0.4663 ppb	21:21:56
3	Zn 213.857†	575.0	-31.8	-0.3373 ug/L	-0.3373 ppb	21:22:17
3	SiO2†	656.6	106.2	7.6886 ug/L	7.6886 ppb	21:22:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901885.3	102.66 %	0.448			0.44%
Sc Radial	4327.8	98.5 %	0.81			0.82%
Y 371.029	759253.3	102.69 %	0.536			0.52%
Y RADIAL	4740.1	98.24 %	1.039			1.06%
Ag 328.068†	-188.7	-0.8996 ug/L	0.07274	-0.8996 ppb	0.07274	8.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.0	-8.7858 ug/L	5.56191	-8.7858 ppb	5.56191	63.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.1	0.5584 ug/L	0.67097	0.5584 ppb	0.67097	120.15%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	105.1	2.6215 ug/L	0.40125	2.6215 ppb	0.40125	15.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.2	0.0083 ug/L	0.03804	0.0083 ppb	0.03804	457.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	45.5	0.0178 ug/L	0.02508	0.0178 ppb	0.02508	141.26%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.7	1.4643 ug/L	5.42520	1.4643 ppb	5.42520	370.50%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502†	6.9	0.0872 ug/L	0.07068	0.0872 ppb	0.07068	81.04%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-12.2	-0.2809 ug/L	0.04313	-0.2809 ppb	0.04313	15.35%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-17.6	-0.2108 ug/L	0.02105	-0.2108 ppb	0.02105	9.99%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-378.7	-1.1561 ug/L	0.11057	-1.1561 ppb	0.11057	9.56%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.3	-3.4200 ug/L	22.91414	-3.4200 ppb	22.91414	670.00%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	208.2	40.022 ug/L	13.0932	40.022 ppb	13.0932	32.72%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.4	20.221 ug/L	81.1956	20.221 ppb	81.1956	401.54%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-15.2	-0.0194 ug/L	0.01947	-0.0194 ppb	0.01947	100.45%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.6	0.3610 ug/L	0.29513	0.3610 ppb	0.29513	81.75%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	43.8	12.626 ug/L	2.0275	12.626 ppb	2.0275	16.06%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-11.4	-0.3172 ug/L	0.26291	-0.3172 ppb	0.26291	82.88%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	2.9	2.2061 ug/L	5.53597	2.2061 ppb	5.53597	250.94%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.9	-0.3948 ug/L	0.19268	-0.3948 ppb	0.19268	48.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	6.5	10.517 ug/L	1.6309	10.517 ppb	1.6309	15.51%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	7.3	2.7531 ug/L	2.68386	2.7531 ppb	2.68386	97.49%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.7	-1.9483 ug/L	2.18960	-1.9483 ppb	2.18960	112.38%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	123.8	4.2118 ug/L	0.09047	4.2118 ppb	0.09047	2.15%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.4	0.0831 ug/L	1.14937	0.0831 ppb	1.14937	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	1.5	0.0099 ug/L	0.09107	0.0099 ppb	0.09107	923.73%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-73.0	-0.1134 ug/L	0.07283	-0.1134 ppb	0.07283	64.25%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.2	-1.0997 ug/L	1.30638	-1.0997 ppb	1.30638	118.79%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-325.9	-9.0128 ug/L	2.13689	-9.0128 ppb	2.13689	23.71%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-75.4	-0.5658 ug/L	0.15763	-0.5658 ppb	0.15763	27.86%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-26.5	-0.2830 ug/L	0.10844	-0.2830 ppb	0.10844	38.32%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	100.8	7.3073 ug/L	1.10519	7.3073 ppb	1.10519	15.12%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/22/2010 22:13:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4350.1	4350.1	99.0 %		22:15:21
1	Y RADIAL	4695.3	4695.3	97.31 %		22:15:21
1	Al 396.153Radial†	5345.8	5506.1	4789.6 ug/L	4789.6 ppb	22:15:21
1	Ca 317.933Radial†	2591.2	2598.7	5160.4 ug/L	5160.4 ppb	22:15:41
1	Fe 238.204 Radial†	430.5	423.9	5155.9 ug/L	5155.9 ppb	22:15:41
1	K 766.490 Radial†	28816.9	26631.6	5113.7 ug/L	5113.7 ppb	22:15:21
1	Mg 279.077 IEC†	120.1	118.5	5373.9 ug/L	5373.9 ppb	22:15:41
1	Na 589.592 Radial†	32111.6	33142.5	9560.0 ug/L	9560.0 ppb	22:15:21
1	Sr 421.552†	73394.5	74151.0	479.98 ug/L	479.98 ppb	22:15:21
1	Sc 361.383	918940.1	918940.1	104.60 %		22:16:39
1	Y 371.029	760382.3	760382.3	102.84 %		22:16:39
1	Ag 328.068†	109650.7	104385.6	503.14 ug/L	503.14 ppb	22:16:44
1	As 188.979†	1085.7	1062.4	525.22 ug/L	525.22 ppb	22:17:04
1	B 249.677†	20298.4	19873.9	493.04 ug/L	493.04 ppb	22:16:44
1	Ba 233.527†	64285.8	61465.8	515.04 ug/L	515.04 ppb	22:16:44
1	Be 313.107†	1335417.2	1280541.3	507.75 ug/L	507.75 ppb	22:16:39
1	Cd 226.502†	42847.9	41141.2	529.97 ug/L	529.97 ppb	22:16:44
1	Co 228.616†	24064.3	23057.0	532.87 ug/L	532.87 ppb	22:16:44
1	Cr 267.716†	44444.6	42410.7	513.67 ug/L	513.67 ppb	22:16:44
1	Cu 324.752†	173571.5	159735.4	489.63 ug/L	489.63 ppb	22:16:44
1	Mn 257.610†	449568.9	429348.4	514.79 ug/L	514.79 ppb	22:16:39
1	Mo 202.031†	6871.5	6561.7	513.71 ug/L	513.71 ppb	22:17:04
1	Ni 231.604†	19819.4	18874.8	523.69 ug/L	523.69 ppb	22:16:44
1	P 214.914†	4333.2	3946.7	2546.2 ug/L	2546.2 ppb	22:17:04
1	Pb 220.353†	3997.1	3873.9	527.05 ug/L	527.05 ppb	22:17:04
1	S 181.975 Axial†	728.9	665.7	1069.5 ug/L	1069.5 ppb	22:17:04
1	Sb 206.836†	1456.8	1358.0	529.83 ug/L	529.83 ppb	22:17:04
1	Se 196.026†	731.4	718.6	541.43 ug/L	541.43 ppb	22:17:04
1	Si 251.611†	79004.8	75007.2	2549.2 ug/L	2549.2 ppb	22:16:44
1	Sn 189.927†	2741.4	2607.4	525.66 ug/L	525.66 ppb	22:17:04
1	Ti 334.940†	322274.9	309271.4	491.16 ug/L	491.16 ppb	22:16:44
1	Tl 190.801†	1534.4	1494.6	516.72 ug/L	516.72 ppb	22:17:04
1	U 409.014†	15699.6	17434.5	480.52 ug/L	480.52 ppb	22:16:44
1	V 292.402†	70206.4	68466.3	510.57 ug/L	510.57 ppb	22:16:44
1	Zn 213.857†	50795.9	47972.5	514.45 ug/L	514.45 ppb	22:16:44
1	SiO2†	79262.5	75246.0	5447.7 ug/L	5447.7 ppb	22:18:11
2	Sc Radial	4244.2	4244.2	96.6 %		22:15:46
2	Y RADIAL	4632.9	4632.9	96.02 %		22:15:46
2	Al 396.153Radial†	5412.0	5709.5	4966.9 ug/L	4966.9 ppb	22:15:46
2	Ca 317.933Radial†	2580.8	2653.2	5268.7 ug/L	5268.7 ppb	22:16:06
2	Fe 238.204 Radial†	426.9	431.0	5242.7 ug/L	5242.7 ppb	22:16:06
2	K 766.490 Radial†	29295.6	27854.0	5348.5 ug/L	5348.5 ppb	22:15:46
2	Mg 279.077 IEC†	118.5	119.9	5439.0 ug/L	5439.0 ppb	22:16:06
2	Na 589.592 Radial†	32595.1	34452.9	9938.0 ug/L	9938.0 ppb	22:15:46
2	Sr 421.552†	74480.8	77126.6	499.24 ug/L	499.24 ppb	22:15:46
2	Sc 361.383	902891.7	902891.7	102.77 %		22:17:10
2	Y 371.029	747607.1	747607.1	101.12 %		22:17:10
2	Ag 328.068†	111050.3	107610.7	518.66 ug/L	518.66 ppb	22:17:15
2	As 188.979†	1090.6	1085.6	536.72 ug/L	536.72 ppb	22:17:35
2	B 249.677†	20683.0	20593.0	510.90 ug/L	510.90 ppb	22:17:15
2	Ba 233.527†	65102.1	63352.5	530.84 ug/L	530.84 ppb	22:17:15
2	Be 313.107†	1320584.4	1288801.1	511.05 ug/L	511.05 ppb	22:17:10
2	Cd 226.502†	43291.4	42300.8	544.91 ug/L	544.91 ppb	22:17:15
2	Co 228.616†	24382.0	23775.1	549.45 ug/L	549.45 ppb	22:17:15
2	Cr 267.716†	44977.2	43684.2	529.09 ug/L	529.09 ppb	22:17:15
2	Cu 324.752†	176110.2	165155.0	506.24 ug/L	506.24 ppb	22:17:15
2	Mn 257.610†	444381.0	431939.9	517.90 ug/L	517.90 ppb	22:17:10
2	Mo 202.031†	6879.2	6686.0	523.44 ug/L	523.44 ppb	22:17:35
2	Ni 231.604†	20020.3	19407.0	538.46 ug/L	538.46 ppb	22:17:15

2	P 214.914†	4348.0	4034.7	2601.8 ug/L	2601.8 ppb	22:17:35
2	Pb 220.353†	4011.1	3955.3	538.15 ug/L	538.15 ppb	22:17:35
2	S 181.975 Axial†	722.3	671.6	1079.1 ug/L	1079.1 ppb	22:17:35
2	Sb 206.836†	1459.2	1385.1	540.31 ug/L	540.31 ppb	22:17:35
2	Se 196.026†	743.2	742.5	559.14 ug/L	559.14 ppb	22:17:35
2	Si 251.611†	80006.6	77324.4	2628.0 ug/L	2628.0 ppb	22:17:15
2	Sn 189.927†	2731.8	2644.6	533.16 ug/L	533.16 ppb	22:17:35
2	Ti 334.940†	326943.9	319290.8	507.08 ug/L	507.08 ppb	22:17:15
2	Tl 190.801†	1549.2	1535.0	530.66 ug/L	530.66 ppb	22:17:35
2	U 409.014†	15876.5	17873.3	492.61 ug/L	492.61 ppb	22:17:15
2	V 292.402†	71120.4	70548.7	526.02 ug/L	526.02 ppb	22:17:15
2	Zn 213.857†	51485.5	49506.7	530.92 ug/L	530.92 ppb	22:17:15
2	SiO2†	79765.0	77081.9	5580.7 ug/L	5580.7 ppb	22:18:16
3	Sc Radial	4262.0	4262.0	97.0 %		22:16:11
3	Y RADIAL	4629.5	4629.5	95.95 %		22:16:11
3	Al 396.153Radial†	5404.2	5677.9	4939.6 ug/L	4939.6 ppb	22:16:11
3	Ca 317.933Radial†	2594.9	2656.5	5275.3 ug/L	5275.3 ppb	22:16:31
3	Fe 238.204 Radial†	430.7	433.1	5267.7 ug/L	5267.7 ppb	22:16:31
3	K 766.490 Radial†	29292.3	27723.6	5323.5 ug/L	5323.5 ppb	22:16:11
3	Mg 279.077 IEC†	121.6	122.5	5559.5 ug/L	5559.5 ppb	22:16:31
3	Na 589.592 Radial†	32386.3	34096.3	9835.1 ug/L	9835.1 ppb	22:16:11
3	Sr 421.552†	74310.7	76628.3	496.01 ug/L	496.01 ppb	22:16:11
3	Sc 361.383	917851.5	917851.5	104.48 %		22:17:41
3	Y 371.029	760202.8	760202.8	102.82 %		22:17:41
3	Ag 328.068†	110737.8	105550.4	508.77 ug/L	508.77 ppb	22:17:46
3	As 188.979†	1107.4	1084.4	536.07 ug/L	536.07 ppb	22:18:06
3	B 249.677†	20649.5	20232.9	501.95 ug/L	501.95 ppb	22:17:46
3	Ba 233.527†	65142.1	62358.3	522.51 ug/L	522.51 ppb	22:17:46
3	Be 313.107†	1347440.6	1293563.7	512.91 ug/L	512.91 ppb	22:17:41
3	Cd 226.502†	43477.8	41792.7	538.36 ug/L	538.36 ppb	22:17:46
3	Co 228.616†	24386.2	23392.4	540.61 ug/L	540.61 ppb	22:17:46
3	Cr 267.716†	45064.5	43054.4	521.47 ug/L	521.47 ppb	22:17:46
3	Cu 324.752†	175361.5	161645.5	495.49 ug/L	495.49 ppb	22:17:46
3	Mn 257.610†	451720.3	431917.3	517.87 ug/L	517.87 ppb	22:17:41
3	Mo 202.031†	6928.6	6624.2	518.61 ug/L	518.61 ppb	22:18:06
3	Ni 231.604†	20149.7	19213.4	533.09 ug/L	533.09 ppb	22:17:46
3	P 214.914†	4391.9	4007.8	2585.9 ug/L	2585.9 ppb	22:18:06
3	Pb 220.353†	4040.0	3919.5	533.27 ug/L	533.27 ppb	22:18:06
3	S 181.975 Axial†	733.5	670.9	1077.9 ug/L	1077.9 ppb	22:18:06
3	Sb 206.836†	1477.4	1379.4	538.04 ug/L	538.04 ppb	22:18:06
3	Se 196.026†	755.2	742.2	558.95 ug/L	558.95 ppb	22:18:06
3	Si 251.611†	80083.9	76129.5	2587.4 ug/L	2587.4 ppb	22:17:46
3	Sn 189.927†	2762.6	2630.8	530.38 ug/L	530.38 ppb	22:18:06
3	Ti 334.940†	326140.9	313337.2	497.61 ug/L	497.61 ppb	22:17:46
3	Tl 190.801†	1555.5	1516.5	524.26 ug/L	524.26 ppb	22:18:06
3	U 409.014†	15876.1	17621.2	485.65 ug/L	485.65 ppb	22:17:46
3	V 292.402†	71032.7	69336.9	517.03 ug/L	517.03 ppb	22:17:46
3	Zn 213.857†	51533.5	48736.2	522.63 ug/L	522.63 ppb	22:17:46
3	SiO2†	79481.6	75545.6	5469.3 ug/L	5469.3 ppb	22:18:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913227.8	103.95 %	1.021			0.98%
Sc Radial	4285.5	97.5 %	1.29			1.32%
Y 371.029	756064.1	102.26 %	0.991			0.97%
Y RADIAL	4652.6	96.42 %	0.768			0.80%
Ag 328.068†	105848.9	510.19 ug/L	7.859	510.19 ppb	7.859	1.54%
QC value within limits for Ag 328.068 Recovery = 102.04%						
Al 396.153Radial†	5631.2	4898.7 ug/L	95.49	4898.7 ppb	95.49	1.95%
QC value within limits for Al 396.153Radial Recovery = 97.97%						
As 188.979†	1077.5	532.67 ug/L	6.462	532.67 ppb	6.462	1.21%
QC value within limits for As 188.979 Recovery = 106.53%						
B 249.677†	20233.3	501.96 ug/L	8.932	501.96 ppb	8.932	1.78%
QC value within limits for B 249.677 Recovery = 100.39%						
Ba 233.527†	62392.2	522.80 ug/L	7.907	522.80 ppb	7.907	1.51%
QC value within limits for Ba 233.527 Recovery = 104.56%						
Be 313.107†	1287635.4	510.57 ug/L	2.617	510.57 ppb	2.617	0.51%
QC value within limits for Be 313.107 Recovery = 102.11%						
Ca 317.933Radial†	2636.1	5234.8 ug/L	64.54	5234.8 ppb	64.54	1.23%

QC value within limits for Ca 317.933 Radial Recovery = 104.70%							
Cd 226.502†	41744.9	537.75 ug/L	7.491	537.75 ppb	7.491	1.39%	
QC value within limits for Cd 226.502 Recovery = 107.55%							
Co 228.616†	23408.2	540.97 ug/L	8.296	540.97 ppb	8.296	1.53%	
QC value within limits for Co 228.616 Recovery = 108.19%							
Cr 267.716†	43049.8	521.41 ug/L	7.710	521.41 ppb	7.710	1.48%	
QC value within limits for Cr 267.716 Recovery = 104.28%							
Cu 324.752†	162178.6	497.12 ug/L	8.424	497.12 ppb	8.424	1.69%	
QC value within limits for Cu 324.752 Recovery = 99.42%							
Fe 238.204 Radial†	429.3	5222.1 ug/L	58.66	5222.1 ppb	58.66	1.12%	
QC value within limits for Fe 238.204 Radial Recovery = 104.44%							
K 766.490 Radial†	27403.0	5261.9 ug/L	128.95	5261.9 ppb	128.95	2.45%	
QC value within limits for K 766.490 Radial Recovery = 105.24%							
Mg 279.077 IEC†	120.3	5457.5 ug/L	94.15	5457.5 ppb	94.15	1.73%	
QC value within limits for Mg 279.077 IEC Recovery = 109.15%							
Mn 257.610†	431068.5	516.85 ug/L	1.788	516.85 ppb	1.788	0.35%	
QC value within limits for Mn 257.610 Recovery = 103.37%							
Mo 202.031†	6624.0	518.59 ug/L	4.864	518.59 ppb	4.864	0.94%	
QC value within limits for Mo 202.031 Recovery = 103.72%							
Na 589.592 Radial†	33897.2	9777.7 ug/L	195.43	9777.7 ppb	195.43	2.00%	
QC value within limits for Na 589.592 Radial Recovery = 97.78%							
Ni 231.604†	19165.0	531.75 ug/L	7.474	531.75 ppb	7.474	1.41%	
QC value within limits for Ni 231.604 Recovery = 106.35%							
P 214.914†	3996.4	2578.0 ug/L	28.67	2578.0 ppb	28.67	1.11%	
QC value within limits for P 214.914 Recovery = 103.12%							
Pb 220.353†	3916.2	532.82 ug/L	5.562	532.82 ppb	5.562	1.04%	
QC value within limits for Pb 220.353 Recovery = 106.56%							
S 181.975 Axial†	669.4	1075.5 ug/L	5.20	1075.5 ppb	5.20	0.48%	
QC value within limits for S 181.975 Axial Recovery = 107.55%							
Sb 206.836†	1374.2	536.06 ug/L	5.515	536.06 ppb	5.515	1.03%	
QC value within limits for Sb 206.836 Recovery = 107.21%							
Se 196.026†	734.4	553.18 ug/L	10.171	553.18 ppb	10.171	1.84%	
QC value greater than the upper limit for Se 196.026 Recovery = 110.64%							
Si 251.611†	76153.7	2588.2 ug/L	39.42	2588.2 ppb	39.42	1.52%	
QC value within limits for Si 251.611 Recovery = 103.53%							
Sn 189.927†	2627.6	529.73 ug/L	3.794	529.73 ppb	3.794	0.72%	
QC value within limits for Sn 189.927 Recovery = 105.95%							
Sr 421.552†	75968.6	491.74 ug/L	10.316	491.74 ppb	10.316	2.10%	
QC value within limits for Sr 421.552 Recovery = 98.35%							
Ti 334.940†	313966.5	498.62 ug/L	8.005	498.62 ppb	8.005	1.61%	
QC value within limits for Ti 334.940 Recovery = 99.72%							
Tl 190.801†	1515.3	523.88 ug/L	6.976	523.88 ppb	6.976	1.33%	
QC value within limits for Tl 190.801 Recovery = 104.78%							
U 409.014†	17643.0	486.26 ug/L	6.070	486.26 ppb	6.070	1.25%	
QC value within limits for U 409.014 Recovery = 97.25%							
V 292.402†	69450.6	517.87 ug/L	7.758	517.87 ppb	7.758	1.50%	
QC value within limits for V 292.402 Recovery = 103.57%							
Zn 213.857†	48738.5	522.67 ug/L	8.238	522.67 ppb	8.238	1.58%	
QC value within limits for Zn 213.857 Recovery = 104.53%							
SiO2†	75957.8	5499.2 ug/L	71.37	5499.2 ppb	71.37	1.30%	
QC value within limits for SiO2 Recovery = 102.84%							
QC Failed. Continue with analysis.							

Sequence No.: 40

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/22/2010 22:20:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4081.3	4081.3	92.8 %		22:22:23
1	Y RADIAL	4500.4	4500.4	93.27 %		22:22:23
1	Al 396.153Radial†	-107.3	-11.3	-9.8732 ug/L	-9.8732 ppb	22:22:43
1	Ca 317.933Radial†	23.9	6.0	11.969 ug/L	11.969 ppb	22:22:43
1	Fe 238.204 Radial†	10.9	0.6	7.3319 ug/L	7.3319 ppb	22:22:43
1	K 766.490 Radial†	2668.2	386.2	74.255 ug/L	74.255 ppb	22:22:23
1	Mg 279.077 IEC†	1.6	-1.1	-49.591 ug/L	-49.591 ppb	22:22:43
1	Na 589.592 Radial†	-661.7	-18.6	-5.3774 ug/L	-5.3774 ppb	22:22:23
1	Sr 421.552†	42.9	32.7	0.2114 ug/L	0.2114 ppb	22:22:23
1	Sc 361.383	903105.5	903105.5	102.80 %		22:23:40
1	Y 371.029	757547.5	757547.5	102.46 %		22:23:40
1	Ag 328.068†	312.7	-138.8	-0.6618 ug/L	-0.6618 ppb	22:23:45
1	As 188.979†	-16.6	8.3	4.0656 ug/L	4.0656 ppb	22:24:05
1	B 249.677†	-447.3	32.9	0.8206 ug/L	0.8206 ppb	22:24:05
1	Ba 233.527†	-7.9	-0.5	-0.0064 ug/L	-0.0064 ppb	22:24:05
1	Be 313.107†	-3933.3	25.9	0.0100 ug/L	0.0100 ppb	22:23:45
1	Cd 226.502†	-191.5	-8.7	-0.1137 ug/L	-0.1137 ppb	22:24:05
1	Co 228.616†	-61.1	-8.4	-0.1962 ug/L	-0.1962 ppb	22:24:05
1	Cr 267.716†	65.5	-15.7	-0.1878 ug/L	-0.1878 ppb	22:24:05
1	Cu 324.752†	6014.8	-351.8	-1.0747 ug/L	-1.0747 ppb	22:23:45
1	Mn 257.610†	478.7	15.9	0.0218 ug/L	0.0218 ppb	22:24:05
1	Mo 202.031†	0.1	-7.4	-0.5797 ug/L	-0.5797 ppb	22:24:05
1	Ni 231.604†	67.9	-7.0	-0.1947 ug/L	-0.1947 ppb	22:24:05
1	P 214.914†	188.3	-12.9	-8.3994 ug/L	-8.3994 ppb	22:24:05
1	Pb 220.353†	-66.6	-12.3	-1.6740 ug/L	-1.6740 ppb	22:24:05
1	S 181.975 Axial†	36.2	4.1	6.5398 ug/L	6.5398 ppb	22:24:05
1	Sb 206.836†	32.3	-3.3	-1.2393 ug/L	-1.2393 ppb	22:24:05
1	Se 196.026†	-21.4	-1.5	-1.0687 ug/L	-1.0687 ppb	22:24:05
1	Si 251.611†	602.9	63.3	2.1628 ug/L	2.1628 ppb	22:24:05
1	Sn 189.927†	15.5	1.6	0.3201 ug/L	0.3201 ppb	22:24:05
1	Ti 334.940†	-1276.2	-72.2	-0.1064 ug/L	-0.1064 ppb	22:23:45
1	Tl 190.801†	-37.0	-8.4	-2.8868 ug/L	-2.8868 ppb	22:24:05
1	U 409.014†	-2714.3	-215.2	-5.9519 ug/L	-5.9519 ppb	22:23:40
1	V 292.402†	-1527.4	-138.3	-1.0393 ug/L	-1.0393 ppb	22:23:45
1	Zn 213.857†	574.2	-30.9	-0.3333 ug/L	-0.3333 ppb	22:24:05
1	SiO2†	604.6	57.4	4.1852 ug/L	4.1852 ppb	22:25:11
2	Sc Radial	4373.6	4373.6	99.5 %		22:22:48
2	Y RADIAL	4738.8	4738.8	98.21 %		22:22:48
2	Al 396.153Radial†	-109.9	-6.2	-5.4523 ug/L	-5.4523 ppb	22:23:08
2	Ca 317.933Radial†	16.7	-3.0	-5.9800 ug/L	-5.9800 ppb	22:23:08
2	Fe 238.204 Radial†	7.8	-3.3	-39.521 ug/L	-39.521 ppb	22:23:08
2	K 766.490 Radial†	2637.3	163.0	31.336 ug/L	31.336 ppb	22:22:48
2	Mg 279.077 IEC†	1.1	-1.7	-78.139 ug/L	-78.139 ppb	22:23:08
2	Na 589.592 Radial†	-677.6	13.0	3.7432 ug/L	3.7432 ppb	22:22:48
2	Sr 421.552†	24.7	11.3	0.0733 ug/L	0.0733 ppb	22:22:48
2	Sc 361.383	918218.2	918218.2	104.52 %		22:24:10
2	Y 371.029	770487.2	770487.2	104.21 %		22:24:10
2	Ag 328.068†	261.0	-193.2	-0.9328 ug/L	-0.9328 ppb	22:24:15
2	As 188.979†	-22.4	3.0	1.4462 ug/L	1.4462 ppb	22:24:35
2	B 249.677†	-409.7	76.1	1.9036 ug/L	1.9036 ppb	22:24:35
2	Ba 233.527†	3.8	10.8	0.0886 ug/L	0.0886 ppb	22:24:35
2	Be 313.107†	-3832.7	185.1	0.0729 ug/L	0.0729 ppb	22:24:15
2	Cd 226.502†	-173.7	11.5	0.1500 ug/L	0.1500 ppb	22:24:35
2	Co 228.616†	-70.0	-15.9	-0.3645 ug/L	-0.3645 ppb	22:24:35
2	Cr 267.716†	79.1	-3.7	-0.0456 ug/L	-0.0456 ppb	22:24:35
2	Cu 324.752†	5896.9	-560.9	-1.7177 ug/L	-1.7177 ppb	22:24:15
2	Mn 257.610†	454.0	-15.4	-0.0191 ug/L	-0.0191 ppb	22:24:35
2	Mo 202.031†	18.8	10.4	0.8128 ug/L	0.8128 ppb	22:24:35
2	Ni 231.604†	51.3	-23.9	-0.6633 ug/L	-0.6633 ppb	22:24:35

2	P 214.914†	204.0	-0.9	-0.1910 ug/L	-0.1910 ppb	22:24:35
2	Pb 220.353†	-52.2	2.6	0.3554 ug/L	0.3554 ppb	22:24:35
2	S 181.975 Axial†	39.4	6.5	10.472 ug/L	10.472 ppb	22:24:35
2	Sb 206.836†	31.8	-4.4	-1.6065 ug/L	-1.6065 ppb	22:24:35
2	Se 196.026†	-29.9	-9.2	-6.8447 ug/L	-6.8447 ppb	22:24:35
2	Si 251.611†	607.4	57.9	1.9619 ug/L	1.9619 ppb	22:24:35
2	Sn 189.927†	19.0	4.7	0.9489 ug/L	0.9489 ppb	22:24:35
2	Ti 334.940†	-1317.7	-91.5	-0.1367 ug/L	-0.1367 ppb	22:24:15
2	Tl 190.801†	-28.7	0.2	0.0592 ug/L	0.0592 ppb	22:24:35
2	U 409.014†	-2792.2	-246.2	-6.8059 ug/L	-6.8059 ppb	22:24:10
2	V 292.402†	-1436.5	-27.0	-0.1955 ug/L	-0.1955 ppb	22:24:15
2	Zn 213.857†	569.7	-44.5	-0.4686 ug/L	-0.4686 ppb	22:24:35
2	SiO2†	604.6	47.8	3.4473 ug/L	3.4473 ppb	22:25:16
3	Sc Radial	4342.9	4342.9	98.8 %		22:23:13
3	Y RADIAL	4728.6	4728.6	98.0 %		22:23:13
3	Al 396.153Radial†	-116.5	-13.7	-11.913 ug/L	-11.913 ppb	22:23:33
3	Ca 317.933Radial†	17.3	-2.3	-4.5432 ug/L	-4.5432 ppb	22:23:33
3	Fe 238.204 Radial†	11.5	0.5	6.6250 ug/L	6.6250 ppb	22:23:33
3	K 766.490 Radial†	2728.4	274.0	52.687 ug/L	52.687 ppb	22:23:13
3	Mg 279.077 IEC†	1.8	-1.1	-48.566 ug/L	-48.566 ppb	22:23:33
3	Na 589.592 Radial†	-696.4	-10.9	-3.1334 ug/L	-3.1334 ppb	22:23:13
3	Sr 421.552†	37.7	24.6	0.1596 ug/L	0.1596 ppb	22:23:13
3	Sc 361.383	920239.9	920239.9	104.75 %		22:24:40
3	Y 371.029	772900.4	772900.4	104.54 %		22:24:40
3	Ag 328.068†	255.4	-199.1	-0.9514 ug/L	-0.9514 ppb	22:24:45
3	As 188.979†	-23.0	2.5	1.2106 ug/L	1.2106 ppb	22:25:05
3	B 249.677†	-417.3	69.7	1.7365 ug/L	1.7365 ppb	22:25:05
3	Ba 233.527†	-1.5	5.7	0.0471 ug/L	0.0471 ppb	22:25:05
3	Be 313.107†	-3821.2	204.2	0.0808 ug/L	0.0808 ppb	22:24:45
3	Cd 226.502†	-193.9	-7.5	-0.0983 ug/L	-0.0983 ppb	22:25:05
3	Co 228.616†	-56.7	-3.1	-0.0721 ug/L	-0.0721 ppb	22:25:05
3	Cr 267.716†	71.3	-11.3	-0.1360 ug/L	-0.1360 ppb	22:25:05
3	Cu 324.752†	5975.7	-498.0	-1.5252 ug/L	-1.5252 ppb	22:24:45
3	Mn 257.610†	475.8	4.5	0.0080 ug/L	0.0080 ppb	22:25:05
3	Mo 202.031†	1.7	-5.9	-0.4600 ug/L	-0.4600 ppb	22:25:05
3	Ni 231.604†	60.8	-15.0	-0.4158 ug/L	-0.4158 ppb	22:25:05
3	P 214.914†	197.9	-7.1	-4.4653 ug/L	-4.4653 ppb	22:25:05
3	Pb 220.353†	-52.5	2.4	0.3229 ug/L	0.3229 ppb	22:25:05
3	S 181.975 Axial†	32.0	-0.6	-1.0063 ug/L	-1.0063 ppb	22:25:05
3	Sb 206.836†	29.8	-6.3	-2.3766 ug/L	-2.3766 ppb	22:25:05
3	Se 196.026†	-27.1	-6.5	-4.7352 ug/L	-4.7352 ppb	22:25:05
3	Si 251.611†	614.2	63.1	2.1541 ug/L	2.1541 ppb	22:25:05
3	Sn 189.927†	11.2	-2.8	-0.5562 ug/L	-0.5562 ppb	22:25:05
3	Ti 334.940†	-1212.3	12.0	0.0234 ug/L	0.0234 ppb	22:24:45
3	Tl 190.801†	-20.2	8.3	2.8430 ug/L	2.8430 ppb	22:25:05
3	U 409.014†	-2617.2	-73.3	-2.0271 ug/L	-2.0271 ppb	22:24:40
3	V 292.402†	-1457.9	-44.3	-0.3382 ug/L	-0.3382 ppb	22:24:45
3	Zn 213.857†	564.0	-51.0	-0.5483 ug/L	-0.5483 ppb	22:25:05
3	SiO2†	615.6	57.0	4.1468 ug/L	4.1468 ppb	22:25:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913854.5	104.02 %	1.066			1.02%
Sc Radial	4265.9	97.0 %	3.66			3.77%
Y 371.029	766978.4	103.74 %	1.117			1.08%
Y RADIAL	4655.9	96.49 %	2.794			2.90%
Ag 328.068†	-177.0	-0.8487 ug/L	0.16210	-0.8487 ppb	0.16210	19.10%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.4	-9.0796 ug/L	3.30280	-9.0796 ppb	3.30280	36.38%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.6	2.2408 ug/L	1.58470	2.2408 ppb	1.58470	70.72%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	59.6	1.4869 ug/L	0.58306	1.4869 ppb	0.58306	39.21%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.3	0.0431 ug/L	0.04759	0.0431 ppb	0.04759	110.43%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	138.4	0.0546 ug/L	0.03882	0.0546 ppb	0.03882	71.13%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.2	0.4819 ug/L	9.97388	0.4819 ppb	9.97388	>999.9%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.6	-0.0207 ug/L	0.14799	-0.0207 ppb	0.14799	715.89%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-9.1	-0.2109 ug/L	0.14676	-0.2109 ppb	0.14676	69.59%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-10.2	-0.1231 ug/L	0.07200	-0.1231 ppb	0.07200	58.46%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-470.3	-1.4392 ug/L	0.32998	-1.4392 ppb	0.32998	22.93%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.7	-8.5212 ug/L	26.84857	-8.5212 ppb	26.84857	315.08%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	274.4	52.759 ug/L	21.4594	52.759 ppb	21.4594	40.67%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.3	-58.766 ug/L	16.7861	-58.766 ppb	16.7861	28.56%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	1.7	0.0036 ug/L	0.02081	0.0036 ppb	0.02081	582.34%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-1.0	-0.0756 ug/L	0.77173	-0.0756 ppb	0.77173	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-5.5	-1.5892 ug/L	4.75236	-1.5892 ppb	4.75236	299.04%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-15.3	-0.4246 ug/L	0.23445	-0.4246 ppb	0.23445	55.22%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-6.9	-4.3519 ug/L	4.10539	-4.3519 ppb	4.10539	94.34%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.4	-0.3319 ug/L	1.16242	-0.3319 ppb	1.16242	350.23%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.3	5.3351 ug/L	5.83308	5.3351 ppb	5.83308	109.33%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-4.6	-1.7408 ug/L	0.58041	-1.7408 ppb	0.58041	33.34%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-5.8	-4.2162 ug/L	2.92274	-4.2162 ppb	2.92274	69.32%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	61.4	2.0930 ug/L	0.11358	2.0930 ppb	0.11358	5.43%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.2	0.2376 ug/L	0.75592	0.2376 ppb	0.75592	318.12%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	22.9	0.1481 ug/L	0.06973	0.1481 ppb	0.06973	47.08%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-50.6	-0.0732 ug/L	0.08502	-0.0732 ppb	0.08502	116.08%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.0	0.0051 ug/L	2.86526	0.0051 ppb	2.86526	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-178.2	-4.9283 ug/L	2.54851	-4.9283 ppb	2.54851	51.71%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-69.9	-0.5243 ug/L	0.45169	-0.5243 ppb	0.45169	86.14%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-42.1	-0.4501 ug/L	0.10870	-0.4501 ppb	0.10870	24.15%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	54.1	3.9264 ug/L	0.41542	3.9264 ppb	0.41542	10.58%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 41

Sample ID: 1202036894|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 68

Date Collected: 2/22/2010 22:27:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036894|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4170.4	4170.4	94.9 %		22:29:24
1	Y RADIAL	4557.1	4557.1	94.44 %		22:29:24
1	Al 396.153Radial†	-97.1	1.9	1.6343 ug/L	1.6343 ppb	22:29:44
1	Ca 317.933Radial†	26.5	8.2	16.287 ug/L	16.287 ppb	22:29:44
1	Fe 238.204 Radial†	12.4	1.9	23.599 ug/L	23.599 ppb	22:29:44
1	K 766.490 Radial†	2700.1	358.3	68.883 ug/L	68.883 ppb	22:29:24
1	Mg 279.077 IEC†	4.1	1.5	67.191 ug/L	67.191 ppb	22:29:44
1	Na 589.592 Radial†	-639.9	19.5	5.6305 ug/L	5.6305 ppb	22:29:24
1	Sr 421.552†	27.0	15.0	0.0968 ug/L	0.0968 ppb	22:29:24
1	Sc 361.383	895724.5	895724.5	101.96 %		22:30:41
1	Y 371.029	752280.1	752280.1	101.75 %		22:30:41
1	Ag 328.068†	273.6	-174.6	-0.8231 ug/L	-0.8231 ppb	22:30:41
1	As 188.979†	-26.1	-1.2	-0.5678 ug/L	-0.5678 ppb	22:31:01
1	B 249.677†	-520.8	-42.7	-1.0683 ug/L	-1.0683 ppb	22:31:01
1	Ba 233.527†	21.6	28.4	0.2375 ug/L	0.2375 ppb	22:31:01
1	Be 313.107†	-3862.0	64.3	0.0260 ug/L	0.0260 ppb	22:30:41
1	Cd 226.502†	-174.8	6.2	0.0760 ug/L	0.0760 ppb	22:31:01
1	Co 228.616†	-67.5	-15.2	-0.3512 ug/L	-0.3512 ppb	22:31:01
1	Cr 267.716†	110.2	28.7	0.3520 ug/L	0.3520 ppb	22:31:01
1	Cu 324.752†	5905.1	-411.1	-1.2545 ug/L	-1.2545 ppb	22:30:41
1	Mn 257.610†	1033.6	564.0	0.6755 ug/L	0.6755 ppb	22:31:01
1	Mo 202.031†	12.1	4.4	0.3442 ug/L	0.3442 ppb	22:31:01
1	Ni 231.604†	74.1	-0.3	-0.0089 ug/L	-0.0089 ppb	22:31:01
1	P 214.914†	217.0	16.8	11.512 ug/L	11.512 ppb	22:31:01
1	Pb 220.353†	-65.4	-11.6	-1.5795 ug/L	-1.5795 ppb	22:31:01
1	S 181.975 Axial†	41.5	9.5	15.300 ug/L	15.300 ppb	22:31:01
1	Sb 206.836†	35.9	0.4	0.1985 ug/L	0.1985 ppb	22:31:01
1	Se 196.026†	-28.1	-8.2	-5.8810 ug/L	-5.8810 ppb	22:31:01
1	Si 251.611†	1140.9	595.8	20.293 ug/L	20.293 ppb	22:31:01
1	Sn 189.927†	23.2	9.3	1.8769 ug/L	1.8769 ppb	22:31:01
1	Ti 334.940†	-1041.3	148.0	0.2352 ug/L	0.2352 ppb	22:30:41
1	Tl 190.801†	-30.8	-2.6	-0.8929 ug/L	-0.8929 ppb	22:31:01
1	U 409.014†	-2768.8	-290.4	-8.0348 ug/L	-8.0348 ppb	22:30:41
1	V 292.402†	-1391.2	-17.0	-0.1380 ug/L	-0.1380 ppb	22:30:41
1	Zn 213.857†	697.8	94.9	1.0255 ug/L	1.0255 ppb	22:31:01
1	SiO2†	1227.2	673.0	48.838 ug/L	48.838 ppb	22:31:57
2	Sc Radial	4157.2	4157.2	94.6 %		22:29:49
2	Y RADIAL	4550.7	4550.7	94.31 %		22:29:49
2	Al 396.153Radial†	-105.3	-7.1	-6.2202 ug/L	-6.2202 ppb	22:30:09
2	Ca 317.933Radial†	23.0	4.6	9.0503 ug/L	9.0503 ppb	22:30:09
2	Fe 238.204 Radial†	15.3	5.1	61.262 ug/L	61.262 ppb	22:30:09
2	K 766.490 Radial†	2656.9	321.7	61.845 ug/L	61.845 ppb	22:29:49
2	Mg 279.077 IEC†	1.6	-1.2	-55.029 ug/L	-55.029 ppb	22:30:09
2	Na 589.592 Radial†	-617.4	41.2	11.887 ug/L	11.887 ppb	22:29:49
2	Sr 421.552†	46.4	35.6	0.2304 ug/L	0.2304 ppb	22:29:49
2	Sc 361.383	892396.2	892396.2	101.58 %		22:31:06
2	Y 371.029	750949.3	750949.3	101.57 %		22:31:06
2	Ag 328.068†	277.2	-170.1	-0.7951 ug/L	-0.7951 ppb	22:31:06
2	As 188.979†	-18.9	5.9	2.8867 ug/L	2.8867 ppb	22:31:26
2	B 249.677†	-523.8	-47.6	-1.1964 ug/L	-1.1964 ppb	22:31:26
2	Ba 233.527†	25.9	32.6	0.2737 ug/L	0.2737 ppb	22:31:26
2	Be 313.107†	-3810.5	100.9	0.0400 ug/L	0.0400 ppb	22:31:06
2	Cd 226.502†	-174.6	5.8	0.0672 ug/L	0.0672 ppb	22:31:26
2	Co 228.616†	-55.7	-3.8	-0.0884 ug/L	-0.0884 ppb	22:31:26
2	Cr 267.716†	93.3	12.5	0.1571 ug/L	0.1571 ppb	22:31:26
2	Cu 324.752†	5944.5	-350.8	-1.0708 ug/L	-1.0708 ppb	22:31:06
2	Mn 257.610†	998.2	533.0	0.6470 ug/L	0.6470 ppb	22:31:26
2	Mo 202.031†	14.5	6.7	0.5305 ug/L	0.5305 ppb	22:31:26
2	Ni 231.604†	68.1	-6.0	-0.1669 ug/L	-0.1669 ppb	22:31:26

2	P 214.914†	203.6	4.4	3.1436 ug/L	3.1436 ppb	22:31:26
2	Pb 220.353†	-64.2	-10.7	-1.4593 ug/L	-1.4593 ppb	22:31:26
2	S 181.975 Axial†	37.0	5.3	8.4846 ug/L	8.4846 ppb	22:31:26
2	Sb 206.836†	39.6	4.3	1.6550 ug/L	1.6550 ppb	22:31:26
2	Se 196.026†	-21.6	-2.0	-1.2237 ug/L	-1.2237 ppb	22:31:26
2	Si 251.611†	1167.3	625.9	21.317 ug/L	21.317 ppb	22:31:26
2	Sn 189.927†	24.5	10.6	2.1403 ug/L	2.1403 ppb	22:31:26
2	Ti 334.940†	-1147.3	39.8	0.0699 ug/L	0.0699 ppb	22:31:06
2	Tl 190.801†	-30.4	-2.4	-0.8104 ug/L	-0.8104 ppb	22:31:26
2	U 409.014†	-2548.2	-83.3	-2.3126 ug/L	-2.3126 ppb	22:31:06
2	V 292.402†	-1405.3	-36.0	-0.2721 ug/L	-0.2721 ppb	22:31:06
2	Zn 213.857†	703.6	103.2	1.1101 ug/L	1.1101 ppb	22:31:26
2	SiO2†	1204.8	655.4	47.557 ug/L	47.557 ppb	22:32:02
3	Sc Radial	4179.0	4179.0	95.1 %		22:30:14
3	Y RADIAL	4581.7	4581.7	94.95 %		22:30:14
3	Al 396.153Radial†	-98.3	0.8	0.6671 ug/L	0.6671 ppb	22:30:34
3	Ca 317.933Radial†	23.3	4.7	9.4183 ug/L	9.4183 ppb	22:30:34
3	Fe 238.204 Radial†	14.5	4.1	49.576 ug/L	49.576 ppb	22:30:34
3	K 766.490 Radial†	2706.7	359.5	69.103 ug/L	69.103 ppb	22:30:14
3	Mg 279.077 IEC†	0.2	-2.6	-120.00 ug/L	-120.00 ppb	22:30:34
3	Na 589.592 Radial†	-636.6	24.4	7.0440 ug/L	7.0440 ppb	22:30:14
3	Sr 421.552†	2.1	-11.3	-0.0729 ug/L	-0.0729 ppb	22:30:14
3	Sc 361.383	906375.1	906375.1	103.17 %		22:31:32
3	Y 371.029	763263.4	763263.4	103.23 %		22:31:32
3	Ag 328.068†	247.8	-202.8	-0.9492 ug/L	-0.9492 ppb	22:31:32
3	As 188.979†	-18.4	6.6	3.2451 ug/L	3.2451 ppb	22:31:52
3	B 249.677†	-507.4	-23.7	-0.5992 ug/L	-0.5992 ppb	22:31:52
3	Ba 233.527†	4.6	11.6	0.0984 ug/L	0.0984 ppb	22:31:52
3	Be 313.107†	-3793.4	175.3	0.0700 ug/L	0.0700 ppb	22:31:32
3	Cd 226.502†	-193.0	-9.5	-0.1291 ug/L	-0.1291 ppb	22:31:52
3	Co 228.616†	-61.2	-8.3	-0.1908 ug/L	-0.1908 ppb	22:31:52
3	Cr 267.716†	110.6	27.8	0.3447 ug/L	0.3447 ppb	22:31:52
3	Cu 324.752†	6017.9	-369.9	-1.1267 ug/L	-1.1267 ppb	22:31:32
3	Mn 257.610†	1009.0	528.2	0.6428 ug/L	0.6428 ppb	22:31:52
3	Mo 202.031†	16.8	8.7	0.6845 ug/L	0.6845 ppb	22:31:52
3	Ni 231.604†	68.7	-6.4	-0.1780 ug/L	-0.1780 ppb	22:31:52
3	P 214.914†	203.9	1.6	1.2859 ug/L	1.2859 ppb	22:31:52
3	Pb 220.353†	-55.2	-1.0	-0.1404 ug/L	-0.1404 ppb	22:31:52
3	S 181.975 Axial†	37.5	5.1	8.2470 ug/L	8.2470 ppb	22:31:52
3	Sb 206.836†	42.3	6.3	2.3692 ug/L	2.3692 ppb	22:31:52
3	Se 196.026†	-23.4	-3.4	-2.2993 ug/L	-2.2993 ppb	22:31:52
3	Si 251.611†	1145.2	586.7	19.981 ug/L	19.981 ppb	22:31:52
3	Sn 189.927†	14.0	0.1	0.0193 ug/L	0.0193 ppb	22:31:52
3	Ti 334.940†	-1015.2	185.3	0.3090 ug/L	0.3090 ppb	22:31:32
3	Tl 190.801†	-37.2	-8.5	-2.9088 ug/L	-2.9088 ppb	22:31:52
3	U 409.014†	-2810.8	-299.1	-8.2799 ug/L	-8.2799 ppb	22:31:32
3	V 292.402†	-1382.4	7.5	0.0393 ug/L	0.0393 ppb	22:31:32
3	Zn 213.857†	709.3	98.1	1.0566 ug/L	1.0566 ppb	22:31:52
3	SiO2†	1197.2	629.7	45.688 ug/L	45.688 ppb	22:32:07

Mean Data: 1202036894|950496|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	898165.3	102.24 %		0.831			0.81%
Sc Radial	4168.9	94.8 %		0.25			0.26%
Y 371.029	755497.6	102.18 %		0.914			0.89%
Y RADIAL	4563.1	94.57 %		0.339			0.36%
Ag 328.068†	-182.5	-0.8558 ug/L		0.08210	-0.8558 ppb	0.08210	9.59%
Al 396.153Radial†	-1.5	-1.3063 ug/L		4.28295	-1.3063 ppb	4.28295	327.88%
As 188.979†	3.8	1.8547 ug/L		2.10559	1.8547 ppb	2.10559	113.53%
B 249.677†	-38.0	-0.9546 ug/L		0.31441	-0.9546 ppb	0.31441	32.94%
Ba 233.527†	24.2	0.2032 ug/L		0.09255	0.2032 ppb	0.09255	45.54%
Be 313.107†	113.5	0.0453 ug/L		0.02250	0.0453 ppb	0.02250	49.60%
Ca 317.933Radial†	5.8	11.585 ug/L		4.0758	11.585 ppb	4.0758	35.18%
Cd 226.502†	0.8	0.0047 ug/L		0.11599	0.0047 ppb	0.11599	>999.9%
Co 228.616†	-9.1	-0.2101 ug/L		0.13250	-0.2101 ppb	0.13250	63.05%
Cr 267.716†	23.0	0.2846 ug/L		0.11047	0.2846 ppb	0.11047	38.81%
Cu 324.752†	-377.3	-1.1507 ug/L		0.09415	-1.1507 ppb	0.09415	8.18%
Fe 238.204 Radial†	3.7	44.812 ug/L		19.2782	44.812 ppb	19.2782	43.02%
K 766.490 Radial†	346.5	66.611 ug/L		4.1286	66.611 ppb	4.1286	6.20%

Mg 279.077 IEC†	-0.8	-35.948 ug/L	95.0451	-35.948 ppb	95.0451	264.40%
Mn 257.610†	541.7	0.6551 ug/L	0.01779	0.6551 ppb	0.01779	2.72%
Mo 202.031†	6.6	0.5197 ug/L	0.17041	0.5197 ppb	0.17041	32.79%
Na 589.592 Radial†	28.4	8.1872 ug/L	3.28131	8.1872 ppb	3.28131	40.08%
Ni 231.604†	-4.3	-0.1179 ug/L	0.09458	-0.1179 ppb	0.09458	80.20%
P 214.914†	7.6	5.3139 ug/L	5.44760	5.3139 ppb	5.44760	102.52%
Pb 220.353†	-7.8	-1.0597 ug/L	0.79839	-1.0597 ppb	0.79839	75.34%
S 181.975 Axial†	6.6	10.677 ug/L	4.0051	10.677 ppb	4.0051	37.51%
Sb 206.836†	3.7	1.4076 ug/L	1.10630	1.4076 ppb	1.10630	78.60%
Se 196.026†	-4.5	-3.1347 ug/L	2.43847	-3.1347 ppb	2.43847	77.79%
Si 251.611†	602.8	20.530 ug/L	0.6987	20.530 ppb	0.6987	3.40%
Sn 189.927†	6.7	1.3455 ug/L	1.15605	1.3455 ppb	1.15605	85.92%
Sr 421.552†	13.1	0.0848 ug/L	0.15200	0.0848 ppb	0.15200	179.32%
Ti 334.940†	124.4	0.2047 ug/L	0.12242	0.2047 ppb	0.12242	59.81%
Tl 190.801†	-4.5	-1.5374 ug/L	1.18845	-1.5374 ppb	1.18845	77.30%
U 409.014†	-224.3	-6.2091 ug/L	3.37666	-6.2091 ppb	3.37666	54.38%
V 292.402†	-15.2	-0.1236 ug/L	0.15620	-0.1236 ppb	0.15620	126.38%
Zn 213.857†	98.7	1.0640 ug/L	0.04279	1.0640 ppb	0.04279	4.02%
SiO2†	652.7	47.361 ug/L	1.5842	47.361 ppb	1.5842	3.34%

Sequence No.: 42

Sample ID: 1202036899|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 2/22/2010 22:34:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036899|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4407.2	4407.2	100 %		22:36:31
1	Y RADIAL	5294.2	5294.2	109.7 %		22:36:31
1	Al 396.153Radial†	116632.6	116433.3	101780 ug/L	101780 ppb	22:36:11
1	Ca 317.933Radial†	57671.1	57501.3	114190 ug/L	114190 ppb	22:36:11
1	Fe 238.204 Radial†	17837.6	17780.1	215640 ug/L	215640 ppb	22:36:11
1	K 766.490 Radial†	274793.9	271591.3	52168 ug/L	52168 ppb	22:36:11
1	Mg 279.077 IEC†	1033.6	1028.1	46419 ug/L	46419 ppb	22:36:31
1	Na 589.592 Radial†	39330.2	39921.9	11516 ug/L	11516 ppb	22:36:11
1	Sr 421.552†	404897.8	403830.9	2613.3 ug/L	2613.3 ppb	22:36:11
1	Sc 361.383	921035.6	921035.6	104.84 %		22:37:33
1	Y 371.029	841719.9	841719.9	113.84 %		22:37:33
1	Ag 328.068†	64288.1	60878.1	362.20 ug/L	362.20 ppb	22:37:33
1	As 188.979†	2532.3	2439.9	1302.2 ug/L	1302.2 ppb	22:37:38
1	B 249.677†	70829.2	68028.4	1657.7 ug/L	1657.7 ppb	22:37:33
1	Ba 233.527†	287388.1	274131.6	2301.1 ug/L	2301.1 ppb	22:37:33
1	Be 313.107†	2373242.1	2267563.4	911.95 ug/L	911.95 ppb	22:37:33
1	Cd 226.502†	57743.2	55255.8	690.58 ug/L	690.58 ppb	22:37:38
1	Co 228.616†	48612.9	46420.3	1057.0 ug/L	1057.0 ppb	22:37:38
1	Cr 267.716†	231488.9	220725.7	2690.7 ug/L	2690.7 ppb	22:37:33
1	Cu 324.752†	712443.5	673359.6	2075.5 ug/L	2075.5 ppb	22:37:33
1	Mn 257.610†	5326452.8	5080174.3	6107.1 ug/L	6107.1 ppb	22:37:33
1	Mo 202.031†	7554.9	7198.7	581.17 ug/L	581.17 ppb	22:37:38
1	Ni 231.604†	56599.1	53913.9	1496.1 ug/L	1496.1 ppb	22:37:38
1	P 214.914†	15674.6	14755.2	9329.0 ug/L	9329.0 ppb	22:37:38
1	Pb 220.353†	7340.2	7053.9	956.66 ug/L	956.66 ppb	22:37:38
1	S 181.975 Axial†	2926.1	2759.9	4418.8 ug/L	4418.8 ppb	22:37:38
1	Sb 206.836†	5555.6	5264.5	1991.0 ug/L	1991.0 ppb	22:37:38
1	Se 196.026†	4127.7	3956.5	3607.7 ug/L	3607.7 ppb	22:37:38
1	Si 251.611†	483829.1	460975.9	15699 ug/L	15699 ppb	22:37:33
1	Sn 189.927†	6565.8	6249.3	1266.3 ug/L	1266.3 ppb	22:37:38
1	Ti 334.940†	4306153.5	4108583.3	6537.5 ug/L	6537.5 ppb	22:37:33
1	Tl 190.801†	4046.8	3887.6	1411.5 ug/L	1411.5 ppb	22:37:38
1	U 409.014†	-8897.1	-6061.2	-198.21 ug/L	-198.21 ppb	22:37:33
1	V 292.402†	201040.4	193109.4	1390.1 ug/L	1390.1 ppb	22:37:33
1	Zn 213.857†	660331.0	629265.6	6766.1 ug/L	6766.1 ppb	22:37:33
1	SiO2†	484662.2	461763.2	33501 ug/L	33501 ppb	22:38:12
2	Sc Radial	4432.6	4432.6	101 %		22:36:57
2	Y RADIAL	5317.6	5317.6	110.2 %		22:36:57
2	Al 396.153Radial†	115868.5	115010.0	100540 ug/L	100540 ppb	22:36:37
2	Ca 317.933Radial†	57044.2	56550.5	112300 ug/L	112300 ppb	22:36:37
2	Fe 238.204 Radial†	17706.9	17548.7	212840 ug/L	212840 ppb	22:36:37
2	K 766.490 Radial†	271766.1	267020.4	51290 ug/L	51290 ppb	22:36:37
2	Mg 279.077 IEC†	1029.8	1018.4	45982 ug/L	45982 ppb	22:36:57
2	Na 589.592 Radial†	38647.4	39020.3	11255 ug/L	11255 ppb	22:36:37
2	Sr 421.552†	400149.2	396810.9	2567.9 ug/L	2567.9 ppb	22:36:37
2	Sc 361.383	933195.2	933195.2	106.22 %		22:37:47
2	Y 371.029	852353.3	852353.3	115.28 %		22:37:47
2	Ag 328.068†	64662.9	60432.0	359.18 ug/L	359.18 ppb	22:37:47
2	As 188.979†	2564.6	2438.8	1300.6 ug/L	1300.6 ppb	22:37:52
2	B 249.677†	71255.1	67549.0	1646.2 ug/L	1646.2 ppb	22:37:47
2	Ba 233.527†	288353.0	271468.1	2278.7 ug/L	2278.7 ppb	22:37:47
2	Be 313.107†	2384723.9	2248876.4	904.44 ug/L	904.44 ppb	22:37:47
2	Cd 226.502†	57627.3	54429.0	680.20 ug/L	680.20 ppb	22:37:52
2	Co 228.616†	48500.5	45710.3	1040.7 ug/L	1040.7 ppb	22:37:52
2	Cr 267.716†	232719.7	219007.3	2669.7 ug/L	2669.7 ppb	22:37:47
2	Cu 324.752†	717537.4	669300.4	2062.9 ug/L	2062.9 ppb	22:37:47
2	Mn 257.610†	5345909.7	5032290.8	6049.5 ug/L	6049.5 ppb	22:37:47
2	Mo 202.031†	7530.6	7081.9	571.79 ug/L	571.79 ppb	22:37:52
2	Ni 231.604†	56502.8	53119.8	1474.1 ug/L	1474.1 ppb	22:37:52

2	P 214.914†	15603.8	14493.7	9158.2 ug/L	9158.2 ppb	22:37:52
2	Pb 220.353†	7415.3	7033.4	953.88 ug/L	953.88 ppb	22:37:52
2	S 181.975 Axial†	2922.0	2719.6	4354.3 ug/L	4354.3 ppb	22:37:52
2	Sb 206.836†	5522.1	5163.9	1952.8 ug/L	1952.8 ppb	22:37:52
2	Se 196.026†	4118.6	3896.6	3554.7 ug/L	3554.7 ppb	22:37:52
2	Si 251.611†	486672.1	457639.1	15585 ug/L	15585 ppb	22:37:47
2	Sn 189.927†	6544.0	6147.1	1245.6 ug/L	1245.6 ppb	22:37:52
2	Ti 334.940†	4328002.8	4075632.9	6484.9 ug/L	6484.9 ppb	22:37:47
2	Tl 190.801†	4045.0	3835.6	1393.0 ug/L	1393.0 ppb	22:37:52
2	U 409.014†	-8787.5	-5847.4	-191.93 ug/L	-191.93 ppb	22:37:47
2	V 292.402†	202318.4	191813.8	1380.9 ug/L	1380.9 ppb	22:37:47
2	Zn 213.857†	662660.1	623251.2	6701.6 ug/L	6701.6 ppb	22:37:47
2	SiO2†	484886.5	455950.7	33080 ug/L	33080 ppb	22:38:17
3	Sc Radial	4422.2	4422.2	101 %		22:37:22
3	Y RADIAL	5325.3	5325.3	110.4 %		22:37:22
3	Al 396.153Radial†	117594.2	116995.2	102270 ug/L	102270 ppb	22:37:02
3	Ca 317.933Radial†	57891.8	57525.9	114230 ug/L	114230 ppb	22:37:02
3	Fe 238.204 Radial†	17911.2	17793.0	215800 ug/L	215800 ppb	22:37:02
3	K 766.490 Radial†	275567.5	271431.9	52138 ug/L	52138 ppb	22:37:02
3	Mg 279.077 IEC†	1027.2	1018.2	45974 ug/L	45974 ppb	22:37:22
3	Na 589.592 Radial†	39203.7	39663.3	11441 ug/L	11441 ppb	22:37:02
3	Sr 421.552†	405566.0	403127.1	2608.8 ug/L	2608.8 ppb	22:37:02
3	Sc 361.383	935526.7	935526.7	106.49 %		22:38:01
3	Y 371.029	853750.3	853750.3	115.47 %		22:38:01
3	Ag 328.068†	64099.1	59750.8	356.74 ug/L	356.74 ppb	22:38:01
3	As 188.979†	2550.5	2419.6	1291.3 ug/L	1291.3 ppb	22:38:06
3	B 249.677†	70605.8	66772.1	1626.3 ug/L	1626.3 ppb	22:38:01
3	Ba 233.527†	286805.1	269338.0	2260.9 ug/L	2260.9 ppb	22:38:01
3	Be 313.107†	2366732.4	2226386.1	895.40 ug/L	895.40 ppb	22:38:01
3	Cd 226.502†	57932.5	54580.4	681.85 ug/L	681.85 ppb	22:38:06
3	Co 228.616†	48887.4	45959.8	1046.6 ug/L	1046.6 ppb	22:38:06
3	Cr 267.716†	230930.0	216780.7	2643.0 ug/L	2643.0 ppb	22:38:01
3	Cu 324.752†	710041.0	660577.3	2036.3 ug/L	2036.3 ppb	22:38:01
3	Mn 257.610†	5312948.5	4988795.3	5997.7 ug/L	5997.7 ppb	22:38:01
3	Mo 202.031†	7582.5	7113.0	574.48 ug/L	574.48 ppb	22:38:06
3	Ni 231.604†	57104.5	53552.3	1486.1 ug/L	1486.1 ppb	22:38:06
3	P 214.914†	15755.5	14599.6	9232.4 ug/L	9232.4 ppb	22:38:06
3	Pb 220.353†	7484.8	7081.3	960.46 ug/L	960.46 ppb	22:38:06
3	S 181.975 Axial†	2933.6	2723.7	4360.5 ug/L	4360.5 ppb	22:38:06
3	Sb 206.836†	5604.8	5228.5	1977.3 ug/L	1977.3 ppb	22:38:06
3	Se 196.026†	4133.6	3901.1	3568.0 ug/L	3568.0 ppb	22:38:06
3	Si 251.611†	482632.2	452703.5	15417 ug/L	15417 ppb	22:38:01
3	Sn 189.927†	6567.3	6153.7	1247.0 ug/L	1247.0 ppb	22:38:06
3	Ti 334.940†	4297286.3	4036633.7	6423.2 ug/L	6423.2 ppb	22:38:01
3	Tl 190.801†	4100.3	3878.0	1406.8 ug/L	1406.8 ppb	22:38:06
3	U 409.014†	-8614.7	-5664.6	-187.15 ug/L	-187.15 ppb	22:38:01
3	V 292.402†	200730.2	189847.8	1366.1 ug/L	1366.1 ppb	22:38:01
3	Zn 213.857†	658426.4	617720.8	6641.2 ug/L	6641.2 ppb	22:38:01
3	SiO2†	479369.9	449632.5	32621 ug/L	32621 ppb	22:38:23

Mean Data: 1202036899|950496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	929919.1	105.85 %	0.886			0.84%
Sc Radial	4420.7	101 %	0.3			0.29%
Y 371.029	849274.5	114.87 %	0.890			0.77%
Y RADIAL	5312.4	110.1 %	0.33			0.30%
Ag 328.068†	60353.6	359.37 ug/L	2.734	359.37 ppb	2.734	0.76%
Al 396.153Radial†	116146.2	101530 ug/L	894.7	101530 ppb	894.7	0.88%
As 188.979†	2432.7	1298.0 ug/L	5.88	1298.0 ppb	5.88	0.45%
B 249.677†	67449.8	1643.4 ug/L	15.84	1643.4 ppb	15.84	0.96%
Ba 233.527†	271645.9	2280.2 ug/L	20.10	2280.2 ppb	20.10	0.88%
Be 313.107†	2247608.6	903.93 ug/L	8.287	903.93 ppb	8.287	0.92%
Ca 317.933Radial†	57192.5	113570 ug/L	1104.4	113570 ppb	1104.4	0.97%
Cd 226.502†	54755.1	684.21 ug/L	5.575	684.21 ppb	5.575	0.81%
Co 228.616†	46030.2	1048.1 ug/L	8.24	1048.1 ppb	8.24	0.79%
Cr 267.716†	218837.9	2667.8 ug/L	23.91	2667.8 ppb	23.91	0.90%
Cu 324.752†	667745.8	2058.2 ug/L	20.00	2058.2 ppb	20.00	0.97%
Fe 238.204 Radial†	17707.2	214760 ug/L	1667.3	214760 ppb	1667.3	0.78%
K 766.490 Radial†	270014.6	51865 ug/L	498.3	51865 ppb	498.3	0.96%

Mg 279.077 IEC†	1021.5	46125 ug/L	254.8	46125 ppb	254.8	0.55%
Mn 257.610†	5033753.4	6051.4 ug/L	54.76	6051.4 ppb	54.76	0.90%
Mo 202.031†	7131.2	575.81 ug/L	4.830	575.81 ppb	4.830	0.84%
Na 589.592 Radial†	39535.2	11404 ug/L	133.9	11404 ppb	133.9	1.17%
Ni 231.604†	53528.7	1485.5 ug/L	11.03	1485.5 ppb	11.03	0.74%
P 214.914†	14616.2	9239.9 ug/L	85.64	9239.9 ppb	85.64	0.93%
Pb 220.353†	7056.2	957.00 ug/L	3.306	957.00 ppb	3.306	0.35%
S 181.975 Axial†	2734.4	4377.9 ug/L	35.59	4377.9 ppb	35.59	0.81%
Sb 206.836†	5219.0	1973.7 ug/L	19.35	1973.7 ppb	19.35	0.98%
Se 196.026†	3918.1	3576.8 ug/L	27.60	3576.8 ppb	27.60	0.77%
Si 251.611†	457106.1	15567 ug/L	141.8	15567 ppb	141.8	0.91%
Sn 189.927†	6183.4	1253.0 ug/L	11.57	1253.0 ppb	11.57	0.92%
Sr 421.552†	401256.3	2596.7 ug/L	25.02	2596.7 ppb	25.02	0.96%
Ti 334.940†	4073616.6	6481.9 ug/L	57.18	6481.9 ppb	57.18	0.88%
Tl 190.801†	3867.1	1403.8 ug/L	9.61	1403.8 ppb	9.61	0.68%
U 409.014†	-5857.7	-192.43 ug/L	5.546	-192.43 ppb	5.546	2.88%
V 292.402†	191590.3	1379.0 ug/L	12.09	1379.0 ppb	12.09	0.88%
Zn 213.857†	623412.6	6703.0 ug/L	62.44	6703.0 ppb	62.44	0.93%
SiO2†	455782.1	33067 ug/L	440.3	33067 ppb	440.3	1.33%

Sequence No.: 43

Sample ID: 246443001|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 2/22/2010 22:40:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246443001|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4395.9	4395.9	100 %		22:42:27
1	Y RADIAL	5546.3	5546.3	114.9 %		22:42:27
1	Al 396.153Radial†	28110.9	28214.1	24670 ug/L	24670 ppb	22:42:27
1	Ca 317.933Radial†	3364.1	3344.2	6640.9 ug/L	6640.9 ppb	22:42:47
1	Fe 238.204 Radial†	6081.0	6069.7	73605 ug/L	73605 ppb	22:42:27
1	K 766.490 Radial†	24725.5	22237.0	4271.9 ug/L	4271.9 ppb	22:42:27
1	Mg 279.077 IEC†	108.1	105.2	4695.8 ug/L	4695.8 ppb	22:42:47
1	Na 589.592 Radial†	842.1	1536.1	443.10 ug/L	443.10 ppb	22:42:27
1	Sr 421.552†	9171.4	9157.6	59.232 ug/L	59.232 ppb	22:42:27
1	Sc 361.383	931533.4	931533.4	106.03 %		22:43:44
1	Y 371.029	896459.8	896459.8	121.25 %		22:43:44
1	Ag 328.068†	-4423.6	-4614.9	0.9110 ug/L	0.9110 ppb	22:43:50
1	As 188.979†	-42.2	-15.3	26.267 ug/L	26.267 ppb	22:44:10
1	B 249.677†	727.6	1154.3	16.765 ug/L	16.765 ppb	22:43:50
1	Ba 233.527†	47597.9	44896.6	377.70 ug/L	377.70 ppb	22:43:50
1	Be 313.107†	-732.0	3161.8	5.5867 ug/L	5.5867 ppb	22:43:50
1	Cd 226.502†	477.9	628.4	0.5001 ug/L	0.5001 ppb	22:44:10
1	Co 228.616†	821.0	825.3	14.147 ug/L	14.147 ppb	22:44:10
1	Cr 267.716†	8787.2	8207.8	106.40 ug/L	106.40 ppb	22:43:50
1	Cu 324.752†	18029.7	10800.8	37.095 ug/L	37.095 ppb	22:43:50
1	Mn 257.610†	1852689.7	1746818.9	2100.3 ug/L	2100.3 ppb	22:43:44
1	Mo 202.031†	39.7	29.9	8.1291 ug/L	8.1291 ppb	22:44:10
1	Ni 231.604†	2424.1	2213.1	61.431 ug/L	61.431 ppb	22:44:10
1	P 214.914†	1118.2	858.5	514.88 ug/L	514.88 ppb	22:44:10
1	Pb 220.353†	726.9	738.0	97.383 ug/L	97.383 ppb	22:44:10
1	S 181.975 Axial†	164.7	124.2	195.06 ug/L	195.06 ppb	22:44:10
1	Sb 206.836†	68.5	29.9	3.7751 ug/L	3.7751 ppb	22:44:10
1	Se 196.026†	-322.9	-285.2	41.305 ug/L	41.305 ppb	22:44:10
1	Si 251.611†	338125.2	318362.0	10847 ug/L	10847 ppb	22:43:50
1	Sn 189.927†	4.5	-9.2	-4.8990 ug/L	-4.8990 ppb	22:44:10
1	Ti 334.940†	1273512.5	1202216.8	1910.4 ug/L	1910.4 ppb	22:43:44
1	Tl 190.801†	-124.4	-89.7	-5.2080 ug/L	-5.2080 ppb	22:44:10
1	U 409.014†	-8913.5	-5981.0	-174.05 ug/L	-174.05 ppb	22:43:44
1	V 292.402†	10918.6	11644.8	72.707 ug/L	72.707 ppb	22:43:50
1	Zn 213.857†	31732.8	29337.7	306.08 ug/L	306.08 ppb	22:43:50
1	SiO2†	349068.3	328675.0	23857 ug/L	23857 ppb	22:45:17
2	Sc Radial	4402.0	4402.0	100 %		22:42:52
2	Y RADIAL	5553.5	5553.5	115.1 %		22:42:52
2	Al 396.153Radial†	27969.3	28033.9	24512 ug/L	24512 ppb	22:42:52
2	Ca 317.933Radial†	3371.5	3347.0	6646.4 ug/L	6646.4 ppb	22:43:12
2	Fe 238.204 Radial†	6078.9	6059.2	73477 ug/L	73477 ppb	22:42:52
2	K 766.490 Radial†	24690.3	22167.6	4258.5 ug/L	4258.5 ppb	22:42:52
2	Mg 279.077 IEC†	107.2	104.2	4648.7 ug/L	4648.7 ppb	22:43:12
2	Na 589.592 Radial†	922.0	1614.7	465.77 ug/L	465.77 ppb	22:42:52
2	Sr 421.552†	9111.1	9084.6	58.759 ug/L	58.759 ppb	22:42:52
2	Sc 361.383	928607.6	928607.6	105.70 %		22:44:15
2	Y 371.029	892169.1	892169.1	120.67 %		22:44:15
2	Ag 328.068†	-4450.1	-4653.1	0.6840 ug/L	0.6840 ppb	22:44:21
2	As 188.979†	-36.7	-10.3	28.704 ug/L	28.704 ppb	22:44:41
2	B 249.677†	659.7	1092.2	15.238 ug/L	15.238 ppb	22:44:21
2	Ba 233.527†	47605.0	45044.8	378.94 ug/L	378.94 ppb	22:44:21
2	Be 313.107†	-604.7	3280.1	5.6350 ug/L	5.6350 ppb	22:44:21
2	Cd 226.502†	490.5	641.7	0.6861 ug/L	0.6861 ppb	22:44:41
2	Co 228.616†	822.6	829.3	14.240 ug/L	14.240 ppb	22:44:41
2	Cr 267.716†	8798.1	8244.2	106.83 ug/L	106.83 ppb	22:44:21
2	Cu 324.752†	18131.1	10950.4	37.542 ug/L	37.542 ppb	22:44:21
2	Mn 257.610†	1848375.7	1748242.6	2102.0 ug/L	2102.0 ppb	22:44:15
2	Mo 202.031†	38.6	28.9	8.0472 ug/L	8.0472 ppb	22:44:41
2	Ni 231.604†	2411.1	2208.0	61.289 ug/L	61.289 ppb	22:44:41

2	P 214.914†	1124.9	868.3	521.36 ug/L	521.36 ppb	22:44:41
2	Pb 220.353†	719.7	733.3	96.731 ug/L	96.731 ppb	22:44:41
2	S 181.975 Axial†	173.8	133.2	209.61 ug/L	209.61 ppb	22:44:41
2	Sb 206.836†	53.7	16.1	-1.4353 ug/L	-1.4353 ppb	22:44:41
2	Se 196.026†	-312.0	-275.9	47.663 ug/L	47.663 ppb	22:44:41
2	Si 251.611†	339440.3	320610.9	10923 ug/L	10923 ppb	22:44:21
2	Sn 189.927†	1.1	-12.4	-5.5374 ug/L	-5.5374 ppb	22:44:41
2	Ti 334.940†	1269939.9	1202621.0	1911.0 ug/L	1911.0 ppb	22:44:15
2	Tl 190.801†	-104.1	-70.9	1.2590 ug/L	1.2590 ppb	22:44:41
2	U 409.014†	-8593.5	-5704.8	-166.40 ug/L	-166.40 ppb	22:44:15
2	V 292.402†	10941.7	11699.1	73.137 ug/L	73.137 ppb	22:44:21
2	Zn 213.857†	31865.2	29557.2	308.47 ug/L	308.47 ppb	22:44:21
2	SiO2†	350459.1	331028.0	24027 ug/L	24027 ppb	22:45:23
3	Sc Radial	4432.0	4432.0	101 %		22:43:17
3	Y RADIAL	5591.8	5591.8	115.9 %		22:43:17
3	Al 396.153Radial†	27965.1	27840.7	24343 ug/L	24343 ppb	22:43:17
3	Ca 317.933Radial†	3337.4	3290.3	6533.8 ug/L	6533.8 ppb	22:43:37
3	Fe 238.204 Radial†	6118.2	6057.1	73452 ug/L	73452 ppb	22:43:17
3	K 766.490 Radial†	24520.0	21832.0	4194.0 ug/L	4194.0 ppb	22:43:17
3	Mg 279.077 IEC†	108.9	105.2	4694.3 ug/L	4694.3 ppb	22:43:37
3	Na 589.592 Radial†	832.8	1520.0	438.45 ug/L	438.45 ppb	22:43:17
3	Sr 421.552†	9116.2	9028.2	58.395 ug/L	58.395 ppb	22:43:17
3	Sc 361.383	930489.9	930489.9	105.91 %		22:44:46
3	Y 371.029	893880.3	893880.3	120.90 %		22:44:46
3	Ag 328.068†	-4389.6	-4587.4	0.9942 ug/L	0.9942 ppb	22:44:52
3	As 188.979†	-33.6	-7.3	30.158 ug/L	30.158 ppb	22:45:12
3	B 249.677†	614.4	1048.2	14.146 ug/L	14.146 ppb	22:44:52
3	Ba 233.527†	47976.0	45303.9	381.10 ug/L	381.10 ppb	22:44:52
3	Be 313.107†	-564.5	3319.2	5.6473 ug/L	5.6473 ppb	22:44:52
3	Cd 226.502†	491.6	641.8	0.6899 ug/L	0.6899 ppb	22:45:12
3	Co 228.616†	817.7	823.1	14.101 ug/L	14.101 ppb	22:45:12
3	Cr 267.716†	8897.2	8321.0	107.75 ug/L	107.75 ppb	22:44:52
3	Cu 324.752†	18173.5	10955.7	37.558 ug/L	37.558 ppb	22:44:52
3	Mn 257.610†	1848399.2	1744727.4	2097.8 ug/L	2097.8 ppb	22:44:46
3	Mo 202.031†	42.2	32.3	8.3039 ug/L	8.3039 ppb	22:45:12
3	Ni 231.604†	2423.1	2214.7	61.475 ug/L	61.475 ppb	22:45:12
3	P 214.914†	1104.2	846.5	506.77 ug/L	506.77 ppb	22:45:12
3	Pb 220.353†	698.1	711.6	93.747 ug/L	93.747 ppb	22:45:12
3	S 181.975 Axial†	165.7	125.3	196.89 ug/L	196.89 ppb	22:45:12
3	Sb 206.836†	61.3	23.1	1.1817 ug/L	1.1817 ppb	22:45:12
3	Se 196.026†	-322.9	-285.5	40.554 ug/L	40.554 ppb	22:45:12
3	Si 251.611†	340963.1	321399.0	10950 ug/L	10950 ppb	22:44:52
3	Sn 189.927†	-13.0	-25.8	-8.2512 ug/L	-8.2512 ppb	22:45:12
3	Ti 334.940†	1271583.6	1201742.5	1909.6 ug/L	1909.6 ppb	22:44:46
3	Tl 190.801†	-110.8	-77.0	-0.8832 ug/L	-0.8832 ppb	22:45:12
3	U 409.014†	-8661.9	-5752.9	-167.73 ug/L	-167.73 ppb	22:44:46
3	V 292.402†	10989.4	11723.2	73.321 ug/L	73.321 ppb	22:44:52
3	Zn 213.857†	31986.5	29610.7	309.05 ug/L	309.05 ppb	22:44:52
3	SiO2†	349366.0	329325.3	23904 ug/L	23904 ppb	22:45:28

Mean Data: 246443001|950496|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	930210.3	105.88 %	0.169			0.16%
Sc Radial	4410.0	100 %	0.4			0.44%
Y 371.029	894169.8	120.94 %	0.292			0.24%
Y RADIAL	5563.8	115.3 %	0.51			0.44%
Ag 328.068†	-4618.5	0.8630 ug/L	0.16056	0.8630 ppb	0.16056	18.60%
Al 396.153Radial†	28029.5	24509 ug/L	163.3	24509 ppb	163.3	0.67%
As 188.979†	-11.0	28.376 ug/L	1.9658	28.376 ppb	1.9658	6.93%
B 249.677†	1098.2	15.383 ug/L	1.3154	15.383 ppb	1.3154	8.55%
Ba 233.527†	45081.8	379.25 ug/L	1.722	379.25 ppb	1.722	0.45%
Be 313.107†	3253.7	5.6230 ug/L	0.03202	5.6230 ppb	0.03202	0.57%
Ca 317.933Radial†	3327.2	6607.0 ug/L	63.44	6607.0 ppb	63.44	0.96%
Cd 226.502†	637.3	0.6254 ug/L	0.10852	0.6254 ppb	0.10852	17.35%
Co 228.616†	825.9	14.163 ug/L	0.0706	14.163 ppb	0.0706	0.50%
Cr 267.716†	8257.7	107.00 ug/L	0.691	107.00 ppb	0.691	0.65%
Cu 324.752†	10902.3	37.398 ug/L	0.2630	37.398 ppb	0.2630	0.70%
Fe 238.204 Radial†	6062.0	73511 ug/L	82.1	73511 ppb	82.1	0.11%
K 766.490 Radial†	22078.9	4241.5 ug/L	41.62	4241.5 ppb	41.62	0.98%

Mg 279.077 IEC†	104.8	4679.6 ug/L	26.78	4679.6 ppb	26.78	0.57%
Mn 257.610†	1746596.3	2100.1 ug/L	2.12	2100.1 ppb	2.12	0.10%
Mo 202.031†	30.4	8.1601 ug/L	0.13109	8.1601 ppb	0.13109	1.61%
Na 589.592 Radial†	1557.0	449.11 ug/L	14.615	449.11 ppb	14.615	3.25%
Ni 231.604†	2212.0	61.398 ug/L	0.0976	61.398 ppb	0.0976	0.16%
P 214.914†	857.8	514.34 ug/L	7.310	514.34 ppb	7.310	1.42%
Pb 220.353†	727.6	95.954 ug/L	1.9386	95.954 ppb	1.9386	2.02%
S 181.975 Axial†	127.6	200.52 ug/L	7.924	200.52 ppb	7.924	3.95%
Sb 206.836†	23.0	1.1739 ug/L	2.60522	1.1739 ppb	2.60522	221.94%
Se 196.026†	-282.2	43.174 ug/L	3.9054	43.174 ppb	3.9054	9.05%
Si 251.611†	320124.0	10907 ug/L	53.7	10907 ppb	53.7	0.49%
Sn 189.927†	-15.8	-6.2292 ug/L	1.77994	-6.2292 ppb	1.77994	28.57%
Sr 421.552†	9090.1	58.795 ug/L	0.4196	58.795 ppb	0.4196	0.71%
Ti 334.940†	1202193.5	1910.3 ug/L	0.71	1910.3 ppb	0.71	0.04%
Tl 190.801†	-79.2	-1.6107 ug/L	3.29433	-1.6107 ppb	3.29433	204.52%
U 409.014†	-5812.9	-169.39 ug/L	4.091	-169.39 ppb	4.091	2.41%
V 292.402†	11689.0	73.055 ug/L	0.3153	73.055 ppb	0.3153	0.43%
Zn 213.857†	29501.9	307.87 ug/L	1.578	307.87 ppb	1.578	0.51%
SiO2†	329676.1	23929 ug/L	88.2	23929 ppb	88.2	0.37%

Sequence No.: 44

Sample ID: 1202036895|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 2/22/2010 22:47:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036895|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4400.3	4400.3	100 %		22:49:32
1	Y RADIAL	5560.2	5560.2	115.2 %		22:49:32
1	Al 396.153Radial†	29043.8	29117.7	25460 ug/L	25460 ppb	22:49:32
1	Ca 317.933Radial†	3645.5	3621.9	7192.4 ug/L	7192.4 ppb	22:49:52
1	Fe 238.204 Radial†	5545.1	5528.2	67038 ug/L	67038 ppb	22:49:32
1	K 766.490 Radial†	25251.0	22737.0	4367.8 ug/L	4367.8 ppb	22:49:32
1	Mg 279.077 IEC†	115.5	112.6	5036.4 ug/L	5036.4 ppb	22:49:52
1	Na 589.592 Radial†	897.8	1590.9	458.89 ug/L	458.89 ppb	22:49:32
1	Sr 421.552†	9223.7	9200.6	59.506 ug/L	59.506 ppb	22:49:32
1	Sc 361.383	944102.6	944102.6	107.46 %		22:50:49
1	Y 371.029	914973.3	914973.3	123.75 %		22:50:49
1	Ag 328.068†	-4052.3	-4213.8	0.7802 ug/L	0.7802 ppb	22:50:54
1	As 188.979†	-34.4	-7.5	27.384 ug/L	27.384 ppb	22:51:14
1	B 249.677†	311.6	758.0	7.9467 ug/L	7.9467 ppb	22:50:54
1	Ba 233.527†	51526.6	47954.8	403.06 ug/L	403.06 ppb	22:50:54
1	Be 313.107†	-2846.1	1203.7	4.5036 ug/L	4.5036 ppb	22:50:54
1	Cd 226.502†	440.7	587.7	0.6512 ug/L	0.6512 ppb	22:51:14
1	Co 228.616†	951.4	936.4	17.115 ug/L	17.115 ppb	22:51:14
1	Cr 267.716†	6734.8	6187.6	81.348 ug/L	81.348 ppb	22:51:14
1	Cu 324.752†	18584.0	11090.3	37.627 ug/L	37.627 ppb	22:50:54
1	Mn 257.610†	2016601.2	1876083.3	2254.6 ug/L	2254.6 ppb	22:50:49
1	Mo 202.031†	28.5	19.0	6.7720 ug/L	6.7720 ppb	22:51:14
1	Ni 231.604†	2097.9	1879.2	52.158 ug/L	52.158 ppb	22:51:14
1	P 214.914†	1341.9	1052.7	650.15 ug/L	650.15 ppb	22:51:14
1	Pb 220.353†	631.2	639.9	84.951 ug/L	84.951 ppb	22:51:14
1	S 181.975 Axial†	173.5	130.3	204.75 ug/L	204.75 ppb	22:51:14
1	Sb 206.836†	65.4	26.2	2.7982 ug/L	2.7982 ppb	22:51:14
1	Se 196.026†	-285.9	-246.7	47.348 ug/L	47.348 ppb	22:51:14
1	Si 251.611†	335387.9	311569.4	10615 ug/L	10615 ppb	22:50:54
1	Sn 189.927†	-4.2	-17.4	-6.0821 ug/L	-6.0821 ppb	22:51:14
1	Ti 334.940†	1198799.3	1116703.0	1774.6 ug/L	1774.6 ppb	22:50:49
1	Tl 190.801†	-123.8	-87.6	-4.8913 ug/L	-4.8913 ppb	22:51:14
1	U 409.014†	-8558.3	-5538.6	-161.01 ug/L	-161.01 ppb	22:50:49
1	V 292.402†	10494.4	11113.0	69.921 ug/L	69.921 ppb	22:50:54
1	Zn 213.857†	29550.0	26908.0	280.82 ug/L	280.82 ppb	22:50:54
1	SiO2†	340923.2	316712.8	22988 ug/L	22988 ppb	22:52:22
2	Sc Radial	4347.2	4347.2	98.9 %		22:49:57
2	Y RADIAL	5517.5	5517.5	114.3 %		22:49:57
2	Al 396.153Radial†	28776.8	29202.4	25534 ug/L	25534 ppb	22:49:57
2	Ca 317.933Radial†	3631.5	3652.3	7252.7 ug/L	7252.7 ppb	22:50:17
2	Fe 238.204 Radial†	5469.8	5519.8	66936 ug/L	66936 ppb	22:49:57
2	K 766.490 Radial†	25021.1	22812.9	4382.3 ug/L	4382.3 ppb	22:49:57
2	Mg 279.077 IEC†	108.7	107.0	4784.8 ug/L	4784.8 ppb	22:50:17
2	Na 589.592 Radial†	875.3	1579.1	455.48 ug/L	455.48 ppb	22:49:57
2	Sr 421.552†	9082.7	9170.6	59.311 ug/L	59.311 ppb	22:49:57
2	Sc 361.383	941434.8	941434.8	107.16 %		22:51:20
2	Y 371.029	911760.5	911760.5	123.32 %		22:51:20
2	Ag 328.068†	-4004.4	-4179.8	0.9076 ug/L	0.9076 ppb	22:51:25
2	As 188.979†	-37.2	-10.3	25.984 ug/L	25.984 ppb	22:51:45
2	B 249.677†	275.9	725.6	7.1553 ug/L	7.1553 ppb	22:51:25
2	Ba 233.527†	51107.7	47699.7	400.92 ug/L	400.92 ppb	22:51:25
2	Be 313.107†	-2837.6	1204.2	4.4974 ug/L	4.4974 ppb	22:51:25
2	Cd 226.502†	440.7	588.9	0.6775 ug/L	0.6775 ppb	22:51:45
2	Co 228.616†	937.6	926.0	16.882 ug/L	16.882 ppb	22:51:45
2	Cr 267.716†	6781.3	6248.8	82.077 ug/L	82.077 ppb	22:51:45
2	Cu 324.752†	18493.1	11054.4	37.511 ug/L	37.511 ppb	22:51:25
2	Mn 257.610†	2010014.2	1875254.0	2253.6 ug/L	2253.6 ppb	22:51:20
2	Mo 202.031†	33.8	24.0	7.1589 ug/L	7.1589 ppb	22:51:45
2	Ni 231.604†	2135.7	1919.9	53.290 ug/L	53.290 ppb	22:51:45

2	P 214.914†	1354.6	1068.1	660.56 ug/L	660.56 ppb	22:51:45
2	Pb 220.353†	640.1	649.9	86.332 ug/L	86.332 ppb	22:51:45
2	S 181.975 Axial†	172.6	129.9	204.10 ug/L	204.10 ppb	22:51:45
2	Sb 206.836†	44.0	6.3	-4.6306 ug/L	-4.6306 ppb	22:51:45
2	Se 196.026†	-296.0	-256.9	39.625 ug/L	39.625 ppb	22:51:45
2	Si 251.611†	333353.1	310554.9	10581 ug/L	10581 ppb	22:51:25
2	Sn 189.927†	0.8	-12.7	-5.1210 ug/L	-5.1210 ppb	22:51:45
2	Ti 334.940†	1193496.5	1114915.6	1771.8 ug/L	1771.8 ppb	22:51:20
2	Tl 190.801†	-124.4	-88.4	-5.1974 ug/L	-5.1974 ppb	22:51:45
2	U 409.014†	-8453.8	-5463.7	-158.93 ug/L	-158.93 ppb	22:51:20
2	V 292.402†	10403.4	11055.7	69.522 ug/L	69.522 ppb	22:51:25
2	Zn 213.857†	29375.1	26822.8	279.91 ug/L	279.91 ppb	22:51:25
2	SiO2†	339545.8	316326.4	22960 ug/L	22960 ppb	22:52:27
3	Sc Radial	4458.5	4458.5	101 %		22:50:22
3	Y RADIAL	5658.8	5658.8	117.3 %		22:50:22
3	Al 396.153Radial†	29514.4	29202.9	25535 ug/L	25535 ppb	22:50:22
3	Ca 317.933Radial†	3645.0	3573.9	7097.0 ug/L	7097.0 ppb	22:50:42
3	Fe 238.204 Radial†	5551.6	5462.3	66239 ug/L	66239 ppb	22:50:22
3	K 766.490 Radial†	25561.5	22713.8	4363.4 ug/L	4363.4 ppb	22:50:22
3	Mg 279.077 IEC†	112.0	107.6	4811.8 ug/L	4811.8 ppb	22:50:42
3	Na 589.592 Radial†	802.7	1485.5	428.49 ug/L	428.49 ppb	22:50:22
3	Sr 421.552†	9355.5	9210.2	59.569 ug/L	59.569 ppb	22:50:22
3	Sc 361.383	938689.9	938689.9	106.85 %		22:51:51
3	Y 371.029	910111.0	910111.0	123.09 %		22:51:51
3	Ag 328.068†	-4056.7	-4239.6	0.4137 ug/L	0.4137 ppb	22:51:56
3	As 188.979†	-38.8	-11.9	25.036 ug/L	25.036 ppb	22:52:16
3	B 249.677†	249.4	701.5	6.6691 ug/L	6.6691 ppb	22:51:56
3	Ba 233.527†	51325.8	48043.4	403.77 ug/L	403.77 ppb	22:51:56
3	Be 313.107†	-2940.8	1099.9	4.4551 ug/L	4.4551 ppb	22:51:56
3	Cd 226.502†	440.3	589.7	0.7598 ug/L	0.7598 ppb	22:52:16
3	Co 228.616†	928.1	919.7	16.747 ug/L	16.747 ppb	22:52:16
3	Cr 267.716†	6710.0	6200.6	81.429 ug/L	81.429 ppb	22:52:16
3	Cu 324.752†	18670.5	11271.0	38.139 ug/L	38.139 ppb	22:51:56
3	Mn 257.610†	2000026.8	1871391.8	2248.9 ug/L	2248.9 ppb	22:51:51
3	Mo 202.031†	23.9	14.8	6.3831 ug/L	6.3831 ppb	22:52:16
3	Ni 231.604†	2107.4	1899.3	52.717 ug/L	52.717 ppb	22:52:16
3	P 214.914†	1354.8	1072.0	663.62 ug/L	663.62 ppb	22:52:16
3	Pb 220.353†	642.0	653.4	86.881 ug/L	86.881 ppb	22:52:16
3	S 181.975 Axial†	175.3	132.9	208.93 ug/L	208.93 ppb	22:52:16
3	Sb 206.836†	41.4	4.0	-5.4725 ug/L	-5.4725 ppb	22:52:16
3	Se 196.026†	-301.1	-262.4	33.242 ug/L	33.242 ppb	22:52:16
3	Si 251.611†	334600.3	312631.9	10651 ug/L	10651 ppb	22:51:56
3	Sn 189.927†	17.4	2.8	-1.9856 ug/L	-1.9856 ppb	22:52:16
3	Ti 334.940†	1189709.0	1114627.8	1771.3 ug/L	1771.3 ppb	22:51:51
3	Tl 190.801†	-114.6	-79.7	-2.2079 ug/L	-2.2079 ppb	22:52:16
3	U 409.014†	-8525.1	-5553.5	-161.33 ug/L	-161.33 ppb	22:51:51
3	V 292.402†	10470.1	11146.5	70.278 ug/L	70.278 ppb	22:51:56
3	Zn 213.857†	29527.1	27045.2	282.42 ug/L	282.42 ppb	22:51:56
3	SiO2†	339801.3	317492.2	23045 ug/L	23045 ppb	22:52:32

Mean Data: 1202036895|950496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	941409.1	107.16 %	0.308			0.29%
Sc Radial	4402.0	100 %	1.3			1.27%
Y 371.029	912281.6	123.39 %	0.334			0.27%
Y RADIAL	5578.8	115.6 %	1.50			1.30%
Ag 328.068†	-4211.1	0.7005 ug/L	0.25641	0.7005 ppb	0.25641	36.60%
Al 396.153Radial†	29174.3	25510 ug/L	42.9	25510 ppb	42.9	0.17%
As 188.979†	-9.9	26.135 ug/L	1.1810	26.135 ppb	1.1810	4.52%
B 249.677†	728.4	7.2571 ug/L	0.64486	7.2571 ppb	0.64486	8.89%
Ba 233.527†	47899.3	402.58 ug/L	1.484	402.58 ppb	1.484	0.37%
Be 313.107†	1169.3	4.4854 ug/L	0.02642	4.4854 ppb	0.02642	0.59%
Ca 317.933Radial†	3616.0	7180.7 ug/L	78.50	7180.7 ppb	78.50	1.09%
Cd 226.502†	588.8	0.6962 ug/L	0.05666	0.6962 ppb	0.05666	8.14%
Co 228.616†	927.4	16.914 ug/L	0.1861	16.914 ppb	0.1861	1.10%
Cr 267.716†	6212.3	81.618 ug/L	0.3994	81.618 ppb	0.3994	0.49%
Cu 324.752†	11138.6	37.759 ug/L	0.3342	37.759 ppb	0.3342	0.89%
Fe 238.204 Radial†	5503.4	66738 ug/L	434.7	66738 ppb	434.7	0.65%
K 766.490 Radial†	22754.6	4371.1 ug/L	9.94	4371.1 ppb	9.94	0.23%

Mg 279.077 IEC†	109.1	4877.7 ug/L	138.13	4877.7 ppb	138.13	2.83%
Mn 257.610†	1874243.0	2252.4 ug/L	3.04	2252.4 ppb	3.04	0.13%
Mo 202.031†	19.2	6.7713 ug/L	0.38790	6.7713 ppb	0.38790	5.73%
Na 589.592 Radial†	1551.8	447.62 ug/L	16.659	447.62 ppb	16.659	3.72%
Ni 231.604†	1899.5	52.722 ug/L	0.5658	52.722 ppb	0.5658	1.07%
P 214.914†	1064.3	658.11 ug/L	7.062	658.11 ppb	7.062	1.07%
Pb 220.353†	647.7	86.055 ug/L	0.9947	86.055 ppb	0.9947	1.16%
S 181.975 Axial†	131.0	205.93 ug/L	2.619	205.93 ppb	2.619	1.27%
Sb 206.836†	12.2	-2.4350 ug/L	4.55158	-2.4350 ppb	4.55158	186.92%
Se 196.026†	-255.3	40.072 ug/L	7.0635	40.072 ppb	7.0635	17.63%
Si 251.611†	311585.4	10616 ug/L	35.4	10616 ppb	35.4	0.33%
Sn 189.927†	-9.1	-4.3962 ug/L	2.14226	-4.3962 ppb	2.14226	48.73%
Sr 421.552†	9193.8	59.462 ug/L	0.1343	59.462 ppb	0.1343	0.23%
Ti 334.940†	1115415.5	1772.5 ug/L	1.78	1772.5 ppb	1.78	0.10%
Tl 190.801†	-85.3	-4.0989 ug/L	1.64478	-4.0989 ppb	1.64478	40.13%
U 409.014†	-5518.6	-160.42 ug/L	1.305	-160.42 ppb	1.305	0.81%
V 292.402†	11105.1	69.907 ug/L	0.3782	69.907 ppb	0.3782	0.54%
Zn 213.857†	26925.3	281.05 ug/L	1.273	281.05 ppb	1.273	0.45%
SiO2†	316843.8	22998 ug/L	43.1	22998 ppb	43.1	0.19%

Sequence No.: 45

Sample ID: 1202036897|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 2/22/2010 22:54:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036897|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4296.6	4296.6	97.7 %		22:56:58
1	Y RADIAL	5504.9	5504.9	114.1 %		22:56:58
1	Al 396.153Radial†	67214.4	68870.1	60194 ug/L	60194 ppb	22:56:37
1	Ca 317.933Radial†	6371.3	6498.6	12905 ug/L	12905 ppb	22:56:58
1	Fe 238.204 Radial†	6688.3	6831.5	82859 ug/L	82859 ppb	22:56:58
1	K 766.490 Radial†	67304.4	66370.4	12752 ug/L	12752 ppb	22:56:37
1	Mg 279.077 IEC†	306.0	310.2	13989 ug/L	13989 ppb	22:56:58
1	Na 589.592 Radial†	18190.4	19304.3	5568.4 ug/L	5568.4 ppb	22:56:37
1	Sr 421.552†	87766.4	89778.8	581.08 ug/L	581.08 ppb	22:56:37
1	Sc 361.383	927551.7	927551.7	105.58 %		22:57:57
1	Y 371.029	909257.5	909257.5	122.98 %		22:57:57
1	Ag 328.068†	103717.0	97792.3	495.89 ug/L	495.89 ppb	22:57:57
1	As 188.979†	1062.0	1030.4	549.76 ug/L	549.76 ppb	22:58:17
1	B 249.677†	21303.2	20645.3	499.65 ug/L	499.65 ppb	22:57:57
1	Ba 233.527†	124155.1	117600.2	986.84 ug/L	986.84 ppb	22:57:57
1	Be 313.107†	1362040.4	129304.3	518.81 ug/L	518.81 ppb	22:57:57
1	Cd 226.502†	42981.8	40887.7	518.69 ug/L	518.69 ppb	22:57:57
1	Co 228.616†	24239.9	23009.8	525.50 ug/L	525.50 ppb	22:58:17
1	Cr 267.716†	53985.4	51052.7	625.73 ug/L	625.73 ppb	22:57:57
1	Cu 324.752†	205739.1	188662.2	582.49 ug/L	582.49 ppb	22:57:57
1	Mn 257.610†	2602663.8	2464654.6	2961.1 ug/L	2961.1 ppb	22:57:57
1	Mo 202.031†	6941.8	6567.3	520.27 ug/L	520.27 ppb	22:58:17
1	Ni 231.604†	22444.8	21185.5	587.84 ug/L	587.84 ppb	22:58:17
1	P 214.914†	2347.6	2027.6	1195.4 ug/L	1195.4 ppb	22:58:17
1	Pb 220.353†	4625.5	4433.5	606.18 ug/L	606.18 ppb	22:58:17
1	S 181.975 Axial†	3838.0	3604.0	5783.9 ug/L	5783.9 ppb	22:58:17
1	Sb 206.836†	1439.7	1328.9	508.48 ug/L	508.48 ppb	22:58:17
1	Se 196.026†	455.8	451.1	611.65 ug/L	611.65 ppb	22:58:17
1	Si 251.611†	485049.4	458889.6	15628 ug/L	15628 ppb	22:57:57
1	Sn 189.927†	2775.5	2615.3	524.17 ug/L	524.17 ppb	22:58:17
1	Ti 334.940†	2017343.1	1911889.1	3037.4 ug/L	3037.4 ppb	22:57:57
1	Tl 190.801†	1457.3	1407.9	519.54 ug/L	519.54 ppb	22:58:17
1	U 409.014†	10207.2	12093.0	323.68 ug/L	323.68 ppb	22:57:57
1	V 292.402†	86228.4	83018.4	603.48 ug/L	603.48 ppb	22:57:57
1	Zn 213.857†	87936.2	82699.0	878.14 ug/L	878.14 ppb	22:57:57
1	SiO2†	485491.3	459300.8	33324 ug/L	33324 ppb	22:59:17
2	Sc Radial	4349.2	4349.2	98.9 %		22:57:23
2	Y RADIAL	5581.7	5581.7	115.7 %		22:57:23
2	Al 396.153Radial†	68203.2	69036.9	60340 ug/L	60340 ppb	22:57:03
2	Ca 317.933Radial†	6428.7	6477.7	12863 ug/L	12863 ppb	22:57:23
2	Fe 238.204 Radial†	6724.0	6784.9	82293 ug/L	82293 ppb	22:57:23
2	K 766.490 Radial†	68312.2	66555.4	12787 ug/L	12787 ppb	22:57:03
2	Mg 279.077 IEC†	311.4	311.9	14070 ug/L	14070 ppb	22:57:23
2	Na 589.592 Radial†	18225.6	19114.6	5513.6 ug/L	5513.6 ppb	22:57:03
2	Sr 421.552†	88814.3	89750.8	580.90 ug/L	580.90 ppb	22:57:03
2	Sc 361.383	923561.7	923561.7	105.13 %		22:58:24
2	Y 371.029	905704.2	905704.2	122.50 %		22:58:24
2	Ag 328.068†	103717.8	98217.4	497.76 ug/L	497.76 ppb	22:58:24
2	As 188.979†	1074.7	1046.8	557.78 ug/L	557.78 ppb	22:58:44
2	B 249.677†	21320.8	20749.3	502.32 ug/L	502.32 ppb	22:58:24
2	Ba 233.527†	123979.7	117941.4	989.68 ug/L	989.68 ppb	22:58:24
2	Be 313.107†	1360515.3	1298026.9	520.47 ug/L	520.47 ppb	22:58:24
2	Cd 226.502†	42963.4	41046.0	520.79 ug/L	520.79 ppb	22:58:24
2	Co 228.616†	24339.3	23203.5	529.97 ug/L	529.97 ppb	22:58:44
2	Cr 267.716†	54011.6	51298.6	628.66 ug/L	628.66 ppb	22:58:24
2	Cu 324.752†	206059.5	189808.9	585.98 ug/L	585.98 ppb	22:58:24
2	Mn 257.610†	2601019.7	2473740.7	2971.9 ug/L	2971.9 ppb	22:58:24
2	Mo 202.031†	6963.0	6616.0	524.03 ug/L	524.03 ppb	22:58:44
2	Ni 231.604†	22589.3	21414.8	594.21 ug/L	594.21 ppb	22:58:44

2	P 214.914†	2377.2	2065.3	1220.5 ug/L	1220.5 ppb	22:58:44
2	Pb 220.353†	4653.2	4478.8	612.42 ug/L	612.42 ppb	22:58:44
2	S 181.975 Axial†	3853.1	3634.0	5832.2 ug/L	5832.2 ppb	22:58:44
2	Sb 206.836†	1442.9	1337.8	511.95 ug/L	511.95 ppb	22:58:44
2	Se 196.026†	456.9	454.0	611.89 ug/L	611.89 ppb	22:58:44
2	Si 251.611†	484537.3	460387.4	15679 ug/L	15679 ppb	22:58:24
2	Sn 189.927†	2789.9	2640.3	529.23 ug/L	529.23 ppb	22:58:44
2	Ti 334.940†	2016774.1	1919602.8	3049.7 ug/L	3049.7 ppb	22:58:24
2	Tl 190.801†	1474.6	1430.3	527.37 ug/L	527.37 ppb	22:58:44
2	U 409.014†	10168.0	12097.5	323.86 ug/L	323.86 ppb	22:58:24
2	V 292.402†	86097.1	83246.4	605.28 ug/L	605.28 ppb	22:58:24
2	Zn 213.857†	87857.7	82984.1	881.27 ug/L	881.27 ppb	22:58:24
2	SiO2†	492877.5	468313.4	33978 ug/L	33978 ppb	22:59:23
3	Sc Radial	4338.4	4338.4	98.7 %		22:57:48
3	Y RADIAL	5537.8	5537.8	114.8 %		22:57:48
3	Al 396.153Radial†	67954.6	68956.8	60270 ug/L	60270 ppb	22:57:28
3	Ca 317.933Radial†	6391.5	6456.2	12821 ug/L	12821 ppb	22:57:48
3	Fe 238.204 Radial†	6689.7	6767.0	82076 ug/L	82076 ppb	22:57:48
3	K 766.490 Radial†	68250.5	66664.8	12808 ug/L	12808 ppb	22:57:28
3	Mg 279.077 IEC†	311.1	312.4	14091 ug/L	14091 ppb	22:57:48
3	Na 589.592 Radial†	18094.8	19027.9	5488.6 ug/L	5488.6 ppb	22:57:28
3	Sr 421.552†	88184.8	89336.6	578.22 ug/L	578.22 ppb	22:57:28
3	Sc 361.383	917084.3	917084.3	104.39 %		22:58:52
3	Y 371.029	903304.4	903304.4	122.17 %		22:58:52
3	Ag 328.068†	104568.2	99728.9	504.97 ug/L	504.97 ppb	22:58:52
3	As 188.979†	1073.4	1052.7	561.06 ug/L	561.06 ppb	22:59:12
3	B 249.677†	21560.0	21121.6	511.64 ug/L	511.64 ppb	22:58:52
3	Ba 233.527†	125003.7	119755.3	1004.9 ug/L	1004.9 ppb	22:58:52
3	Be 313.107†	1374283.7	1320357.2	529.42 ug/L	529.42 ppb	22:58:52
3	Cd 226.502†	43311.7	41668.4	528.83 ug/L	528.83 ppb	22:58:52
3	Co 228.616†	24222.3	23255.0	531.07 ug/L	531.07 ppb	22:59:12
3	Cr 267.716†	54546.8	52174.1	639.23 ug/L	639.23 ppb	22:58:52
3	Cu 324.752†	207940.5	192995.2	595.73 ug/L	595.73 ppb	22:58:52
3	Mn 257.610†	2619343.9	2508769.7	3013.9 ug/L	3013.9 ppb	22:58:52
3	Mo 202.031†	6946.3	6646.7	526.42 ug/L	526.42 ppb	22:59:12
3	Ni 231.604†	22462.3	21444.9	595.04 ug/L	595.04 ppb	22:59:12
3	P 214.914†	2356.0	2060.9	1215.8 ug/L	1215.8 ppb	22:59:12
3	Pb 220.353†	4621.5	4479.7	612.55 ug/L	612.55 ppb	22:59:12
3	S 181.975 Axial†	3838.9	3646.3	5851.9 ug/L	5851.9 ppb	22:59:12
3	Sb 206.836†	1438.9	1343.7	514.12 ug/L	514.12 ppb	22:59:12
3	Se 196.026†	435.8	436.8	598.69 ug/L	598.69 ppb	22:59:12
3	Si 251.611†	488270.7	467219.2	15912 ug/L	15912 ppb	22:58:52
3	Sn 189.927†	2777.6	2647.3	530.64 ug/L	530.64 ppb	22:59:12
3	Ti 334.940†	2034304.6	1949946.1	3097.8 ug/L	3097.8 ppb	22:58:52
3	Tl 190.801†	1480.7	1446.1	533.35 ug/L	533.35 ppb	22:59:12
3	U 409.014†	10487.8	12472.1	334.22 ug/L	334.22 ppb	22:58:52
3	V 292.402†	86972.8	84663.7	615.74 ug/L	615.74 ppb	22:58:52
3	Zn 213.857†	88649.7	84333.1	895.88 ug/L	895.88 ppb	22:58:52
3	SiO2†	484317.2	463424.4	33623 ug/L	33623 ppb	22:59:28

Mean Data: 1202036897|950496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	922732.6	105.03 %	0.601			0.57%
Sc Radial	4328.1	98.5 %	0.63			0.64%
Y 371.029	906088.7	122.55 %	0.405			0.33%
Y RADIAL	5541.5	114.8 %	0.80			0.70%
Ag 328.068†	98579.5	499.54 ug/L	4.793	499.54 ppb	4.793	0.96%
Al 396.153Radial†	68954.6	60268 ug/L	72.8	60268 ppb	72.8	0.12%
As 188.979†	1043.3	556.20 ug/L	5.813	556.20 ppb	5.813	1.05%
B 249.677†	20838.7	504.54 ug/L	6.292	504.54 ppb	6.292	1.25%
Ba 233.527†	118432.3	993.79 ug/L	9.687	993.79 ppb	9.687	0.97%
Be 313.107†	1304096.1	522.90 ug/L	5.703	522.90 ppb	5.703	1.09%
Ca 317.933Radial†	6477.5	12863 ug/L	42.1	12863 ppb	42.1	0.33%
Cd 226.502†	41200.7	522.77 ug/L	5.355	522.77 ppb	5.355	1.02%
Co 228.616†	23156.1	528.84 ug/L	2.949	528.84 ppb	2.949	0.56%
Cr 267.716†	51508.5	631.21 ug/L	7.099	631.21 ppb	7.099	1.12%
Cu 324.752†	190488.7	588.07 ug/L	6.860	588.07 ppb	6.860	1.17%
Fe 238.204 Radial†	6794.5	82409 ug/L	404.0	82409 ppb	404.0	0.49%
K 766.490 Radial†	66530.2	12782 ug/L	28.6	12782 ppb	28.6	0.22%

Mg 279.077 IEC†	311.5	14050 ug/L	53.5	14050 ppb	53.5	0.38%
Mn 257.610†	2482388.4	2982.3 ug/L	27.88	2982.3 ppb	27.88	0.93%
Mo 202.031†	6610.0	523.58 ug/L	3.099	523.58 ppb	3.099	0.59%
Na 589.592 Radial†	19149.0	5523.5 ug/L	40.78	5523.5 ppb	40.78	0.74%
Ni 231.604†	21348.4	592.37 ug/L	3.938	592.37 ppb	3.938	0.66%
P 214.914†	2051.3	1210.5 ug/L	13.34	1210.5 ppb	13.34	1.10%
Pb 220.353†	4464.0	610.38 ug/L	3.639	610.38 ppb	3.639	0.60%
S 181.975 Axial†	3628.1	5822.7 ug/L	35.01	5822.7 ppb	35.01	0.60%
Sb 206.836†	1336.8	511.52 ug/L	2.846	511.52 ppb	2.846	0.56%
Se 196.026†	447.3	607.41 ug/L	7.549	607.41 ppb	7.549	1.24%
Si 251.611†	462165.4	15740 ug/L	151.2	15740 ppb	151.2	0.96%
Sn 189.927†	2634.3	528.02 ug/L	3.404	528.02 ppb	3.404	0.64%
Sr 421.552†	89622.1	580.07 ug/L	1.603	580.07 ppb	1.603	0.28%
Ti 334.940†	1927146.0	3061.6 ug/L	31.95	3061.6 ppb	31.95	1.04%
Tl 190.801†	1428.1	526.75 ug/L	6.926	526.75 ppb	6.926	1.31%
U 409.014†	12220.9	327.25 ug/L	6.037	327.25 ppb	6.037	1.84%
V 292.402†	83642.8	608.17 ug/L	6.620	608.17 ppb	6.620	1.09%
Zn 213.857†	83338.8	885.10 ug/L	9.469	885.10 ppb	9.469	1.07%
SiO2†	463679.6	33642 ug/L	327.4	33642 ppb	327.4	0.97%

Sequence No.: 46

Sample ID: 1202036898|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 2/22/2010 23:01:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036898|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4425.1	4425.1	101 %		23:03:33
1	Y RADIAL	5650.7	5650.7	117.1 %		23:03:33
1	Al 396.153Radial†	64622.8	64297.7	56197 ug/L	56197 ppb	23:03:33
1	Ca 317.933Radial†	6227.3	6166.2	12245 ug/L	12245 ppb	23:03:33
1	Fe 238.204 Radial†	6579.1	6524.2	79132 ug/L	79132 ppb	23:03:33
1	K 766.490 Radial†	63205.6	60298.1	11585 ug/L	11585 ppb	23:03:33
1	Mg 279.077 IEC†	284.4	279.7	12610 ug/L	12610 ppb	23:03:53
1	Na 589.592 Radial†	18605.7	19176.2	5531.4 ug/L	5531.4 ppb	23:03:33
1	Sr 421.552†	88093.7	87495.0	566.31 ug/L	566.31 ppb	23:03:33
1	Sc 361.383	930722.7	930722.7	105.94 %		23:04:52
1	Y 371.029	908159.4	908159.4	122.83 %		23:04:52
1	Ag 328.068†	103658.9	97402.7	492.84 ug/L	492.84 ppb	23:04:52
1	As 188.979†	1067.9	1032.5	548.25 ug/L	548.25 ppb	23:05:12
1	B 249.677†	21334.1	20605.8	499.29 ug/L	499.29 ppb	23:04:52
1	Ba 233.527†	120244.6	113508.4	952.50 ug/L	952.50 ppb	23:04:52
1	Be 313.107†	1357768.2	1285476.4	515.03 ug/L	515.03 ppb	23:04:52
1	Cd 226.502†	41791.3	39625.3	502.80 ug/L	502.80 ppb	23:05:12
1	Co 228.616†	24030.3	22733.7	519.54 ug/L	519.54 ppb	23:05:12
1	Cr 267.716†	55114.8	51944.6	636.14 ug/L	636.14 ppb	23:04:52
1	Cu 324.752†	203177.1	185580.0	572.85 ug/L	572.85 ppb	23:04:52
1	Mn 257.610†	2338367.1	2206781.3	2651.8 ug/L	2651.8 ppb	23:04:52
1	Mo 202.031†	6847.6	6456.0	511.27 ug/L	511.27 ppb	23:05:12
1	Ni 231.604†	22383.4	21055.1	584.23 ug/L	584.23 ppb	23:05:12
1	P 214.914†	2063.8	1752.0	1014.8 ug/L	1014.8 ppb	23:05:12
1	Pb 220.353†	4602.9	4397.3	600.81 ug/L	600.81 ppb	23:05:12
1	S 181.975 Axial†	3773.0	3530.2	5666.0 ug/L	5666.0 ppb	23:05:12
1	Sb 206.836†	1429.9	1315.0	503.76 ug/L	503.76 ppb	23:05:12
1	Se 196.026†	459.5	453.1	600.32 ug/L	600.32 ppb	23:05:12
1	Si 251.611†	498297.5	469829.7	16001 ug/L	16001 ppb	23:04:52
1	Sn 189.927†	2762.4	2594.0	519.97 ug/L	519.97 ppb	23:05:12
1	Ti 334.940†	1893492.0	1788473.9	2841.4 ug/L	2841.4 ppb	23:04:52
1	Tl 190.801†	1466.7	1412.1	517.91 ug/L	517.91 ppb	23:05:12
1	U 409.014†	10152.7	12008.6	321.74 ug/L	321.74 ppb	23:04:52
1	V 292.402†	84637.5	81238.5	590.98 ug/L	590.98 ppb	23:04:52
1	Zn 213.857†	83120.3	77869.4	826.46 ug/L	826.46 ppb	23:04:52
1	SiO2†	492334.3	464193.4	33679 ug/L	33679 ppb	23:06:13
2	Sc Radial	4458.0	4458.0	101 %		23:03:58
2	Y RADIAL	5685.9	5685.9	117.8 %		23:03:58
2	Al 396.153Radial†	65402.6	64593.3	56455 ug/L	56455 ppb	23:03:58
2	Ca 317.933Radial†	6287.7	6180.1	12272 ug/L	12272 ppb	23:03:58
2	Fe 238.204 Radial†	6633.7	6529.9	79201 ug/L	79201 ppb	23:03:58
2	K 766.490 Radial†	63855.9	60476.4	11619 ug/L	11619 ppb	23:03:58
2	Mg 279.077 IEC†	289.9	283.0	12763 ug/L	12763 ppb	23:04:18
2	Na 589.592 Radial†	18574.1	19008.6	5483.1 ug/L	5483.1 ppb	23:03:58
2	Sr 421.552†	88664.2	87412.1	565.77 ug/L	565.77 ppb	23:03:58
2	Sc 361.383	917598.3	917598.3	104.45 %		23:05:19
2	Y 371.029	895284.9	895284.9	121.09 %		23:05:19
2	Ag 328.068†	102203.9	97409.2	492.88 ug/L	492.88 ppb	23:05:19
2	As 188.979†	1049.5	1029.2	546.67 ug/L	546.67 ppb	23:05:40
2	B 249.677†	21058.1	20629.5	499.85 ug/L	499.85 ppb	23:05:19
2	Ba 233.527†	118617.0	113573.5	953.04 ug/L	953.04 ppb	23:05:19
2	Be 313.107†	1335824.3	1282797.9	513.98 ug/L	513.98 ppb	23:05:19
2	Cd 226.502†	41624.9	40030.2	508.02 ug/L	508.02 ppb	23:05:40
2	Co 228.616†	23960.7	22991.5	525.51 ug/L	525.51 ppb	23:05:40
2	Cr 267.716†	54253.7	51864.2	635.18 ug/L	635.18 ppb	23:05:19
2	Cu 324.752†	200250.2	185520.7	572.67 ug/L	572.67 ppb	23:05:19
2	Mn 257.610†	2305851.5	2207220.1	2652.3 ug/L	2652.3 ppb	23:05:19
2	Mo 202.031†	6840.8	6541.9	518.00 ug/L	518.00 ppb	23:05:40
2	Ni 231.604†	22356.4	21331.5	591.90 ug/L	591.90 ppb	23:05:40

2	P 214.914†	2037.9	1755.1	1016.9 ug/L	1016.9 ppb	23:05:40
2	Pb 220.353†	4589.0	4446.1	607.49 ug/L	607.49 ppb	23:05:40
2	S 181.975 Axial†	3762.6	3571.2	5731.8 ug/L	5731.8 ppb	23:05:40
2	Sb 206.836†	1433.0	1337.2	512.29 ug/L	512.29 ppb	23:05:40
2	Se 196.026†	468.2	467.6	611.14 ug/L	611.14 ppb	23:05:40
2	Si 251.611†	490235.8	468838.6	15967 ug/L	15967 ppb	23:05:19
2	Sn 189.927†	2735.9	2605.9	522.37 ug/L	522.37 ppb	23:05:40
2	Ti 334.940†	1867377.0	1789034.5	2842.3 ug/L	2842.3 ppb	23:05:19
2	Tl 190.801†	1452.7	1418.4	520.08 ug/L	520.08 ppb	23:05:40
2	U 409.014†	10090.1	12085.7	323.87 ug/L	323.87 ppb	23:05:19
2	V 292.402†	83227.6	81031.3	589.54 ug/L	589.54 ppb	23:05:19
2	Zn 213.857†	81882.9	77806.9	825.73 ug/L	825.73 ppb	23:05:19
2	SiO2†	491772.4	470302.4	34123 ug/L	34123 ppb	23:06:18
3	Sc Radial	4399.1	4399.1	100 %		23:04:23
3	Y RADIAL	5656.1	5656.1	117.2 %		23:04:23
3	Al 396.153Radial†	65161.7	65216.1	57000 ug/L	57000 ppb	23:04:23
3	Ca 317.933Radial†	6260.4	6235.8	12383 ug/L	12383 ppb	23:04:23
3	Fe 238.204 Radial†	6595.9	6579.7	79805 ug/L	79805 ppb	23:04:23
3	K 766.490 Radial†	63794.7	61258.3	11769 ug/L	11769 ppb	23:04:23
3	Mg 279.077 IEC†	286.0	282.9	12757 ug/L	12757 ppb	23:04:43
3	Na 589.592 Radial†	18651.9	19331.7	5576.3 ug/L	5576.3 ppb	23:04:23
3	Sr 421.552†	88521.3	88440.2	572.42 ug/L	572.42 ppb	23:04:23
3	Sc 361.383	931132.3	931132.3	105.99 %		23:05:47
3	Y 371.029	910314.3	910314.3	123.12 %		23:05:47
3	Ag 328.068†	103569.3	97275.2	492.43 ug/L	492.43 ppb	23:05:47
3	As 188.979†	1062.8	1027.2	545.81 ug/L	545.81 ppb	23:06:07
3	B 249.677†	21265.1	20531.8	497.34 ug/L	497.34 ppb	23:05:47
3	Ba 233.527†	119793.7	113033.0	948.54 ug/L	948.54 ppb	23:05:47
3	Be 313.107†	1355721.3	1282981.4	514.04 ug/L	514.04 ppb	23:05:47
3	Cd 226.502†	41714.7	39535.7	501.58 ug/L	501.58 ppb	23:06:07
3	Co 228.616†	24000.8	22695.9	518.66 ug/L	518.66 ppb	23:06:07
3	Cr 267.716†	54895.3	51714.6	633.42 ug/L	633.42 ppb	23:05:47
3	Cu 324.752†	203388.1	185694.7	573.23 ug/L	573.23 ppb	23:05:47
3	Mn 257.610†	2331422.9	2199258.4	2642.8 ug/L	2642.8 ppb	23:05:47
3	Mo 202.031†	6850.3	6455.7	511.30 ug/L	511.30 ppb	23:06:07
3	Ni 231.604†	22409.3	21070.3	584.65 ug/L	584.65 ppb	23:06:07
3	P 214.914†	2048.3	1736.6	1004.1 ug/L	1004.1 ppb	23:06:07
3	Pb 220.353†	4616.6	4408.3	602.40 ug/L	602.40 ppb	23:06:07
3	S 181.975 Axial†	3789.8	3544.5	5688.8 ug/L	5688.8 ppb	23:06:07
3	Sb 206.836†	1431.6	1316.0	504.05 ug/L	504.05 ppb	23:06:07
3	Se 196.026†	449.9	443.8	595.90 ug/L	595.90 ppb	23:06:07
3	Si 251.611†	496624.6	468044.3	15940 ug/L	15940 ppb	23:05:47
3	Sn 189.927†	2747.9	2579.1	516.97 ug/L	516.97 ppb	23:06:07
3	Ti 334.940†	1892960.4	1787186.0	2839.3 ug/L	2839.3 ppb	23:05:47
3	Tl 190.801†	1464.6	1409.5	516.98 ug/L	516.98 ppb	23:06:07
3	U 409.014†	10267.4	12112.6	324.55 ug/L	324.55 ppb	23:05:47
3	V 292.402†	84537.3	81108.8	589.93 ug/L	589.93 ppb	23:05:47
3	Zn 213.857†	82826.8	77558.0	822.99 ug/L	822.99 ppb	23:05:47
3	SiO2†	494107.3	465661.8	33786 ug/L	33786 ppb	23:06:24

Mean Data: 1202036898|950496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926484.4	105.46 %	0.876			0.83%
Sc Radial	4427.4	101 %	0.7			0.67%
Y 371.029	904586.2	122.35 %	1.099			0.90%
Y RADIAL	5664.2	117.4 %	0.39			0.33%
Ag 328.068†	97362.4	492.71 ug/L	0.252	492.71 ppb	0.252	0.05%
Al 396.153Radial†	64702.4	56550 ug/L	410.0	56550 ppb	410.0	0.72%
As 188.979†	1029.6	546.91 ug/L	1.239	546.91 ppb	1.239	0.23%
B 249.677†	20589.0	498.83 ug/L	1.320	498.83 ppb	1.320	0.26%
Ba 233.527†	113371.6	951.36 ug/L	2.455	951.36 ppb	2.455	0.26%
Be 313.107†	1283751.9	514.35 ug/L	0.593	514.35 ppb	0.593	0.12%
Ca 317.933Radial†	6194.1	12300 ug/L	73.2	12300 ppb	73.2	0.59%
Cd 226.502†	39730.4	504.14 ug/L	3.419	504.14 ppb	3.419	0.68%
Co 228.616†	22807.1	521.24 ug/L	3.727	521.24 ppb	3.727	0.71%
Cr 267.716†	51841.1	634.91 ug/L	1.378	634.91 ppb	1.378	0.22%
Cu 324.752†	185598.5	572.92 ug/L	0.289	572.92 ppb	0.289	0.05%
Fe 238.204 Radial†	6544.6	79379 ug/L	370.3	79379 ppb	370.3	0.47%
K 766.490 Radial†	60677.6	11657 ug/L	98.2	11657 ppb	98.2	0.84%

Mg 279.077 IEC†	281.9	12710 ug/L	86.5	12710 ppb	86.5	0.68%
Mn 257.610†	2204419.9	2648.9 ug/L	5.33	2648.9 ppb	5.33	0.20%
Mo 202.031†	6484.6	513.52 ug/L	3.873	513.52 ppb	3.873	0.75%
Na 589.592 Radial†	19172.2	5530.2 ug/L	46.60	5530.2 ppb	46.60	0.84%
Ni 231.604†	21152.3	586.92 ug/L	4.312	586.92 ppb	4.312	0.73%
P 214.914†	1747.9	1011.9 ug/L	6.91	1011.9 ppb	6.91	0.68%
Pb 220.353†	4417.2	603.57 ug/L	3.489	603.57 ppb	3.489	0.58%
S 181.975 Axial†	3548.6	5695.5 ug/L	33.43	5695.5 ppb	33.43	0.59%
Sb 206.836†	1322.7	506.70 ug/L	4.844	506.70 ppb	4.844	0.96%
Se 196.026†	454.9	602.45 ug/L	7.843	602.45 ppb	7.843	1.30%
Si 251.611†	468904.2	15969 ug/L	30.5	15969 ppb	30.5	0.19%
Sn 189.927†	2593.0	519.77 ug/L	2.706	519.77 ppb	2.706	0.52%
Sr 421.552†	87782.4	568.17 ug/L	3.697	568.17 ppb	3.697	0.65%
Ti 334.940†	1788231.5	2841.0 ug/L	1.50	2841.0 ppb	1.50	0.05%
Tl 190.801†	1413.3	518.32 ug/L	1.591	518.32 ppb	1.591	0.31%
U 409.014†	12069.0	323.39 ug/L	1.464	323.39 ppb	1.464	0.45%
V 292.402†	81126.2	590.15 ug/L	0.741	590.15 ppb	0.741	0.13%
Zn 213.857†	77744.8	825.06 ug/L	1.831	825.06 ppb	1.831	0.22%
SiO2†	466719.2	33863 ug/L	231.4	33863 ppb	231.4	0.68%

Sequence No.: 47

Sample ID: 1202036896|950496|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 2/22/2010 23:08:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036896|950496|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4388.7	4388.7	99.8 %		23:10:28
1	Y RADIAL	4911.2	4911.2	101.8 %		23:10:28
1	Al 396.153Radial†	5442.4	5555.4	4857.5 ug/L	4857.5 ppb	23:10:28
1	Ca 317.933Radial†	710.9	692.3	1374.8 ug/L	1374.8 ppb	23:10:48
1	Fe 238.204 Radial†	1248.1	1238.9	15024 ug/L	15024 ppb	23:10:48
1	K 766.490 Radial†	7068.5	4592.3	882.19 ug/L	882.19 ppb	23:10:28
1	Mg 279.077 IEC†	23.3	20.5	912.20 ug/L	912.20 ppb	23:10:48
1	Na 589.592 Radial†	-261.9	431.8	124.54 ug/L	124.54 ppb	23:10:28
1	Sr 421.552†	1899.3	1888.9	12.217 ug/L	12.217 ppb	23:10:28
1	Sc 361.383	926507.4	926507.4	105.46 %		23:11:45
1	Y 371.029	797811.7	797811.7	107.91 %		23:11:45
1	Ag 328.068†	-700.7	-1107.4	-0.6088 ug/L	-0.6088 ppb	23:11:50
1	As 188.979†	-28.9	-2.9	5.4105 ug/L	5.4105 ppb	23:12:10
1	B 249.677†	-173.2	303.9	5.1238 ug/L	5.1238 ppb	23:11:50
1	Ba 233.527†	9783.0	9283.5	78.093 ug/L	78.093 ppb	23:11:50
1	Be 313.107†	-3317.6	706.4	1.1516 ug/L	1.1516 ppb	23:11:50
1	Cd 226.502†	-41.0	138.7	0.2375 ug/L	0.2375 ppb	23:12:10
1	Co 228.616†	127.6	172.0	2.9824 ug/L	2.9824 ppb	23:12:10
1	Cr 267.716†	1797.0	1624.5	21.103 ug/L	21.103 ppb	23:12:10
1	Cu 324.752†	8483.6	1841.3	6.4560 ug/L	6.4560 ppb	23:11:50
1	Mn 257.610†	380674.7	360511.4	433.46 ug/L	433.46 ppb	23:11:45
1	Mo 202.031†	12.3	4.2	1.5084 ug/L	1.5084 ppb	23:12:10
1	Ni 231.604†	532.2	431.7	11.982 ug/L	11.982 ppb	23:12:10
1	P 214.914†	393.1	176.8	106.27 ug/L	106.27 ppb	23:12:10
1	Pb 220.353†	102.5	149.7	19.713 ug/L	19.713 ppb	23:12:10
1	S 181.975 Axial†	64.3	29.8	46.993 ug/L	46.993 ppb	23:12:10
1	Sb 206.836†	38.4	1.7	-0.8800 ug/L	-0.8800 ppb	23:12:10
1	Se 196.026†	-80.6	-57.1	9.2533 ug/L	9.2533 ppb	23:12:10
1	Si 251.611†	70323.4	66158.4	2254.0 ug/L	2254.0 ppb	23:11:50
1	Sn 189.927†	6.3	-7.6	-2.1403 ug/L	-2.1403 ppb	23:12:10
1	Ti 334.940†	253785.8	241812.6	384.25 ug/L	384.25 ppb	23:11:45
1	Tl 190.801†	-42.7	-12.9	0.7841 ug/L	0.7841 ppb	23:12:10
1	U 409.014†	-3704.8	-1087.7	-31.842 ug/L	-31.842 ppb	23:11:45
1	V 292.402†	1113.5	2403.3	15.045 ug/L	15.045 ppb	23:11:50
1	Zn 213.857†	6960.3	6010.4	62.719 ug/L	62.719 ppb	23:11:50
1	SiO2†	69775.6	65631.5	4763.8 ug/L	4763.8 ppb	23:13:17
2	Sc Radial	4320.2	4320.2	98.3 %		23:10:53
2	Y RADIAL	4855.4	4855.4	100.6 %		23:10:53
2	Al 396.153Radial†	5355.0	5552.8	4855.2 ug/L	4855.2 ppb	23:10:53
2	Ca 317.933Radial†	713.7	706.4	1402.8 ug/L	1402.8 ppb	23:11:13
2	Fe 238.204 Radial†	1252.1	1262.9	15315 ug/L	15315 ppb	23:11:13
2	K 766.490 Radial†	6957.1	4591.2	881.98 ug/L	881.98 ppb	23:10:53
2	Mg 279.077 IEC†	22.7	20.2	901.19 ug/L	901.19 ppb	23:11:13
2	Na 589.592 Radial†	-387.3	300.0	86.521 ug/L	86.521 ppb	23:10:53
2	Sr 421.552†	1827.8	1846.2	11.941 ug/L	11.941 ppb	23:10:53
2	Sc 361.383	936840.6	936840.6	106.64 %		23:12:16
2	Y 371.029	805904.0	805904.0	109.00 %		23:12:16
2	Ag 328.068†	-748.6	-1144.9	-0.6978 ug/L	-0.6978 ppb	23:12:21
2	As 188.979†	-26.8	-0.7	6.5740 ug/L	6.5740 ppb	23:12:41
2	B 249.677†	-254.3	229.6	3.2270 ug/L	3.2270 ppb	23:12:21
2	Ba 233.527†	9707.2	9110.1	76.653 ug/L	76.653 ppb	23:12:21
2	Be 313.107†	-3353.5	707.4	1.1547 ug/L	1.1547 ppb	23:12:21
2	Cd 226.502†	-38.2	141.8	0.2464 ug/L	0.2464 ppb	23:12:41
2	Co 228.616†	110.4	154.6	2.5746 ug/L	2.5746 ppb	23:12:41
2	Cr 267.716†	1777.2	1587.2	20.680 ug/L	20.680 ppb	23:12:41
2	Cu 324.752†	8388.7	1663.7	5.9285 ug/L	5.9285 ppb	23:12:21
2	Mn 257.610†	385334.5	360899.9	433.95 ug/L	433.95 ppb	23:12:16
2	Mo 202.031†	22.5	13.5	2.2642 ug/L	2.2642 ppb	23:12:41
2	Ni 231.604†	531.6	425.5	11.812 ug/L	11.812 ppb	23:12:41

2	P 214.914†	388.2	168.1	100.32 ug/L	100.32 ppb	23:12:41
2	Pb 220.353†	122.7	167.6	22.110 ug/L	22.110 ppb	23:12:41
2	S 181.975 Axial†	64.1	29.0	45.651 ug/L	45.651 ppb	23:12:41
2	Sb 206.836†	33.5	-3.4	-2.8068 ug/L	-2.8068 ppb	23:12:41
2	Se 196.026†	-83.2	-58.7	9.0797 ug/L	9.0797 ppb	23:12:41
2	Si 251.611†	69488.9	64640.4	2202.3 ug/L	2202.3 ppb	23:12:21
2	Sn 189.927†	-2.7	-16.0	-3.8491 ug/L	-3.8491 ppb	23:12:41
2	Ti 334.940†	257424.9	242570.9	385.47 ug/L	385.47 ppb	23:12:16
2	Tl 190.801†	-53.2	-22.3	-2.4435 ug/L	-2.4435 ppb	23:12:41
2	U 409.014†	-3870.8	-1204.5	-35.107 ug/L	-35.107 ppb	23:12:16
2	V 292.402†	1095.2	2374.5	14.794 ug/L	14.794 ppb	23:12:21
2	Zn 213.857†	6941.8	5920.3	61.702 ug/L	61.702 ppb	23:12:21
2	SiO2†	69309.6	64464.8	4679.1 ug/L	4679.1 ppb	23:13:22
3	Sc Radial	4396.9	4396.9	100 %		23:11:18
3	Y RADIAL	4912.3	4912.3	101.8 %		23:11:18
3	Al 396.153Radial†	5366.2	5469.0	4781.9 ug/L	4781.9 ppb	23:11:18
3	Ca 317.933Radial†	718.3	698.3	1386.8 ug/L	1386.8 ppb	23:11:38
3	Fe 238.204 Radial†	1252.3	1240.8	15047 ug/L	15047 ppb	23:11:38
3	K 766.490 Radial†	6926.2	4436.8	852.32 ug/L	852.32 ppb	23:11:18
3	Mg 279.077 IEC†	21.7	18.9	839.52 ug/L	839.52 ppb	23:11:38
3	Na 589.592 Radial†	-389.7	304.4	87.811 ug/L	87.811 ppb	23:11:18
3	Sr 421.552†	1802.6	1788.7	11.568 ug/L	11.568 ppb	23:11:18
3	Sc 361.383	936269.6	936269.6	106.57 %		23:12:46
3	Y 371.029	805547.5	805547.5	108.95 %		23:12:46
3	Ag 328.068†	-623.5	-1028.0	-0.2235 ug/L	-0.2235 ppb	23:12:51
3	As 188.979†	-26.5	-0.4	6.6665 ug/L	6.6665 ppb	23:13:11
3	B 249.677†	-208.5	272.4	4.3367 ug/L	4.3367 ppb	23:12:51
3	Ba 233.527†	9639.6	9052.2	76.161 ug/L	76.161 ppb	23:12:51
3	Be 313.107†	-3353.2	705.8	1.1527 ug/L	1.1527 ppb	23:12:51
3	Cd 226.502†	-35.5	144.4	0.3078 ug/L	0.3078 ppb	23:13:11
3	Co 228.616†	122.2	165.7	2.8372 ug/L	2.8372 ppb	23:13:11
3	Cr 267.716†	1793.4	1603.4	20.849 ug/L	20.849 ppb	23:13:11
3	Cu 324.752†	8298.9	1584.2	5.6679 ug/L	5.6679 ppb	23:12:51
3	Mn 257.610†	384450.3	360290.5	433.20 ug/L	433.20 ppb	23:12:46
3	Mo 202.031†	31.2	21.8	2.8863 ug/L	2.8863 ppb	23:13:11
3	Ni 231.604†	534.3	428.3	11.889 ug/L	11.889 ppb	23:13:11
3	P 214.914†	384.4	164.7	98.331 ug/L	98.331 ppb	23:13:11
3	Pb 220.353†	113.4	158.9	20.947 ug/L	20.947 ppb	23:13:11
3	S 181.975 Axial†	68.6	33.2	52.446 ug/L	52.446 ppb	23:13:11
3	Sb 206.836†	39.4	2.2	-0.6822 ug/L	-0.6822 ppb	23:13:11
3	Se 196.026†	-81.7	-57.3	9.1643 ug/L	9.1643 ppb	23:13:11
3	Si 251.611†	68721.4	63959.9	2179.1 ug/L	2179.1 ppb	23:12:51
3	Sn 189.927†	1.6	-12.0	-3.0272 ug/L	-3.0272 ppb	23:13:11
3	Ti 334.940†	256875.0	242202.2	384.88 ug/L	384.88 ppb	23:12:46
3	Tl 190.801†	-47.8	-17.3	-0.7329 ug/L	-0.7329 ppb	23:13:11
3	U 409.014†	-3666.6	-1015.2	-29.840 ug/L	-29.840 ppb	23:12:46
3	V 292.402†	1123.8	2402.0	15.054 ug/L	15.054 ppb	23:12:51
3	Zn 213.857†	6802.2	5793.2	60.367 ug/L	60.367 ppb	23:12:51
3	SiO2†	70820.8	65922.4	4784.9 ug/L	4784.9 ppb	23:13:27

Mean Data: 1202036896|950496|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	933205.9	106.22 %	0.661			0.62%
Sc Radial	4368.6	99.4 %	0.96			0.96%
Y 371.029	803087.8	108.62 %	0.618			0.57%
Y RADIAL	4893.0	101.4 %	0.67			0.66%
Ag 328.068†	-1093.4	-0.5100 ug/L	0.25210	-0.5100 ppb	0.25210	49.43%
Al 396.153Radial†	5525.7	4831.6 ug/L	43.00	4831.6 ppb	43.00	0.89%
As 188.979†	-1.3	6.2170 ug/L	0.69998	6.2170 ppb	0.69998	11.26%
B 249.677†	268.7	4.2292 ug/L	0.95297	4.2292 ppb	0.95297	22.53%
Ba 233.527†	9148.6	76.969 ug/L	1.0044	76.969 ppb	1.0044	1.30%
Be 313.107†	706.5	1.1530 ug/L	0.00159	1.1530 ppb	0.00159	0.14%
Ca 317.933Radial†	699.0	1388.1 ug/L	14.06	1388.1 ppb	14.06	1.01%
Cd 226.502†	141.6	0.2639 ug/L	0.03826	0.2639 ppb	0.03826	14.50%
Co 228.616†	164.1	2.7981 ug/L	0.20672	2.7981 ppb	0.20672	7.39%
Cr 267.716†	1605.0	20.877 ug/L	0.2130	20.877 ppb	0.2130	1.02%
Cu 324.752†	1696.4	6.0175 ug/L	0.40153	6.0175 ppb	0.40153	6.67%
Fe 238.204 Radial†	1247.6	15129 ug/L	161.6	15129 ppb	161.6	1.07%
K 766.490 Radial†	4540.1	872.16 ug/L	17.187	872.16 ppb	17.187	1.97%

Mg 279.077 IEC†	19.8	884.30 ug/L	39.175	884.30 ppb	39.175	4.43%
Mn 257.610†	360567.3	433.54 ug/L	0.383	433.54 ppb	0.383	0.09%
Mo 202.031†	13.2	2.2196 ug/L	0.69005	2.2196 ppb	0.69005	31.09%
Na 589.592 Radial†	345.4	99.625 ug/L	21.5877	99.625 ppb	21.5877	21.67%
Ni 231.604†	428.5	11.894 ug/L	0.0851	11.894 ppb	0.0851	0.72%
P 214.914†	169.8	101.64 ug/L	4.133	101.64 ppb	4.133	4.07%
Pb 220.353†	158.7	20.923 ug/L	1.1987	20.923 ppb	1.1987	5.73%
S 181.975 Axial†	30.6	48.363 ug/L	3.5991	48.363 ppb	3.5991	7.44%
Sb 206.836†	0.2	-1.4563 ug/L	1.17369	-1.4563 ppb	1.17369	80.59%
Se 196.026†	-57.7	9.1658 ug/L	0.08683	9.1658 ppb	0.08683	0.95%
Si 251.611†	64919.6	2211.8 ug/L	38.35	2211.8 ppb	38.35	1.73%
Sn 189.927†	-11.8	-3.0055 ug/L	0.85458	-3.0055 ppb	0.85458	28.43%
Sr 421.552†	1841.2	11.909 ug/L	0.3255	11.909 ppb	0.3255	2.73%
Ti 334.940†	242195.3	384.87 ug/L	0.606	384.87 ppb	0.606	0.16%
Tl 190.801†	-17.5	-0.7974 ug/L	1.61479	-0.7974 ppb	1.61479	202.50%
U 409.014†	-1102.5	-32.263 ug/L	2.6588	-32.263 ppb	2.6588	8.24%
V 292.402†	2393.3	14.964 ug/L	0.1476	14.964 ppb	0.1476	0.99%
Zn 213.857†	5908.0	61.596 ug/L	1.1795	61.596 ppb	1.1795	1.91%
SiO2†	65339.6	4742.6 ug/L	55.99	4742.6 ppb	55.99	1.18%

Sequence No.: 48
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 2/22/2010 23:15:38
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4199.2	4199.2	95.5 %		23:17:30
1	Y RADIAL	4527.8	4527.8	93.84 %		23:17:30
1	Al 396.153Radial†	5417.2	5775.0	5024.3 ug/L	5024.3 ppb	23:17:30
1	Ca 317.933Radial†	2552.3	2651.9	5266.1 ug/L	5266.1 ppb	23:17:50
1	Fe 238.204 Radial†	428.8	437.8	5325.4 ug/L	5325.4 ppb	23:17:50
1	K 766.490 Radial†	28958.6	27826.1	5343.1 ug/L	5343.1 ppb	23:17:30
1	Mg 279.077 IEC†	116.4	119.0	5398.2 ug/L	5398.2 ppb	23:17:50
1	Na 589.592 Radial†	33109.1	35352.4	10197 ug/L	10197 ppb	23:17:30
1	Sr 421.552†	74958.3	78452.4	507.82 ug/L	507.82 ppb	23:17:30
1	Sc 361.383	910682.9	910682.9	103.66 %		23:18:48
1	Y 371.029	754242.0	754242.0	102.01 %		23:18:48
1	Ag 328.068†	111259.0	106887.6	515.22 ug/L	515.22 ppb	23:18:53
1	As 188.979†	1103.7	1089.2	538.46 ug/L	538.46 ppb	23:19:13
1	B 249.677†	20904.9	20634.8	511.93 ug/L	511.93 ppb	23:18:53
1	Ba 233.527†	65768.2	63453.1	531.69 ug/L	531.69 ppb	23:18:53
1	Be 313.107†	1310656.8	1268230.9	502.89 ug/L	502.89 ppb	23:18:48
1	Cd 226.502†	43944.9	42570.9	548.38 ug/L	548.38 ppb	23:18:53
1	Co 228.616†	24682.0	23861.6	551.45 ug/L	551.45 ppb	23:18:53
1	Cr 267.716†	45451.0	43766.8	530.09 ug/L	530.09 ppb	23:18:53
1	Cu 324.752†	176404.4	163972.8	502.62 ug/L	502.62 ppb	23:18:53
1	Mn 257.610†	441994.9	425938.7	510.72 ug/L	510.72 ppb	23:18:48
1	Mo 202.031†	6909.3	6657.8	521.24 ug/L	521.24 ppb	23:19:13
1	Ni 231.604†	20271.4	19482.6	540.56 ug/L	540.56 ppb	23:18:53
1	P 214.914†	4379.3	4028.6	2598.5 ug/L	2598.5 ppb	23:19:13
1	Pb 220.353†	4035.5	3945.6	536.82 ug/L	536.82 ppb	23:19:13
1	S 181.975 Axial†	741.6	684.3	1099.4 ug/L	1099.4 ppb	23:19:13
1	Sb 206.836†	1468.6	1382.1	539.18 ug/L	539.18 ppb	23:19:13
1	Se 196.026†	761.3	753.7	567.58 ug/L	567.58 ppb	23:19:13
1	Si 251.611†	80566.0	77198.0	2623.7 ug/L	2623.7 ppb	23:18:53
1	Sn 189.927†	2763.7	2652.6	534.77 ug/L	534.77 ppb	23:19:13
1	Ti 334.940†	324806.7	314507.4	499.48 ug/L	499.48 ppb	23:18:48
1	Tl 190.801†	1566.1	1538.4	531.71 ug/L	531.71 ppb	23:19:13
1	U 409.014†	16091.5	17948.6	494.68 ug/L	494.68 ppb	23:18:53
1	V 292.402†	71755.1	70569.0	526.14 ug/L	526.14 ppb	23:18:53
1	Zn 213.857†	51791.1	49372.9	529.45 ug/L	529.45 ppb	23:18:53
1	SiO2†	79734.7	76388.7	5530.4 ug/L	5530.4 ppb	23:20:21
2	Sc Radial	4495.6	4495.6	102 %		23:17:55
2	Y RADIAL	4863.8	4863.8	100.8 %		23:17:55
2	Al 396.153Radial†	5507.7	5489.7	4774.7 ug/L	4774.7 ppb	23:17:55
2	Ca 317.933Radial†	2553.8	2477.3	4919.4 ug/L	4919.4 ppb	23:18:15
2	Fe 238.204 Radial†	424.7	404.2	4917.4 ug/L	4917.4 ppb	23:18:15
2	K 766.490 Radial†	29536.3	26393.0	5067.9 ug/L	5067.9 ppb	23:17:55
2	Mg 279.077 IEC†	114.5	109.1	4949.0 ug/L	4949.0 ppb	23:18:15
2	Na 589.592 Radial†	33441.8	33393.4	9632.4 ug/L	9632.4 ppb	23:17:55
2	Sr 421.552†	76405.3	74695.5	483.50 ug/L	483.50 ppb	23:17:55
2	Sc 361.383	905500.4	905500.4	103.07 %		23:19:19
2	Y 371.029	749383.3	749383.3	101.36 %		23:19:19
2	Ag 328.068†	109672.6	105962.8	510.66 ug/L	510.66 ppb	23:19:24
2	As 188.979†	1110.5	1101.9	544.67 ug/L	544.67 ppb	23:19:44
2	B 249.677†	20555.7	20411.5	506.45 ug/L	506.45 ppb	23:19:24
2	Ba 233.527†	64672.7	62753.4	525.81 ug/L	525.81 ppb	23:19:24
2	Be 313.107†	1336676.8	1300712.3	515.77 ug/L	515.77 ppb	23:19:19
2	Cd 226.502†	43219.5	42109.7	542.48 ug/L	542.48 ppb	23:19:24
2	Co 228.616†	24216.6	23546.2	544.16 ug/L	544.16 ppb	23:19:24
2	Cr 267.716†	44820.9	43406.4	525.69 ug/L	525.69 ppb	23:19:24
2	Cu 324.752†	173564.5	162191.4	497.14 ug/L	497.14 ppb	23:19:24
2	Mn 257.610†	449993.7	436139.6	522.92 ug/L	522.92 ppb	23:19:19
2	Mo 202.031†	6909.5	6696.1	524.20 ug/L	524.20 ppb	23:19:44
2	Ni 231.604†	19984.2	19315.9	535.93 ug/L	535.93 ppb	23:19:24

2	P 214.914†	4392.2	4065.4	2624.5 ug/L	2624.5 ppb	23:19:44
2	Pb 220.353†	4040.9	3973.0	540.54 ug/L	540.54 ppb	23:19:44
2	S 181.975 Axial†	735.8	682.6	1096.8 ug/L	1096.8 ppb	23:19:44
2	Sb 206.836†	1483.3	1404.4	547.69 ug/L	547.69 ppb	23:19:44
2	Se 196.026†	739.5	736.8	553.92 ug/L	553.92 ppb	23:19:44
2	Si 251.611†	79301.6	76416.2	2597.1 ug/L	2597.1 ppb	23:19:24
2	Sn 189.927†	2774.6	2678.5	539.95 ug/L	539.95 ppb	23:19:44
2	Ti 334.940†	330678.4	321997.5	511.37 ug/L	511.37 ppb	23:19:19
2	Tl 190.801†	1556.3	1537.6	531.64 ug/L	531.64 ppb	23:19:44
2	U 409.014†	15692.1	17650.0	486.48 ug/L	486.48 ppb	23:19:24
2	V 292.402†	70544.1	69790.3	520.47 ug/L	520.47 ppb	23:19:24
2	Zn 213.857†	51210.1	49095.2	526.55 ug/L	526.55 ppb	23:19:24
2	SiO2†	79773.7	76866.7	5565.0 ug/L	5565.0 ppb	23:20:26
3	Sc Radial	4213.8	4213.8	95.9 %		23:18:20
3	Y RADIAL	4589.5	4589.5	95.12 %		23:18:20
3	Al 396.153Radial†	5364.1	5699.9	4958.5 ug/L	4958.5 ppb	23:18:20
3	Ca 317.933Radial†	2534.3	2624.0	5210.7 ug/L	5210.7 ppb	23:18:41
3	Fe 238.204 Radial†	419.0	426.0	5182.1 ug/L	5182.1 ppb	23:18:41
3	K 766.490 Radial†	28853.9	27612.3	5302.0 ug/L	5302.0 ppb	23:18:20
3	Mg 279.077 IEC†	115.7	117.8	5345.9 ug/L	5345.9 ppb	23:18:41
3	Na 589.592 Radial†	32677.0	34782.2	10033 ug/L	10033 ppb	23:18:20
3	Sr 421.552†	74332.9	77529.3	501.84 ug/L	501.84 ppb	23:18:20
3	Sc 361.383	900790.5	900790.5	102.53 %		23:19:50
3	Y 371.029	746844.2	746844.2	101.01 %		23:19:50
3	Ag 328.068†	110706.6	107527.5	518.26 ug/L	518.26 ppb	23:19:56
3	As 188.979†	1100.2	1097.4	542.55 ug/L	542.55 ppb	23:20:16
3	B 249.677†	20759.9	20714.9	513.94 ug/L	513.94 ppb	23:19:56
3	Ba 233.527†	65392.7	63783.7	534.45 ug/L	534.45 ppb	23:19:56
3	Be 313.107†	1334810.7	1305673.2	517.74 ug/L	517.74 ppb	23:19:50
3	Cd 226.502†	43620.3	42719.9	550.32 ug/L	550.32 ppb	23:19:56
3	Co 228.616†	24445.2	23892.1	552.15 ug/L	552.15 ppb	23:19:56
3	Cr 267.716†	45149.5	43954.3	532.35 ug/L	532.35 ppb	23:19:56
3	Cu 324.752†	175285.4	164750.4	505.00 ug/L	505.00 ppb	23:19:56
3	Mn 257.610†	447680.0	436165.9	522.96 ug/L	522.96 ppb	23:19:50
3	Mo 202.031†	6887.5	6709.8	525.29 ug/L	525.29 ppb	23:20:16
3	Ni 231.604†	20151.0	19580.0	543.26 ug/L	543.26 ppb	23:19:56
3	P 214.914†	4351.4	4047.9	2611.0 ug/L	2611.0 ppb	23:20:16
3	Pb 220.353†	4029.3	3982.2	541.81 ug/L	541.81 ppb	23:20:16
3	S 181.975 Axial†	732.1	682.8	1097.0 ug/L	1097.0 ppb	23:20:16
3	Sb 206.836†	1473.6	1402.4	546.98 ug/L	546.98 ppb	23:20:16
3	Se 196.026†	742.9	743.9	559.93 ug/L	559.93 ppb	23:20:16
3	Si 251.611†	80105.7	77602.6	2637.5 ug/L	2637.5 ppb	23:19:56
3	Sn 189.927†	2759.6	2677.9	539.86 ug/L	539.86 ppb	23:20:16
3	Ti 334.940†	329126.0	322161.0	511.63 ug/L	511.63 ppb	23:19:50
3	Tl 190.801†	1543.1	1532.5	529.85 ug/L	529.85 ppb	23:20:16
3	U 409.014†	15734.5	17770.9	489.78 ug/L	489.78 ppb	23:19:56
3	V 292.402†	71246.4	70833.0	528.13 ug/L	528.13 ppb	23:19:56
3	Zn 213.857†	51512.6	49650.0	532.45 ug/L	532.45 ppb	23:19:56
3	SiO2†	80196.3	77683.6	5624.3 ug/L	5624.3 ppb	23:20:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	905657.9	103.09 %	0.563			0.55%
Sc Radial	4302.9	97.9 %	3.80			3.88%
Y 371.029	750156.5	101.46 %	0.508			0.50%
Y RADIAL	4660.4	96.59 %	3.707			3.84%
Ag 328.068†	106792.6	514.71 ug/L	3.826	514.71 ppb	3.826	0.74%
QC value within limits for Ag 328.068 Recovery = 102.94%						
Al 396.153Radial†	5654.9	4919.2 ug/L	129.36	4919.2 ppb	129.36	2.63%
QC value within limits for Al 396.153Radial Recovery = 98.38%						
As 188.979†	1096.2	541.89 ug/L	3.160	541.89 ppb	3.160	0.58%
QC value within limits for As 188.979 Recovery = 108.38%						
B 249.677†	20587.1	510.77 ug/L	3.879	510.77 ppb	3.879	0.76%
QC value within limits for B 249.677 Recovery = 102.15%						
Ba 233.527†	63330.1	530.65 ug/L	4.411	530.65 ppb	4.411	0.83%
QC value within limits for Ba 233.527 Recovery = 106.13%						
Be 313.107†	1291538.8	512.13 ug/L	8.062	512.13 ppb	8.062	1.57%
QC value within limits for Be 313.107 Recovery = 102.43%						
Ca 317.933Radial†	2584.4	5132.1 ug/L	186.24	5132.1 ppb	186.24	3.63%

QC value within limits for Ca 317.933 Radial Recovery = 102.64%							
Cd 226.502†	42466.8	547.06 ug/L	4.084	547.06 ppb	4.084	0.75%	
QC value within limits for Cd 226.502 Recovery = 109.41%							
Co 228.616†	23766.6	549.25 ug/L	4.427	549.25 ppb	4.427	0.81%	
QC value within limits for Co 228.616 Recovery = 109.85%							
Cr 267.716†	43709.2	529.38 ug/L	3.386	529.38 ppb	3.386	0.64%	
QC value within limits for Cr 267.716 Recovery = 105.88%							
Cu 324.752†	163638.2	501.59 ug/L	4.028	501.59 ppb	4.028	0.80%	
QC value within limits for Cu 324.752 Recovery = 100.32%							
Fe 238.204 Radial†	422.6	5141.6 ug/L	207.02	5141.6 ppb	207.02	4.03%	
QC value within limits for Fe 238.204 Radial Recovery = 102.83%							
K 766.490 Radial†	27277.1	5237.7 ug/L	148.46	5237.7 ppb	148.46	2.83%	
QC value within limits for K 766.490 Radial Recovery = 104.75%							
Mg 279.077 IEC†	115.3	5231.0 ug/L	245.66	5231.0 ppb	245.66	4.70%	
QC value within limits for Mg 279.077 IEC Recovery = 104.62%							
Mn 257.610†	432748.1	518.87 ug/L	7.057	518.87 ppb	7.057	1.36%	
QC value within limits for Mn 257.610 Recovery = 103.77%							
Mo 202.031†	6687.9	523.58 ug/L	2.097	523.58 ppb	2.097	0.40%	
QC value within limits for Mo 202.031 Recovery = 104.72%							
Na 589.592 Radial†	34509.3	9954.3 ug/L	290.64	9954.3 ppb	290.64	2.92%	
QC value within limits for Na 589.592 Radial Recovery = 99.54%							
Ni 231.604†	19459.5	539.92 ug/L	3.706	539.92 ppb	3.706	0.69%	
QC value within limits for Ni 231.604 Recovery = 107.98%							
P 214.914†	4047.3	2611.3 ug/L	13.00	2611.3 ppb	13.00	0.50%	
QC value within limits for P 214.914 Recovery = 104.45%							
Pb 220.353†	3966.9	539.72 ug/L	2.593	539.72 ppb	2.593	0.48%	
QC value within limits for Pb 220.353 Recovery = 107.94%							
S 181.975 Axial†	683.2	1097.7 ug/L	1.43	1097.7 ppb	1.43	0.13%	
QC value within limits for S 181.975 Axial Recovery = 109.77%							
Sb 206.836†	1396.3	544.62 ug/L	4.720	544.62 ppb	4.720	0.87%	
QC value within limits for Sb 206.836 Recovery = 108.92%							
Se 196.026†	744.8	560.47 ug/L	6.850	560.47 ppb	6.850	1.22%	
QC value greater than the upper limit for Se 196.026 Recovery = 112.09%							
Si 251.611†	77072.3	2619.4 ug/L	20.55	2619.4 ppb	20.55	0.78%	
QC value within limits for Si 251.611 Recovery = 104.78%							
Sn 189.927†	2669.7	538.19 ug/L	2.965	538.19 ppb	2.965	0.55%	
QC value within limits for Sn 189.927 Recovery = 107.64%							
Sr 421.552†	76892.4	497.72 ug/L	12.672	497.72 ppb	12.672	2.55%	
QC value within limits for Sr 421.552 Recovery = 99.54%							
Ti 334.940†	319555.3	507.50 ug/L	6.944	507.50 ppb	6.944	1.37%	
QC value within limits for Ti 334.940 Recovery = 101.50%							
Tl 190.801†	1536.2	531.07 ug/L	1.053	531.07 ppb	1.053	0.20%	
QC value within limits for Tl 190.801 Recovery = 106.21%							
U 409.014†	17789.8	490.31 ug/L	4.128	490.31 ppb	4.128	0.84%	
QC value within limits for U 409.014 Recovery = 98.06%							
V 292.402†	70397.4	524.91 ug/L	3.974	524.91 ppb	3.974	0.76%	
QC value within limits for V 292.402 Recovery = 104.98%							
Zn 213.857†	49372.7	529.48 ug/L	2.954	529.48 ppb	2.954	0.56%	
QC value within limits for Zn 213.857 Recovery = 105.90%							
SiO2†	76979.7	5573.3 ug/L	47.48	5573.3 ppb	47.48	0.85%	
QC value within limits for SiO2 Recovery = 104.22%							
QC Failed. Continue with analysis.							

Sequence No.: 49
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 2/22/2010 23:22:42
 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	4764.5	4764.5	108 %		23:24:33
1	Y RADIAL	5223.1	5223.1	108.2 %		23:24:33
1	Al 396.153Radial†	-123.3	-9.5	-8.3359 ug/L	-8.3359 ppb	23:24:33
1	Ca 317.933Radial†	24.2	2.6	5.0790 ug/L	5.0790 ppb	23:24:53
1	Fe 238.204 Radial†	9.7	-2.1	-25.959 ug/L	-25.959 ppb	23:24:53
1	K 766.490 Radial†	2639.9	-52.0	-10.014 ug/L	-10.014 ppb	23:24:33
1	Mg 279.077 IEC†	1.0	-1.9	-86.032 ug/L	-86.032 ppb	23:24:53
1	Na 589.592 Radial†	-608.0	133.1	38.396 ug/L	38.396 ppb	23:24:33
1	Sr 421.552†	20.9	5.8	0.0372 ug/L	0.0372 ppb	23:24:33
1	Sc 361.383	936736.6	936736.6	106.63 %		23:25:50
1	Y 371.029	786219.4	786219.4	106.34 %		23:25:50
1	Ag 328.068†	332.8	-130.9	-0.6295 ug/L	-0.6295 ppb	23:25:55
1	As 188.979†	-25.3	0.7	0.3560 ug/L	0.3560 ppb	23:26:15
1	B 249.677†	-348.4	141.3	3.5267 ug/L	3.5267 ppb	23:26:15
1	Ba 233.527†	5.8	12.6	0.1059 ug/L	0.1059 ppb	23:26:15
1	Be 313.107†	-3925.1	171.0	0.0674 ug/L	0.0674 ppb	23:25:55
1	Cd 226.502†	-182.1	6.9	0.0901 ug/L	0.0901 ppb	23:26:15
1	Co 228.616†	-39.8	13.7	0.3184 ug/L	0.3184 ppb	23:26:15
1	Cr 267.716†	52.7	-30.0	-0.3623 ug/L	-0.3623 ppb	23:26:15
1	Cu 324.752†	6169.3	-417.0	-1.2774 ug/L	-1.2774 ppb	23:25:55
1	Mn 257.610†	458.2	-20.0	-0.0230 ug/L	-0.0230 ppb	23:26:15
1	Mo 202.031†	8.6	0.5	0.0403 ug/L	0.0403 ppb	23:26:15
1	Ni 231.604†	65.5	-11.6	-0.3224 ug/L	-0.3224 ppb	23:26:15
1	P 214.914†	195.7	-12.4	-8.0291 ug/L	-8.0291 ppb	23:26:15
1	Pb 220.353†	-53.0	2.8	0.3782 ug/L	0.3782 ppb	23:26:15
1	S 181.975 Axial†	38.4	4.8	7.7827 ug/L	7.7827 ppb	23:26:15
1	Sb 206.836†	33.6	-3.2	-1.1756 ug/L	-1.1756 ppb	23:26:15
1	Se 196.026†	-20.6	0.0	-0.0530 ug/L	-0.0530 ppb	23:26:15
1	Si 251.611†	615.2	53.7	1.8294 ug/L	1.8294 ppb	23:26:15
1	Sn 189.927†	22.5	7.6	1.5262 ug/L	1.5262 ppb	23:26:15
1	Ti 334.940†	-1326.1	-74.4	-0.1086 ug/L	-0.1086 ppb	23:25:55
1	Tl 190.801†	-30.0	-0.5	-0.1798 ug/L	-0.1798 ppb	23:26:15
1	U 409.014†	-2737.1	-141.8	-3.9172 ug/L	-3.9172 ppb	23:25:50
1	V 292.402†	-1356.0	75.8	0.5528 ug/L	0.5528 ppb	23:25:55
1	Zn 213.857†	571.2	-53.8	-0.5747 ug/L	-0.5747 ppb	23:26:15
1	SiO2†	603.3	35.1	2.5495 ug/L	2.5495 ppb	23:27:21
2	Sc Radial	4291.5	4291.5	97.6 %		23:24:58
2	Y RADIAL	4678.9	4678.9	96.97 %		23:24:58
2	Al 396.153Radial†	-111.2	-9.7	-8.4719 ug/L	-8.4719 ppb	23:24:58
2	Ca 317.933Radial†	21.9	2.7	5.2871 ug/L	5.2871 ppb	23:25:18
2	Fe 238.204 Radial†	11.0	0.1	1.3304 ug/L	1.3304 ppb	23:25:18
2	K 766.490 Radial†	2548.1	122.4	23.535 ug/L	23.535 ppb	23:24:58
2	Mg 279.077 IEC†	4.0	1.2	54.013 ug/L	54.013 ppb	23:25:18
2	Na 589.592 Radial†	-665.0	12.9	3.7070 ug/L	3.7070 ppb	23:24:58
2	Sr 421.552†	15.1	1.9	0.0125 ug/L	0.0125 ppb	23:24:58
2	Sc 361.383	923966.6	923966.6	105.17 %		23:26:20
2	Y 371.029	775482.3	775482.3	104.89 %		23:26:20
2	Ag 328.068†	342.7	-117.1	-0.5605 ug/L	-0.5605 ppb	23:26:25
2	As 188.979†	-25.9	-0.1	-0.0658 ug/L	-0.0658 ppb	23:26:45
2	B 249.677†	-343.3	141.7	3.5327 ug/L	3.5327 ppb	23:26:45
2	Ba 233.527†	0.9	8.0	0.0662 ug/L	0.0662 ppb	23:26:45
2	Be 313.107†	-3872.9	169.8	0.0669 ug/L	0.0669 ppb	23:26:25
2	Cd 226.502†	-182.2	4.4	0.0567 ug/L	0.0567 ppb	23:26:45
2	Co 228.616†	-71.4	-16.9	-0.3885 ug/L	-0.3885 ppb	23:26:45
2	Cr 267.716†	82.4	-1.0	-0.0122 ug/L	-0.0122 ppb	23:26:45
2	Cu 324.752†	6007.2	-491.1	-1.5048 ug/L	-1.5048 ppb	23:26:25
2	Mn 257.610†	484.8	11.2	0.0113 ug/L	0.0113 ppb	23:26:45
2	Mo 202.031†	14.1	5.9	0.4614 ug/L	0.4614 ppb	23:26:45
2	Ni 231.604†	69.1	-7.3	-0.2034 ug/L	-0.2034 ppb	23:26:45

2	P 214.914†	206.6	0.5	0.5908 ug/L	0.5908 ppb	23:26:45
2	Pb 220.353†	-67.4	-11.6	-1.5696 ug/L	-1.5696 ppb	23:26:45
2	S 181.975 Axial†	39.8	6.7	10.740 ug/L	10.740 ppb	23:26:45
2	Sb 206.836†	39.2	2.6	0.9696 ug/L	0.9696 ppb	23:26:45
2	Se 196.026†	-22.1	-1.7	-1.2326 ug/L	-1.2326 ppb	23:26:45
2	Si 251.611†	610.9	57.6	1.9553 ug/L	1.9553 ppb	23:26:45
2	Sn 189.927†	10.0	-4.0	-0.8091 ug/L	-0.8091 ppb	23:26:45
2	Ti 334.940†	-1316.9	-82.9	-0.1349 ug/L	-0.1349 ppb	23:26:25
2	Tl 190.801†	-28.6	0.4	0.1405 ug/L	0.1405 ppb	23:26:45
2	U 409.014†	-2587.7	-35.2	-0.9730 ug/L	-0.9730 ppb	23:26:20
2	V 292.402†	-1448.8	-30.1	-0.2159 ug/L	-0.2159 ppb	23:26:25
2	Zn 213.857†	552.6	-64.0	-0.6899 ug/L	-0.6899 ppb	23:26:45
2	SiO2†	608.6	48.0	3.4728 ug/L	3.4728 ppb	23:27:26
3	Sc Radial	4255.0	4255.0	96.8 %		23:25:23
3	Y RADIAL	4684.1	4684.1	97.08 %		23:25:23
3	Al 396.153Radial†	-97.7	3.3	2.8669 ug/L	2.8669 ppb	23:25:23
3	Ca 317.933Radial†	21.7	2.6	5.1675 ug/L	5.1675 ppb	23:25:43
3	Fe 238.204 Radial†	13.3	2.6	32.093 ug/L	32.093 ppb	23:25:43
3	K 766.490 Radial†	2711.3	313.4	60.247 ug/L	60.247 ppb	23:25:23
3	Mg 279.077 IEC†	5.4	2.7	123.09 ug/L	123.09 ppb	23:25:43
3	Na 589.592 Radial†	-681.0	-9.4	-2.7213 ug/L	-2.7213 ppb	23:25:23
3	Sr 421.552†	8.6	-4.6	-0.0296 ug/L	-0.0296 ppb	23:25:23
3	Sc 361.383	890774.5	890774.5	101.39 %		23:26:51
3	Y 371.029	748463.2	748463.2	101.23 %		23:26:51
3	Ag 328.068†	321.8	-125.6	-0.5883 ug/L	-0.5883 ppb	23:26:56
3	As 188.979†	-19.6	5.1	2.5299 ug/L	2.5299 ppb	23:27:16
3	B 249.677†	-353.5	119.4	2.9711 ug/L	2.9711 ppb	23:27:16
3	Ba 233.527†	6.7	13.8	0.1150 ug/L	0.1150 ppb	23:27:16
3	Be 313.107†	-3936.9	-30.6	-0.0124 ug/L	-0.0124 ppb	23:26:56
3	Cd 226.502†	-190.6	-10.4	-0.1388 ug/L	-0.1388 ppb	23:27:16
3	Co 228.616†	-47.8	3.9	0.0915 ug/L	0.0915 ppb	23:27:16
3	Cr 267.716†	59.3	-20.9	-0.2474 ug/L	-0.2474 ppb	23:27:16
3	Cu 324.752†	5985.6	-299.6	-0.9128 ug/L	-0.9128 ppb	23:26:56
3	Mn 257.610†	481.6	25.3	0.0284 ug/L	0.0284 ppb	23:27:16
3	Mo 202.031†	11.1	3.4	0.2656 ug/L	0.2656 ppb	23:27:16
3	Ni 231.604†	63.7	-10.2	-0.2826 ug/L	-0.2826 ppb	23:27:16
3	P 214.914†	198.5	-0.3	-0.0183 ug/L	-0.0183 ppb	23:27:16
3	Pb 220.353†	-53.8	-0.6	-0.0775 ug/L	-0.0775 ppb	23:27:16
3	S 181.975 Axial†	40.3	8.5	13.742 ug/L	13.742 ppb	23:27:16
3	Sb 206.836†	42.7	7.4	2.7882 ug/L	2.7882 ppb	23:27:16
3	Se 196.026†	-27.7	-7.9	-5.6596 ug/L	-5.6596 ppb	23:27:16
3	Si 251.611†	592.9	61.5	2.0914 ug/L	2.0914 ppb	23:27:16
3	Sn 189.927†	14.3	0.6	0.1171 ug/L	0.1171 ppb	23:27:16
3	Ti 334.940†	-1270.9	-84.1	-0.1398 ug/L	-0.1398 ppb	23:26:56
3	Tl 190.801†	-24.2	3.7	1.2724 ug/L	1.2724 ppb	23:27:16
3	U 409.014†	-2713.6	-251.0	-6.9451 ug/L	-6.9451 ppb	23:26:51
3	V 292.402†	-1437.0	-69.7	-0.5248 ug/L	-0.5248 ppb	23:26:56
3	Zn 213.857†	576.7	-20.7	-0.2254 ug/L	-0.2254 ppb	23:27:16
3	SiO2†	661.8	122.0	8.8507 ug/L	8.8507 ppb	23:27:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	917159.2	104.40 %	2.701			2.59%
Sc Radial	4437.0	101 %	6.5			6.41%
Y 371.029	770055.0	104.15 %	2.631			2.53%
Y RADIAL	4862.0	100.8 %	6.48			6.43%
Ag 328.068†	-124.5	-0.5928 ug/L	0.03472	-0.5928 ppb	0.03472	5.86%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.3	-4.6470 ug/L	6.50753	-4.6470 ppb	6.50753	140.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.9	0.9401 ug/L	1.39292	0.9401 ppb	1.39292	148.17%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	134.1	3.3435 ug/L	0.32249	3.3435 ppb	0.32249	9.65%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.5	0.0957 ug/L	0.02594	0.0957 ppb	0.02594	27.11%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	103.4	0.0406 ug/L	0.04593	0.0406 ppb	0.04593	113.11%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.6	5.1779 ug/L	0.10442	5.1779 ppb	0.10442	2.02%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.3	0.0026 ug/L	0.12361	0.0026 ppb	0.12361	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.3	0.0071 ug/L	0.36092	0.0071 ppb	0.36092	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-17.3	-0.2073 ug/L	0.17846	-0.2073 ppb	0.17846	86.09%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-402.6	-1.2317 ug/L	0.29865	-1.2317 ppb	0.29865	24.25%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.2	2.4882 ug/L	29.04291	2.4882 ppb	29.04291	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	127.9	24.589 ug/L	35.1424	24.589 ppb	35.1424	142.92%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	30.356 ug/L	106.5480	30.356 ppb	106.5480	350.99%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	5.5	0.0056 ug/L	0.02620	0.0056 ppb	0.02620	471.40%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.3	0.2558 ug/L	0.21071	0.2558 ppb	0.21071	82.38%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	45.5	13.127 ug/L	22.1182	13.127 ppb	22.1182	168.49%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-9.7	-0.2695 ug/L	0.06060	-0.2695 ppb	0.06060	22.49%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.1	-2.4855 ug/L	4.81050	-2.4855 ppb	4.81050	193.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-3.1	-0.4230 ug/L	1.01879	-0.4230 ppb	1.01879	240.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	6.7	10.755 ug/L	2.9798	10.755 ppb	2.9798	27.71%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.3	0.8607 ug/L	1.98413	0.8607 ppb	1.98413	230.52%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.2	-2.3151 ug/L	2.95588	-2.3151 ppb	2.95588	127.68%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	57.6	1.9587 ug/L	0.13103	1.9587 ppb	0.13103	6.69%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.4	0.2780 ug/L	1.17594	0.2780 ppb	1.17594	422.97%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	1.0	0.0067 ug/L	0.03379	0.0067 ppb	0.03379	504.78%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-80.4	-0.1278 ug/L	0.01678	-0.1278 ppb	0.01678	13.13%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.2	0.4110 ug/L	0.76298	0.4110 ppb	0.76298	185.62%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-142.6	-3.9451 ug/L	2.98613	-3.9451 ppb	2.98613	75.69%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-8.0	-0.0626 ug/L	0.55494	-0.0626 ppb	0.55494	886.12%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-46.2	-0.4967 ug/L	0.24187	-0.4967 ppb	0.24187	48.70%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	68.4	4.9577 ug/L	3.40294	4.9577 ppb	3.40294	68.64%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 50

Sample ID: 246443002|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 2/22/2010 23:29:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246443002|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4365.9	4365.9	99.3 %		23:31:34
1	Y RADIAL	5347.7	5347.7	110.8 %		23:31:34
1	Al 396.153Radial†	14309.8	14511.9	12689 ug/L	12689 ppb	23:31:34
1	Ca 317.933Radial†	1820.7	1813.4	3601.1 ug/L	3601.1 ppb	23:31:54
1	Fe 238.204 Radial†	3444.7	3457.2	41924 ug/L	41924 ppb	23:31:54
1	K 766.490 Radial†	15380.0	12997.6	2496.9 ug/L	2496.9 ppb	23:31:34
1	Mg 279.077 IEC†	56.4	54.0	2404.5 ug/L	2404.5 ppb	23:31:54
1	Na 589.592 Radial†	489.1	1186.5	342.24 ug/L	342.24 ppb	23:31:34
1	Sr 421.552†	4215.3	4230.6	27.360 ug/L	27.360 ppb	23:31:34
1	Sc 361.383	953212.0	953212.0	108.50 %		23:32:51
1	Y 371.029	885532.8	885532.8	119.77 %		23:32:51
1	Ag 328.068†	-2425.6	-2678.5	0.2447 ug/L	0.2447 ppb	23:32:51
1	As 188.979†	-35.3	-8.1	16.179 ug/L	16.179 ppb	23:33:12
1	B 249.677†	-32.6	438.1	4.0789 ug/L	4.0789 ppb	23:32:51
1	Ba 233.527†	22680.8	20910.9	176.14 ug/L	176.14 ppb	23:32:51
1	Be 313.107†	-6336.2	-1987.6	1.9167 ug/L	1.9167 ppb	23:32:51
1	Cd 226.502†	203.9	365.6	0.3736 ug/L	0.3736 ppb	23:33:12
1	Co 228.616†	474.5	488.4	8.2591 ug/L	8.2591 ppb	23:33:12
1	Cr 267.716†	2971.4	2659.2	36.227 ug/L	36.227 ppb	23:33:12
1	Cu 324.752†	12230.9	5069.7	17.818 ug/L	17.818 ppb	23:32:51
1	Mn 257.610†	1268546.6	1168705.9	1404.5 ug/L	1404.5 ppb	23:32:51
1	Mo 202.031†	37.5	27.0	5.4117 ug/L	5.4117 ppb	23:33:12
1	Ni 231.604†	997.9	846.7	23.499 ug/L	23.499 ppb	23:33:12
1	P 214.914†	932.4	663.4	410.28 ug/L	410.28 ppb	23:33:12
1	Pb 220.353†	323.3	350.5	45.706 ug/L	45.706 ppb	23:33:12
1	S 181.975 Axial†	171.3	126.7	201.38 ug/L	201.38 ppb	23:33:12
1	Sb 206.836†	34.3	-3.2	-5.7855 ug/L	-5.7855 ppb	23:33:12
1	Se 196.026†	-191.3	-157.0	27.397 ug/L	27.397 ppb	23:33:12
1	Si 251.611†	281932.8	259320.1	8835.0 ug/L	8835.0 ppb	23:32:51
1	Sn 189.927†	7.7	-6.4	-3.0494 ug/L	-3.0494 ppb	23:33:12
1	Ti 334.940†	811944.8	749498.0	1191.0 ug/L	1191.0 ppb	23:32:51
1	Tl 190.801†	-102.2	-66.6	-6.4317 ug/L	-6.4317 ppb	23:33:12
1	U 409.014†	-6837.4	-3876.4	-112.07 ug/L	-112.07 ppb	23:32:51
1	V 292.402†	3992.3	5026.9	29.479 ug/L	29.479 ppb	23:33:12
1	Zn 213.857†	21419.3	19151.6	200.84 ug/L	200.84 ppb	23:32:51
1	SiO2†	279800.6	257347.5	18679 ug/L	18679 ppb	23:34:09
2	Sc Radial	4394.2	4394.2	100.0 %		23:31:59
2	Y RADIAL	5382.4	5382.4	111.6 %		23:31:59
2	Al 396.153Radial†	14367.8	14477.2	12659 ug/L	12659 ppb	23:31:59
2	Ca 317.933Radial†	1809.6	1790.4	3555.4 ug/L	3555.4 ppb	23:32:19
2	Fe 238.204 Radial†	3428.3	3418.4	41453 ug/L	41453 ppb	23:32:19
2	K 766.490 Radial†	15403.3	12921.2	2482.2 ug/L	2482.2 ppb	23:31:59
2	Mg 279.077 IEC†	58.1	55.2	2462.1 ug/L	2462.1 ppb	23:32:19
2	Na 589.592 Radial†	495.4	1189.6	343.13 ug/L	343.13 ppb	23:31:59
2	Sr 421.552†	4210.8	4198.8	27.154 ug/L	27.154 ppb	23:31:59
2	Sc 361.383	940219.8	940219.8	107.02 %		23:33:17
2	Y 371.029	874115.2	874115.2	118.23 %		23:33:17
2	Ag 328.068†	-2428.1	-2711.8	-0.0594 ug/L	-0.0594 ppb	23:33:17
2	As 188.979†	-32.2	-5.7	17.260 ug/L	17.260 ppb	23:33:37
2	B 249.677†	-18.8	450.6	4.4661 ug/L	4.4661 ppb	23:33:17
2	Ba 233.527†	22367.4	20906.9	176.10 ug/L	176.10 ppb	23:33:17
2	Be 313.107†	-6365.1	-2095.3	1.8784 ug/L	1.8784 ppb	23:33:17
2	Cd 226.502†	191.1	356.2	0.3019 ug/L	0.3019 ppb	23:33:37
2	Co 228.616†	481.9	501.3	8.5603 ug/L	8.5603 ppb	23:33:37
2	Cr 267.716†	2935.7	2663.7	36.235 ug/L	36.235 ppb	23:33:37
2	Cu 324.752†	12114.4	5116.6	17.936 ug/L	17.936 ppb	23:33:17
2	Mn 257.610†	1252850.1	1170194.9	1406.3 ug/L	1406.3 ppb	23:33:17
2	Mo 202.031†	33.0	23.3	5.0829 ug/L	5.0829 ppb	23:33:37
2	Ni 231.604†	973.6	836.7	23.222 ug/L	23.222 ppb	23:33:37

2	P 214.914†	928.4	671.5	416.07 ug/L	416.07 ppb	23:33:37
2	Pb 220.353†	319.9	351.5	45.881 ug/L	45.881 ppb	23:33:37
2	S 181.975 Axial†	158.3	116.7	185.25 ug/L	185.25 ppb	23:33:37
2	Sb 206.836†	50.8	12.7	0.2202 ug/L	0.2202 ppb	23:33:37
2	Se 196.026†	-197.4	-165.1	19.928 ug/L	19.928 ppb	23:33:37
2	Si 251.611†	278421.7	259629.8	8845.6 ug/L	8845.6 ppb	23:33:17
2	Sn 189.927†	18.4	3.7	-1.0098 ug/L	-1.0098 ppb	23:33:37
2	Ti 334.940†	802147.1	750683.8	1192.8 ug/L	1192.8 ppb	23:33:17
2	Tl 190.801†	-92.4	-58.8	-3.7145 ug/L	-3.7145 ppb	23:33:37
2	U 409.014†	-6656.3	-3794.3	-109.75 ug/L	-109.75 ppb	23:33:17
2	V 292.402†	3972.6	5059.4	29.786 ug/L	29.786 ppb	23:33:37
2	Zn 213.857†	21115.1	19140.1	200.79 ug/L	200.79 ppb	23:33:17
2	SiO2†	276935.5	258233.8	18744 ug/L	18744 ppb	23:34:14
3	Sc Radial	4431.0	4431.0	101 %		23:32:24
3	Y RADIAL	5395.8	5395.8	111.8 %		23:32:24
3	Al 396.153Radial†	14432.4	14421.8	12610 ug/L	12610 ppb	23:32:24
3	Ca 317.933Radial†	1797.1	1763.0	3501.0 ug/L	3501.0 ppb	23:32:44
3	Fe 238.204 Radial†	3432.4	3394.0	41158 ug/L	41158 ppb	23:32:44
3	K 766.490 Radial†	15359.7	12749.9	2449.3 ug/L	2449.3 ppb	23:32:24
3	Mg 279.077 IEC†	59.5	56.1	2503.0 ug/L	2503.0 ppb	23:32:44
3	Na 589.592 Radial†	422.6	1113.3	321.12 ug/L	321.12 ppb	23:32:24
3	Sr 421.552†	4227.6	4180.4	27.036 ug/L	27.036 ppb	23:32:24
3	Sc 361.383	950947.0	950947.0	108.24 %		23:33:43
3	Y 371.029	883534.7	883534.7	119.50 %		23:33:43
3	Ag 328.068†	-2400.3	-2660.5	0.0966 ug/L	0.0966 ppb	23:33:43
3	As 188.979†	-34.0	-6.9	16.535 ug/L	16.535 ppb	23:34:03
3	B 249.677†	-90.0	384.9	2.8794 ug/L	2.8794 ppb	23:33:43
3	Ba 233.527†	22378.9	20681.7	174.20 ug/L	174.20 ppb	23:33:43
3	Be 313.107†	-6293.7	-1962.2	1.9203 ug/L	1.9203 ppb	23:33:43
3	Cd 226.502†	203.1	365.3	0.4495 ug/L	0.4495 ppb	23:34:03
3	Co 228.616†	459.6	475.6	7.9812 ug/L	7.9812 ppb	23:34:03
3	Cr 267.716†	2939.1	2635.9	35.872 ug/L	35.872 ppb	23:34:03
3	Cu 324.752†	12172.5	5042.6	17.694 ug/L	17.694 ppb	23:33:43
3	Mn 257.610†	1260097.1	1163684.5	1398.4 ug/L	1398.4 ppb	23:33:43
3	Mo 202.031†	36.9	26.5	5.3122 ug/L	5.3122 ppb	23:34:03
3	Ni 231.604†	1011.1	861.0	23.898 ug/L	23.898 ppb	23:34:03
3	P 214.914†	939.7	672.2	416.77 ug/L	416.77 ppb	23:34:03
3	Pb 220.353†	321.7	349.7	45.660 ug/L	45.660 ppb	23:34:03
3	S 181.975 Axial†	165.4	121.6	193.16 ug/L	193.16 ppb	23:34:03
3	Sb 206.836†	49.4	10.9	-0.4869 ug/L	-0.4869 ppb	23:34:03
3	Se 196.026†	-191.0	-157.1	24.757 ug/L	24.757 ppb	23:34:03
3	Si 251.611†	279797.6	257966.3	8788.9 ug/L	8788.9 ppb	23:33:43
3	Sn 189.927†	0.8	-12.8	-4.3159 ug/L	-4.3159 ppb	23:34:03
3	Ti 334.940†	808089.8	747718.9	1188.1 ug/L	1188.1 ppb	23:33:43
3	Tl 190.801†	-96.3	-61.4	-4.6830 ug/L	-4.6830 ppb	23:34:03
3	U 409.014†	-6816.6	-3872.2	-111.87 ug/L	-111.87 ppb	23:33:43
3	V 292.402†	3974.9	5019.6	29.542 ug/L	29.542 ppb	23:34:03
3	Zn 213.857†	21197.5	18993.7	199.24 ug/L	199.24 ppb	23:33:43
3	SiO2†	275190.5	253702.6	18415 ug/L	18415 ppb	23:34:19

Mean Data: 246443002|950496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	948126.3	107.92 %	0.790			0.73%
Sc Radial	4397.0	100 %	0.7			0.74%
Y 371.029	881060.9	119.17 %	0.825			0.69%
Y RADIAL	5375.3	111.4 %	0.51			0.46%
Ag 328.068†	-2683.6	0.0939 ug/L	0.15208	0.0939 ppb	0.15208	161.88%
Al 396.153Radial†	14470.3	12653 ug/L	39.7	12653 ppb	39.7	0.31%
As 188.979†	-6.9	16.658 ug/L	0.5513	16.658 ppb	0.5513	3.31%
B 249.677†	424.5	3.8081 ug/L	0.82728	3.8081 ppb	0.82728	21.72%
Ba 233.527†	20833.2	175.48 ug/L	1.106	175.48 ppb	1.106	0.63%
Be 313.107†	-2015.0	1.9051 ug/L	0.02324	1.9051 ppb	0.02324	1.22%
Ca 317.933Radial†	1789.0	3552.5 ug/L	50.09	3552.5 ppb	50.09	1.41%
Cd 226.502†	362.3	0.3750 ug/L	0.07379	0.3750 ppb	0.07379	19.68%
Co 228.616†	488.4	8.2669 ug/L	0.28963	8.2669 ppb	0.28963	3.50%
Cr 267.716†	2653.0	36.111 ug/L	0.2072	36.111 ppb	0.2072	0.57%
Cu 324.752†	5076.3	17.816 ug/L	0.1207	17.816 ppb	0.1207	0.68%
Fe 238.204 Radial†	3423.2	41512 ug/L	386.4	41512 ppb	386.4	0.93%
K 766.490 Radial†	12889.6	2476.2 ug/L	24.36	2476.2 ppb	24.36	0.98%

Mg 279.077 IEC†	55.1	2456.5 ug/L	49.48	2456.5 ppb	49.48	2.01%
Mn 257.610†	1167528.5	1403.1 ug/L	4.11	1403.1 ppb	4.11	0.29%
Mo 202.031†	25.6	5.2689 ug/L	0.16862	5.2689 ppb	0.16862	3.20%
Na 589.592 Radial†	1163.1	335.50 ug/L	12.460	335.50 ppb	12.460	3.71%
Ni 231.604†	848.1	23.539 ug/L	0.3399	23.539 ppb	0.3399	1.44%
P 214.914†	669.0	414.37 ug/L	3.561	414.37 ppb	3.561	0.86%
Pb 220.353†	350.5	45.749 ug/L	0.1166	45.749 ppb	0.1166	0.25%
S 181.975 Axial†	121.7	193.26 ug/L	8.068	193.26 ppb	8.068	4.17%
Sb 206.836†	6.8	-2.0174 ug/L	3.28238	-2.0174 ppb	3.28238	162.71%
Se 196.026†	-159.7	24.027 ug/L	3.7877	24.027 ppb	3.7877	15.76%
Si 251.611†	258972.1	8823.2 ug/L	30.14	8823.2 ppb	30.14	0.34%
Sn 189.927†	-5.2	-2.7917 ug/L	1.66802	-2.7917 ppb	1.66802	59.75%
Sr 421.552†	4203.3	27.183 ug/L	0.1641	27.183 ppb	0.1641	0.60%
Ti 334.940†	749300.2	1190.6 ug/L	2.38	1190.6 ppb	2.38	0.20%
Tl 190.801†	-62.3	-4.9431 ug/L	1.37713	-4.9431 ppb	1.37713	27.86%
U 409.014†	-3847.6	-111.23 ug/L	1.287	-111.23 ppb	1.287	1.16%
V 292.402†	5035.3	29.602 ug/L	0.1623	29.602 ppb	0.1623	0.55%
Zn 213.857†	19095.1	200.29 ug/L	0.907	200.29 ppb	0.907	0.45%
SiO2†	256428.0	18613 ug/L	174.3	18613 ppb	174.3	0.94%

Sequence No.: 51

Sample ID: 246443003|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 76

Date Collected: 2/22/2010 23:36:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246443003|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4384.2	4384.2	99.7 %		23:38:23
1	Y RADIAL	5573.6	5573.6	115.5 %		23:38:23
1	Al 396.153Radial†	30317.4	30501.8	26670 ug/L	26670 ppb	23:38:23
1	Ca 317.933Radial†	4046.9	4037.9	8018.4 ug/L	8018.4 ppb	23:38:23
1	Fe 238.204 Radial†	5420.5	5423.7	65772 ug/L	65772 ppb	23:38:23
1	K 766.490 Radial†	27088.8	24672.9	4739.7 ug/L	4739.7 ppb	23:38:23
1	Mg 279.077 IEC†	132.6	130.1	5833.9 ug/L	5833.9 ppb	23:38:43
1	Na 589.592 Radial†	733.0	1429.0	412.20 ug/L	412.20 ppb	23:38:23
1	Sr 421.552†	10025.0	10038.0	64.921 ug/L	64.921 ppb	23:38:23
1	Sc 361.383	949216.4	949216.4	108.05 %		23:39:41
1	Y 371.029	915624.9	915624.9	123.84 %		23:39:41
1	Ag 328.068†	-3945.6	-4094.8	0.9489 ug/L	0.9489 ppb	23:39:46
1	As 188.979†	-44.2	-16.4	21.806 ug/L	21.806 ppb	23:40:06
1	B 249.677†	114.0	573.6	3.5588 ug/L	3.5588 ppb	23:39:46
1	Ba 233.527†	50735.7	46964.5	394.73 ug/L	394.73 ppb	23:39:46
1	Be 313.107†	-1042.8	2887.0	4.9300 ug/L	4.9300 ppb	23:39:46
1	Cd 226.502†	432.4	577.8	0.6447 ug/L	0.6447 ppb	23:40:06
1	Co 228.616†	894.9	879.3	16.042 ug/L	16.042 ppb	23:40:06
1	Cr 267.716†	4119.5	3733.4	51.561 ug/L	51.561 ppb	23:40:06
1	Cu 324.752†	19651.8	11985.4	40.309 ug/L	40.309 ppb	23:39:46
1	Mn 257.610†	1850215.5	1711978.9	2057.8 ug/L	2057.8 ppb	23:39:41
1	Mo 202.031†	24.6	15.3	6.3950 ug/L	6.3950 ppb	23:40:06
1	Ni 231.604†	1659.6	1463.0	40.605 ug/L	40.605 ppb	23:40:06
1	P 214.914†	1017.3	745.5	445.30 ug/L	445.30 ppb	23:40:06
1	Pb 220.353†	792.3	785.8	105.14 ug/L	105.14 ppb	23:40:06
1	S 181.975 Axial†	164.2	120.8	189.23 ug/L	189.23 ppb	23:40:06
1	Sb 206.836†	48.3	10.0	-2.9903 ug/L	-2.9903 ppb	23:40:06
1	Se 196.026†	-296.7	-255.2	37.002 ug/L	37.002 ppb	23:40:06
1	Si 251.611†	338297.2	312580.7	10650 ug/L	10650 ppb	23:39:46
1	Sn 189.927†	-12.5	-25.0	-7.3885 ug/L	-7.3885 ppb	23:40:06
1	Ti 334.940†	1133501.8	1050258.4	1669.1 ug/L	1669.1 ppb	23:39:41
1	Tl 190.801†	-114.5	-78.4	-3.5088 ug/L	-3.5088 ppb	23:40:06
1	U 409.014†	-8976.2	-5882.5	-170.31 ug/L	-170.31 ppb	23:39:41
1	V 292.402†	10229.0	10814.7	68.027 ug/L	68.027 ppb	23:39:46
1	Zn 213.857†	27618.3	24972.1	260.13 ug/L	260.13 ppb	23:39:46
1	SiO2†	350939.5	324274.1	23537 ug/L	23537 ppb	23:41:14
2	Sc Radial	4332.8	4332.8	98.6 %		23:38:48
2	Y RADIAL	5500.9	5500.9	114.0 %		23:38:48
2	Al 396.153Radial†	29960.6	30500.3	26669 ug/L	26669 ppb	23:38:48
2	Ca 317.933Radial†	3993.2	4031.5	8005.7 ug/L	8005.7 ppb	23:38:48
2	Fe 238.204 Radial†	5349.7	5416.3	65682 ug/L	65682 ppb	23:38:48
2	K 766.490 Radial†	26912.1	24815.6	4767.2 ug/L	4767.2 ppb	23:38:48
2	Mg 279.077 IEC†	131.1	130.2	5837.6 ug/L	5837.6 ppb	23:39:08
2	Na 589.592 Radial†	687.9	1391.9	401.49 ug/L	401.49 ppb	23:38:48
2	Sr 421.552†	9928.5	10059.2	65.058 ug/L	65.058 ppb	23:38:48
2	Sc 361.383	935133.4	935133.4	106.44 %		23:40:12
2	Y 371.029	902683.7	902683.7	122.09 %		23:40:12
2	Ag 328.068†	-3965.7	-4168.6	0.5789 ug/L	0.5789 ppb	23:40:17
2	As 188.979†	-36.8	-10.1	24.838 ug/L	24.838 ppb	23:40:37
2	B 249.677†	212.1	667.4	5.9107 ug/L	5.9107 ppb	23:40:17
2	Ba 233.527†	52084.4	48938.7	411.24 ug/L	411.24 ppb	23:40:17
2	Be 313.107†	-1092.6	2825.7	4.8987 ug/L	4.8987 ppb	23:40:17
2	Cd 226.502†	431.8	583.3	0.7247 ug/L	0.7247 ppb	23:40:37
2	Co 228.616†	901.5	898.0	16.490 ug/L	16.490 ppb	23:40:37
2	Cr 267.716†	4083.4	3756.8	51.840 ug/L	51.840 ppb	23:40:37
2	Cu 324.752†	19978.6	12566.3	42.085 ug/L	42.085 ppb	23:40:17
2	Mn 257.610†	1822420.8	1711655.6	2057.4 ug/L	2057.4 ppb	23:40:12
2	Mo 202.031†	18.7	10.1	5.9818 ug/L	5.9818 ppb	23:40:37
2	Ni 231.604†	1635.9	1463.9	40.628 ug/L	40.628 ppb	23:40:37

2	P 214.914†	1004.7	747.9	446.61 ug/L	446.61 ppb	23:40:37
2	Pb 220.353†	782.5	787.6	105.40 ug/L	105.40 ppb	23:40:37
2	S 181.975 Axial†	164.9	123.7	193.93 ug/L	193.93 ppb	23:40:37
2	Sb 206.836†	52.6	14.7	-1.2013 ug/L	-1.2013 ppb	23:40:37
2	Se 196.026†	-289.9	-253.0	38.302 ug/L	38.302 ppb	23:40:37
2	Si 251.611†	346919.8	325396.6	11086 ug/L	11086 ppb	23:40:17
2	Sn 189.927†	-9.8	-22.7	-6.9273 ug/L	-6.9273 ppb	23:40:37
2	Ti 334.940†	1114596.1	1048296.2	1666.0 ug/L	1666.0 ppb	23:40:12
2	Tl 190.801†	-109.8	-75.6	-2.5850 ug/L	-2.5850 ppb	23:40:37
2	U 409.014†	-8818.4	-5859.3	-169.66 ug/L	-169.66 ppb	23:40:12
2	V 292.402†	10490.6	11203.1	70.896 ug/L	70.896 ppb	23:40:17
2	Zn 213.857†	28189.6	25893.7	270.11 ug/L	270.11 ppb	23:40:17
2	SiO2†	350833.7	329066.2	23885 ug/L	23885 ppb	23:41:19
3	Sc Radial	4377.4	4377.4	99.6 %		23:39:14
3	Y RADIAL	5597.3	5597.3	116.0 %		23:39:14
3	Al 396.153Radial†	30539.6	30771.6	26906 ug/L	26906 ppb	23:39:14
3	Ca 317.933Radial†	4061.3	4058.6	8059.5 ug/L	8059.5 ppb	23:39:14
3	Fe 238.204 Radial†	5450.6	5462.2	66239 ug/L	66239 ppb	23:39:14
3	K 766.490 Radial†	27319.8	24946.6	4792.4 ug/L	4792.4 ppb	23:39:14
3	Mg 279.077 IEC†	135.7	133.5	5985.2 ug/L	5985.2 ppb	23:39:34
3	Na 589.592 Radial†	645.3	1342.1	387.12 ug/L	387.12 ppb	23:39:14
3	Sr 421.552†	10097.8	10126.6	65.494 ug/L	65.494 ppb	23:39:14
3	Sc 361.383	945121.8	945121.8	107.58 %		23:40:43
3	Y 371.029	913163.7	913163.7	123.51 %		23:40:43
3	Ag 328.068†	-4110.8	-4264.1	0.2822 ug/L	0.2822 ppb	23:40:48
3	As 188.979†	-27.3	-0.9	29.489 ug/L	29.489 ppb	23:41:08
3	B 249.677†	102.5	563.4	3.2287 ug/L	3.2287 ppb	23:40:48
3	Ba 233.527†	51631.7	48000.8	403.41 ug/L	403.41 ppb	23:40:48
3	Be 313.107†	-1164.7	2769.6	4.8710 ug/L	4.8710 ppb	23:40:48
3	Cd 226.502†	448.7	594.7	0.8154 ug/L	0.8154 ppb	23:41:08
3	Co 228.616†	900.0	887.7	16.245 ug/L	16.245 ppb	23:41:08
3	Cr 267.716†	4124.0	3754.1	51.856 ug/L	51.856 ppb	23:41:08
3	Cu 324.752†	19837.4	12236.7	41.102 ug/L	41.102 ppb	23:40:48
3	Mn 257.610†	1836127.9	1706302.7	2051.0 ug/L	2051.0 ppb	23:40:43
3	Mo 202.031†	19.0	10.1	6.0276 ug/L	6.0276 ppb	23:41:08
3	Ni 231.604†	1642.3	1453.5	40.342 ug/L	40.342 ppb	23:41:08
3	P 214.914†	1030.0	761.4	455.47 ug/L	455.47 ppb	23:41:08
3	Pb 220.353†	802.5	798.4	106.86 ug/L	106.86 ppb	23:41:08
3	S 181.975 Axial†	166.2	123.3	193.21 ug/L	193.21 ppb	23:41:08
3	Sb 206.836†	52.7	14.3	-1.3676 ug/L	-1.3676 ppb	23:41:08
3	Se 196.026†	-299.4	-259.0	35.851 ug/L	35.851 ppb	23:41:08
3	Si 251.611†	343984.3	319223.6	10876 ug/L	10876 ppb	23:40:48
3	Sn 189.927†	-8.6	-21.5	-6.6951 ug/L	-6.6951 ppb	23:41:08
3	Ti 334.940†	1124873.0	1046782.6	1663.5 ug/L	1663.5 ppb	23:40:43
3	Tl 190.801†	-117.9	-82.0	-4.8458 ug/L	-4.8458 ppb	23:41:08
3	U 409.014†	-8753.9	-5711.8	-165.65 ug/L	-165.65 ppb	23:40:43
3	V 292.402†	10380.1	10996.2	69.306 ug/L	69.306 ppb	23:40:48
3	Zn 213.857†	27948.8	25390.0	264.58 ug/L	264.58 ppb	23:40:48
3	SiO2†	349901.6	324716.5	23569 ug/L	23569 ppb	23:41:24

Mean Data: 246443003|950496|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	943157.2	107.36 %		0.825			0.77%
Sc Radial	4364.8	99.3 %		0.64			0.64%
Y 371.029	910490.8	123.15 %		0.929			0.75%
Y RADIAL	5557.2	115.2 %		1.04			0.90%
Ag 328.068†	-4175.8	0.6033 ug/L		0.33399	0.6033 ppb	0.33399	55.36%
Al 396.153Radial†	30591.2	26749 ug/L		136.6	26749 ppb	136.6	0.51%
As 188.979†	-9.1	25.378 ug/L		3.8696	25.378 ppb	3.8696	15.25%
B 249.677†	601.5	4.2328 ug/L		1.46253	4.2328 ppb	1.46253	34.55%
Ba 233.527†	47968.0	403.13 ug/L		8.256	403.13 ppb	8.256	2.05%
Be 313.107†	2827.4	4.8999 ug/L		0.02953	4.8999 ppb	0.02953	0.60%
Ca 317.933Radial†	4042.7	8027.9 ug/L		28.11	8027.9 ppb	28.11	0.35%
Cd 226.502†	585.3	0.7283 ug/L		0.08540	0.7283 ppb	0.08540	11.73%
Co 228.616†	888.3	16.259 ug/L		0.2242	16.259 ppb	0.2242	1.38%
Cr 267.716†	3748.1	51.752 ug/L		0.1656	51.752 ppb	0.1656	0.32%
Cu 324.752†	12262.8	41.165 ug/L		0.8895	41.165 ppb	0.8895	2.16%
Fe 238.204 Radial†	5434.1	65897 ug/L		299.0	65897 ppb	299.0	0.45%
K 766.490 Radial†	24811.7	4766.4 ug/L		26.32	4766.4 ppb	26.32	0.55%

Mg 279.077 IEC†	131.3	5885.5 ug/L	86.30	5885.5 ppb	86.30	1.47%
Mn 257.610†	1709979.0	2055.4 ug/L	3.79	2055.4 ppb	3.79	0.18%
Mo 202.031†	11.8	6.1348 ug/L	0.22650	6.1348 ppb	0.22650	3.69%
Na 589.592 Radial†	1387.7	400.27 ug/L	12.587	400.27 ppb	12.587	3.14%
Ni 231.604†	1460.1	40.525 ug/L	0.1592	40.525 ppb	0.1592	0.39%
P 214.914†	751.6	449.12 ug/L	5.530	449.12 ppb	5.530	1.23%
Pb 220.353†	790.6	105.80 ug/L	0.926	105.80 ppb	0.926	0.88%
S 181.975 Axial†	122.6	192.12 ug/L	2.528	192.12 ppb	2.528	1.32%
Sb 206.836†	13.0	-1.8531 ug/L	0.98835	-1.8531 ppb	0.98835	53.34%
Se 196.026†	-255.7	37.052 ug/L	1.2258	37.052 ppb	1.2258	3.31%
Si 251.611†	319067.0	10871 ug/L	218.4	10871 ppb	218.4	2.01%
Sn 189.927†	-23.1	-7.0036 ug/L	0.35290	-7.0036 ppb	0.35290	5.04%
Sr 421.552†	10074.6	65.158 ug/L	0.2992	65.158 ppb	0.2992	0.46%
Ti 334.940†	1048445.7	1666.2 ug/L	2.77	1666.2 ppb	2.77	0.17%
Tl 190.801†	-78.6	-3.6466 ug/L	1.13668	-3.6466 ppb	1.13668	31.17%
U 409.014†	-5817.9	-168.54 ug/L	2.528	-168.54 ppb	2.528	1.50%
V 292.402†	11004.7	69.410 ug/L	1.4375	69.410 ppb	1.4375	2.07%
Zn 213.857†	25418.6	264.94 ug/L	5.003	264.94 ppb	5.003	1.89%
SiO2†	326018.9	23664 ug/L	192.2	23664 ppb	192.2	0.81%

Sequence No.: 52

Sample ID: 246443004|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 77

Date Collected: 2/22/2010 23:43:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246443004|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4275.5	4275.5	97.3 %		23:45:29
1	Y RADIAL	5172.7	5172.7	107.2 %		23:45:29
1	Al 396.153Radial†	23195.9	23952.6	20944 ug/L	20944 ppb	23:45:29
1	Ca 317.933Radial†	2724.6	2781.4	5523.4 ug/L	5523.4 ppb	23:45:49
1	Fe 238.204 Radial†	3740.7	3834.8	46504 ug/L	46504 ppb	23:45:29
1	K 766.490 Radial†	22955.4	21113.4	4056.4 ug/L	4056.4 ppb	23:45:29
1	Mg 279.077 IEC†	105.9	106.1	4762.5 ug/L	4762.5 ppb	23:45:49
1	Na 589.592 Radial†	426.8	1132.9	326.77 ug/L	326.77 ppb	23:45:29
1	Sr 421.552†	7360.5	7554.0	48.860 ug/L	48.860 ppb	23:45:29
1	Sc 361.383	918166.5	918166.5	104.51 %		23:46:46
1	Y 371.029	849859.5	849859.5	114.95 %		23:46:46
1	Ag 328.068†	-2689.5	-3016.3	0.1210 ug/L	0.1210 ppb	23:46:51
1	As 188.979†	-24.5	1.0	22.480 ug/L	22.480 ppb	23:47:11
1	B 249.677†	-43.8	426.2	3.0142 ug/L	3.0142 ppb	23:46:51
1	Ba 233.527†	43471.5	41601.8	349.28 ug/L	349.28 ppb	23:46:51
1	Be 313.107†	-2606.1	1358.6	3.4385 ug/L	3.4385 ppb	23:46:51
1	Cd 226.502†	241.1	408.3	0.4556 ug/L	0.4556 ppb	23:47:11
1	Co 228.616†	861.5	875.4	17.023 ug/L	17.023 ppb	23:47:11
1	Cr 267.716†	3950.7	3700.8	49.294 ug/L	49.294 ppb	23:47:11
1	Cu 324.752†	22457.2	15284.8	49.385 ug/L	49.385 ppb	23:46:51
1	Mn 257.610†	1606186.8	1536395.1	1845.5 ug/L	1845.5 ppb	23:46:46
1	Mo 202.031†	-7.0	-14.2	2.5621 ug/L	2.5621 ppb	23:47:11
1	Ni 231.604†	1476.1	1339.4	37.173 ug/L	37.173 ppb	23:47:11
1	P 214.914†	865.9	632.6	381.77 ug/L	381.77 ppb	23:47:11
1	Pb 220.353†	384.4	420.3	56.409 ug/L	56.409 ppb	23:47:11
1	S 181.975 Axial†	159.8	121.7	191.81 ug/L	191.81 ppb	23:47:11
1	Sb 206.836†	49.8	13.0	-0.3389 ug/L	-0.3389 ppb	23:47:11
1	Se 196.026†	-201.6	-173.6	31.305 ug/L	31.305 ppb	23:47:11
1	Si 251.611†	311126.4	297171.3	10125 ug/L	10125 ppb	23:46:51
1	Sn 189.927†	-16.9	-29.7	-7.6612 ug/L	-7.6612 ppb	23:47:11
1	Ti 334.940†	839439.9	804369.1	1278.2 ug/L	1278.2 ppb	23:46:46
1	Tl 190.801†	-98.6	-66.8	-3.7434 ug/L	-3.7434 ppb	23:47:11
1	U 409.014†	-7435.1	-4688.9	-135.10 ug/L	-135.10 ppb	23:46:51
1	V 292.402†	7156.1	8194.7	51.979 ug/L	51.979 ppb	23:46:51
1	Zn 213.857†	18741.2	17342.7	180.44 ug/L	180.44 ppb	23:46:51
1	SiO2†	316870.1	302659.5	21968 ug/L	21968 ppb	23:48:19
2	Sc Radial	4397.4	4397.4	100 %		23:45:54
2	Y RADIAL	5321.4	5321.4	110.3 %		23:45:54
2	Al 396.153Radial†	23927.3	24022.6	21005 ug/L	21005 ppb	23:45:54
2	Ca 317.933Radial†	2764.7	2743.9	5448.8 ug/L	5448.8 ppb	23:46:14
2	Fe 238.204 Radial†	3809.0	3796.5	46038 ug/L	46038 ppb	23:45:54
2	K 766.490 Radial†	23573.7	21077.2	4049.5 ug/L	4049.5 ppb	23:45:54
2	Mg 279.077 IEC†	101.9	99.1	4445.4 ug/L	4445.4 ppb	23:46:14
2	Na 589.592 Radial†	453.9	1147.7	331.06 ug/L	331.06 ppb	23:45:54
2	Sr 421.552†	7577.2	7560.8	48.904 ug/L	48.904 ppb	23:45:54
2	Sc 361.383	931437.2	931437.2	106.02 %		23:47:17
2	Y 371.029	862237.9	862237.9	116.62 %		23:47:17
2	Ag 328.068†	-2659.2	-2951.1	0.2811 ug/L	0.2811 ppb	23:47:22
2	As 188.979†	-37.7	-11.1	16.400 ug/L	16.400 ppb	23:47:42
2	B 249.677†	-43.2	427.3	3.1199 ug/L	3.1199 ppb	23:47:22
2	Ba 233.527†	43397.2	40939.2	343.73 ug/L	343.73 ppb	23:47:22
2	Be 313.107†	-2721.5	1285.3	3.4041 ug/L	3.4041 ppb	23:47:22
2	Cd 226.502†	264.0	426.6	0.7414 ug/L	0.7414 ppb	23:47:42
2	Co 228.616†	848.6	851.4	16.481 ug/L	16.481 ppb	23:47:42
2	Cr 267.716†	3934.6	3631.7	48.411 ug/L	48.411 ppb	23:47:42
2	Cu 324.752†	22599.4	15112.8	48.829 ug/L	48.829 ppb	23:47:22
2	Mn 257.610†	1624747.7	1532005.3	1840.2 ug/L	1840.2 ppb	23:47:17
2	Mo 202.031†	3.1	-4.6	3.2755 ug/L	3.2755 ppb	23:47:42
2	Ni 231.604†	1498.4	1340.2	37.196 ug/L	37.196 ppb	23:47:42

2	P 214.914†	856.6	611.9	368.45 ug/L	368.45 ppb	23:47:42
2	Pb 220.353†	393.4	423.6	56.912 ug/L	56.912 ppb	23:47:42
2	S 181.975 Axial†	158.6	118.4	186.51 ug/L	186.51 ppb	23:47:42
2	Sb 206.836†	48.1	10.7	-1.1644 ug/L	-1.1644 ppb	23:47:42
2	Se 196.026†	-207.2	-176.1	27.957 ug/L	27.957 ppb	23:47:42
2	Si 251.611†	310041.9	291906.9	9945.3 ug/L	9945.3 ppb	23:47:22
2	Sn 189.927†	-9.6	-22.5	-6.2098 ug/L	-6.2098 ppb	23:47:42
2	Ti 334.940†	850002.4	802887.9	1275.9 ug/L	1275.9 ppb	23:47:17
2	Tl 190.801†	-98.0	-64.9	-3.1292 ug/L	-3.1292 ppb	23:47:42
2	U 409.014†	-7255.6	-4418.2	-127.56 ug/L	-127.56 ppb	23:47:22
2	V 292.402†	7120.6	8063.6	51.104 ug/L	51.104 ppb	23:47:22
2	Zn 213.857†	18663.5	17013.8	176.96 ug/L	176.96 ppb	23:47:22
2	SiO2†	315753.5	297286.6	21578 ug/L	21578 ppb	23:48:24
3	Sc Radial	4388.9	4388.9	99.8 %		23:46:19
3	Y RADIAL	5338.4	5338.4	110.6 %		23:46:19
3	Al 396.153Radial†	23903.7	24045.1	21025 ug/L	21025 ppb	23:46:19
3	Ca 317.933Radial†	2747.4	2731.9	5425.0 ug/L	5425.0 ppb	23:46:39
3	Fe 238.204 Radial†	3797.7	3792.5	45991 ug/L	45991 ppb	23:46:19
3	K 766.490 Radial†	23560.2	21109.3	4055.6 ug/L	4055.6 ppb	23:46:19
3	Mg 279.077 IEC†	102.3	99.6	4472.5 ug/L	4472.5 ppb	23:46:39
3	Na 589.592 Radial†	382.5	1077.1	310.69 ug/L	310.69 ppb	23:46:19
3	Sr 421.552†	7544.0	7542.3	48.784 ug/L	48.784 ppb	23:46:19
3	Sc 361.383	933466.5	933466.5	106.25 %		23:47:48
3	Y 371.029	863989.1	863989.1	116.86 %		23:47:48
3	Ag 328.068†	-2763.5	-3043.8	-0.1757 ug/L	-0.1757 ppb	23:47:53
3	As 188.979†	-27.6	-1.6	21.042 ug/L	21.042 ppb	23:48:13
3	B 249.677†	-19.7	449.5	3.6801 ug/L	3.6801 ppb	23:47:53
3	Ba 233.527†	43440.5	40891.0	343.32 ug/L	343.32 ppb	23:47:53
3	Be 313.107†	-2607.6	1398.1	3.4453 ug/L	3.4453 ppb	23:47:53
3	Cd 226.502†	262.1	424.3	0.7165 ug/L	0.7165 ppb	23:48:13
3	Co 228.616†	865.0	865.1	16.800 ug/L	16.800 ppb	23:48:13
3	Cr 267.716†	3942.0	3630.7	48.394 ug/L	48.394 ppb	23:48:13
3	Cu 324.752†	22478.4	14952.5	48.334 ug/L	48.334 ppb	23:47:53
3	Mn 257.610†	1625295.9	1529189.9	1836.8 ug/L	1836.8 ppb	23:47:48
3	Mo 202.031†	4.2	-3.6	3.3531 ug/L	3.3531 ppb	23:48:13
3	Ni 231.604†	1470.2	1310.6	36.374 ug/L	36.374 ppb	23:48:13
3	P 214.914†	869.4	622.2	375.49 ug/L	375.49 ppb	23:48:13
3	Pb 220.353†	393.0	422.4	56.761 ug/L	56.761 ppb	23:48:13
3	S 181.975 Axial†	157.8	117.4	184.77 ug/L	184.77 ppb	23:48:13
3	Sb 206.836†	46.4	9.0	-1.7951 ug/L	-1.7951 ppb	23:48:13
3	Se 196.026†	-207.0	-175.5	28.196 ug/L	28.196 ppb	23:48:13
3	Si 251.611†	310836.5	292019.1	9949.1 ug/L	9949.1 ppb	23:47:53
3	Sn 189.927†	-11.9	-24.7	-6.6504 ug/L	-6.6504 ppb	23:48:13
3	Ti 334.940†	850841.8	801935.0	1274.3 ug/L	1274.3 ppb	23:47:48
3	Tl 190.801†	-98.6	-65.2	-3.2637 ug/L	-3.2637 ppb	23:48:13
3	U 409.014†	-7212.3	-4362.6	-126.01 ug/L	-126.01 ppb	23:47:53
3	V 292.402†	7229.1	8151.1	51.762 ug/L	51.762 ppb	23:47:53
3	Zn 213.857†	18733.7	17041.6	177.27 ug/L	177.27 ppb	23:47:53
3	SiO2†	315410.0	296315.9	21508 ug/L	21508 ppb	23:48:29

Mean Data: 246443004|950496|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	927690.0	105.60 %		0.946			0.90%
Sc Radial	4353.9	99.0 %		1.55			1.56%
Y 371.029	858695.5	116.14 %		1.042			0.90%
Y RADIAL	5277.5	109.4 %		1.89			1.73%
Ag 328.068†	-3003.7	0.0754 ug/L		0.23181	0.0754 ppb	0.23181	307.26%
Al 396.153Radial†	24006.8	20991 ug/L		42.2	20991 ppb	42.2	0.20%
As 188.979†	-3.9	19.974 ug/L		3.1778	19.974 ppb	3.1778	15.91%
B 249.677†	434.4	3.2714 ug/L		0.35788	3.2714 ppb	0.35788	10.94%
Ba 233.527†	41144.0	345.44 ug/L		3.330	345.44 ppb	3.330	0.96%
Be 313.107†	1347.3	3.4293 ug/L		0.02208	3.4293 ppb	0.02208	0.64%
Ca 317.933Radial†	2752.4	5465.7 ug/L		51.33	5465.7 ppb	51.33	0.94%
Cd 226.502†	419.8	0.6378 ug/L		0.15828	0.6378 ppb	0.15828	24.82%
Co 228.616†	864.0	16.768 ug/L		0.2724	16.768 ppb	0.2724	1.62%
Cr 267.716†	3654.4	48.699 ug/L		0.5149	48.699 ppb	0.5149	1.06%
Cu 324.752†	15116.7	48.849 ug/L		0.5255	48.849 ppb	0.5255	1.08%
Fe 238.204 Radial†	3807.9	46178 ug/L		283.5	46178 ppb	283.5	0.61%
K 766.490 Radial†	21100.0	4053.8 ug/L		3.81	4053.8 ppb	3.81	0.09%

Mg 279.077 IEC†	101.6	4560.1 ug/L	175.74	4560.1 ppb	175.74	3.85%
Mn 257.610†	1532530.1	1840.9 ug/L	4.37	1840.9 ppb	4.37	0.24%
Mo 202.031†	-7.5	3.0635 ug/L	0.43602	3.0635 ppb	0.43602	14.23%
Na 589.592 Radial†	1119.2	322.84 ug/L	10.740	322.84 ppb	10.740	3.33%
Ni 231.604†	1330.1	36.914 ug/L	0.4682	36.914 ppb	0.4682	1.27%
P 214.914†	622.2	375.24 ug/L	6.661	375.24 ppb	6.661	1.78%
Pb 220.353†	422.1	56.694 ug/L	0.2579	56.694 ppb	0.2579	0.45%
S 181.975 Axial†	119.2	187.70 ug/L	3.664	187.70 ppb	3.664	1.95%
Sb 206.836†	10.9	-1.0995 ug/L	0.73029	-1.0995 ppb	0.73029	66.42%
Se 196.026†	-175.1	29.152 ug/L	1.8680	29.152 ppb	1.8680	6.41%
Si 251.611†	293699.1	10006 ug/L	102.5	10006 ppb	102.5	1.02%
Sn 189.927†	-25.6	-6.8405 ug/L	0.74414	-6.8405 ppb	0.74414	10.88%
Sr 421.552†	7552.4	48.849 ug/L	0.0606	48.849 ppb	0.0606	0.12%
Ti 334.940†	803064.0	1276.1 ug/L	1.94	1276.1 ppb	1.94	0.15%
Tl 190.801†	-65.6	-3.3787 ug/L	0.32285	-3.3787 ppb	0.32285	9.56%
U 409.014†	-4489.9	-129.56 ug/L	4.862	-129.56 ppb	4.862	3.75%
V 292.402†	8136.5	51.615 ug/L	0.4554	51.615 ppb	0.4554	0.88%
Zn 213.857†	17132.7	178.22 ug/L	1.930	178.22 ppb	1.930	1.08%
SiO2†	298754.0	21685 ug/L	248.0	21685 ppb	248.0	1.14%

Sequence No.: 53

Sample ID: 246443005|950496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 78

Date Collected: 2/22/2010 23:50:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246443005|950496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4266.9	4266.9	97.1 %		23:52:33
1	Y RADIAL	5182.0	5182.0	107.4 %		23:52:33
1	Al 396.153Radial†	12449.7	12929.9	11306 ug/L	11306 ppb	23:52:33
1	Ca 317.933Radial†	1813.0	1848.0	3669.8 ug/L	3669.8 ppb	23:52:53
1	Fe 238.204 Radial†	4219.1	4335.3	52573 ug/L	52573 ppb	23:52:33
1	K 766.490 Radial†	13332.6	11247.6	2160.4 ug/L	2160.4 ppb	23:52:33
1	Mg 279.077 IEC†	56.6	55.5	2461.2 ug/L	2461.2 ppb	23:52:53
1	Na 589.592 Radial†	537.5	1247.8	359.93 ug/L	359.93 ppb	23:52:33
1	Sr 421.552†	3886.7	3990.6	25.805 ug/L	25.805 ppb	23:52:33
1	Sc 361.383	932746.5	932746.5	106.17 %		23:53:51
1	Y 371.029	862836.2	862836.2	116.70 %		23:53:51
1	Ag 328.068†	-3039.1	-3305.4	0.5756 ug/L	0.5756 ppb	23:53:56
1	As 188.979†	-57.6	-29.8	10.669 ug/L	10.669 ppb	23:54:16
1	B 249.677†	-112.2	362.4	0.4593 ug/L	0.4593 ppb	23:53:56
1	Ba 233.527†	22932.2	21606.3	182.32 ug/L	182.32 ppb	23:53:56
1	Be 313.107†	-6205.1	-1992.2	2.6101 ug/L	2.6101 ppb	23:53:56
1	Cd 226.502†	268.6	430.6	0.1541 ug/L	0.1541 ppb	23:54:16
1	Co 228.616†	552.4	571.3	9.3231 ug/L	9.3231 ppb	23:54:16
1	Cr 267.716†	14834.8	13893.1	173.05 ug/L	173.05 ppb	23:53:56
1	Cu 324.752†	13071.6	6108.9	21.564 ug/L	21.564 ppb	23:53:56
1	Mn 257.610†	1368824.7	1288807.6	1549.5 ug/L	1549.5 ppb	23:53:51
1	Mo 202.031†	39.7	29.8	6.4596 ug/L	6.4596 ppb	23:54:16
1	Ni 231.604†	3446.0	3172.7	88.074 ug/L	88.074 ppb	23:54:16
1	P 214.914†	1105.4	845.2	522.39 ug/L	522.39 ppb	23:54:16
1	Pb 220.353†	279.3	315.6	39.533 ug/L	39.533 ppb	23:54:16
1	S 181.975 Axial†	97.5	60.6	95.363 ug/L	95.363 ppb	23:54:16
1	Sb 206.836†	47.1	9.6	-1.9898 ug/L	-1.9898 ppb	23:54:16
1	Se 196.026†	-225.1	-192.6	37.092 ug/L	37.092 ppb	23:54:16
1	Si 251.611†	225294.5	211675.3	7211.8 ug/L	7211.8 ppb	23:53:51
1	Sn 189.927†	0.6	-12.9	-4.9717 ug/L	-4.9717 ppb	23:54:16
1	Ti 334.940†	999171.2	942260.4	1497.1 ug/L	1497.1 ppb	23:53:51
1	Tl 190.801†	-109.3	-75.3	-6.2376 ug/L	-6.2376 ppb	23:54:16
1	U 409.014†	-6439.7	-3640.1	-107.06 ug/L	-107.06 ppb	23:53:51
1	V 292.402†	6271.7	7254.7	43.961 ug/L	43.961 ppb	23:53:56
1	Zn 213.857†	25576.5	23500.3	245.89 ug/L	245.89 ppb	23:53:56
1	SiO2†	224428.6	210852.3	15304 ug/L	15304 ppb	23:55:24
2	Sc Radial	4387.4	4387.4	99.8 %		23:52:58
2	Y RADIAL	5317.1	5317.1	110.2 %		23:52:58
2	Al 396.153Radial†	12627.1	12755.3	11153 ug/L	11153 ppb	23:52:58
2	Ca 317.933Radial†	1809.2	1792.9	3560.2 ug/L	3560.2 ppb	23:53:18
2	Fe 238.204 Radial†	4252.2	4249.2	51528 ug/L	51528 ppb	23:52:58
2	K 766.490 Radial†	13593.5	11131.7	2138.2 ug/L	2138.2 ppb	23:52:58
2	Mg 279.077 IEC†	59.4	56.6	2514.8 ug/L	2514.8 ppb	23:53:18
2	Na 589.592 Radial†	495.5	1190.5	343.40 ug/L	343.40 ppb	23:52:58
2	Sr 421.552†	3893.0	3886.9	25.135 ug/L	25.135 ppb	23:52:58
2	Sc 361.383	936639.1	936639.1	106.61 %		23:54:22
2	Y 371.029	867811.1	867811.1	117.37 %		23:54:22
2	Ag 328.068†	-3029.0	-3284.0	0.3582 ug/L	0.3582 ppb	23:54:27
2	As 188.979†	-39.4	-12.5	18.910 ug/L	18.910 ppb	23:54:47
2	B 249.677†	-121.6	354.0	0.4183 ug/L	0.4183 ppb	23:54:27
2	Ba 233.527†	22723.5	21320.8	179.90 ug/L	179.90 ppb	23:54:27
2	Be 313.107†	-6278.6	-2036.9	2.5938 ug/L	2.5938 ppb	23:54:27
2	Cd 226.502†	276.8	437.3	0.3479 ug/L	0.3479 ppb	23:54:47
2	Co 228.616†	563.0	579.1	9.5191 ug/L	9.5191 ppb	23:54:47
2	Cr 267.716†	14742.4	13748.4	171.21 ug/L	171.21 ppb	23:54:27
2	Cu 324.752†	13050.4	6037.8	21.290 ug/L	21.290 ppb	23:54:27
2	Mn 257.610†	1372468.5	1286867.3	1547.1 ug/L	1547.1 ppb	23:54:22
2	Mo 202.031†	52.9	42.1	7.3328 ug/L	7.3328 ppb	23:54:47
2	Ni 231.604†	3458.4	3170.8	88.022 ug/L	88.022 ppb	23:54:47

2	P 214.914†	1099.2	835.0	516.48 ug/L	516.48 ppb	23:54:47
2	Pb 220.353†	297.8	331.8	41.820 ug/L	41.820 ppb	23:54:47
2	S 181.975 Axial†	96.9	59.7	93.949 ug/L	93.949 ppb	23:54:47
2	Sb 206.836†	46.6	9.0	-2.1405 ug/L	-2.1405 ppb	23:54:47
2	Se 196.026†	-232.5	-198.7	29.160 ug/L	29.160 ppb	23:54:47
2	Si 251.611†	225798.4	211266.0	7197.8 ug/L	7197.8 ppb	23:54:22
2	Sn 189.927†	14.9	0.5	-2.2243 ug/L	-2.2243 ppb	23:54:47
2	Ti 334.940†	1003757.9	942651.5	1497.7 ug/L	1497.7 ppb	23:54:22
2	Tl 190.801†	-98.4	-64.7	-2.6011 ug/L	-2.6011 ppb	23:54:47
2	U 409.014†	-6466.2	-3639.8	-106.92 ug/L	-106.92 ppb	23:54:22
2	V 292.402†	6309.0	7265.1	44.205 ug/L	44.205 ppb	23:54:27
2	Zn 213.857†	25323.8	23163.1	242.40 ug/L	242.40 ppb	23:54:27
2	SiO2†	225956.8	211407.1	15345 ug/L	15345 ppb	23:55:29
3	Sc Radial	4330.0	4330.0	98.5 %		23:53:24
3	Y RADIAL	5257.2	5257.2	109.0 %		23:53:24
3	Al 396.153Radial†	12373.8	12666.0	11075 ug/L	11075 ppb	23:53:24
3	Ca 317.933Radial†	1834.0	1842.1	3658.0 ug/L	3658.0 ppb	23:53:44
3	Fe 238.204 Radial†	4201.3	4254.0	51587 ug/L	51587 ppb	23:53:24
3	K 766.490 Radial†	13396.0	11111.9	2134.3 ug/L	2134.3 ppb	23:53:24
3	Mg 279.077 IEC†	54.5	52.4	2324.8 ug/L	2324.8 ppb	23:53:44
3	Na 589.592 Radial†	512.1	1213.9	350.15 ug/L	350.15 ppb	23:53:24
3	Sr 421.552†	3854.4	3899.5	25.216 ug/L	25.216 ppb	23:53:24
3	Sc 361.383	932519.3	932519.3	106.15 %		23:54:53
3	Y 371.029	864273.8	864273.8	116.90 %		23:54:53
3	Ag 328.068†	-2989.7	-3259.5	0.4961 ug/L	0.4961 ppb	23:54:58
3	As 188.979†	-42.5	-15.6	17.395 ug/L	17.395 ppb	23:55:18
3	B 249.677†	-116.4	358.4	0.5185 ug/L	0.5185 ppb	23:54:58
3	Ba 233.527†	22938.3	21617.4	182.38 ug/L	182.38 ppb	23:54:58
3	Be 313.107†	-6324.6	-2106.2	2.5654 ug/L	2.5654 ppb	23:54:58
3	Cd 226.502†	262.4	424.8	0.1815 ug/L	0.1815 ppb	23:55:18
3	Co 228.616†	561.2	579.8	9.5342 ug/L	9.5342 ppb	23:55:18
3	Cr 267.716†	14812.7	13875.7	172.75 ug/L	172.75 ppb	23:54:58
3	Cu 324.752†	12999.9	6044.4	21.315 ug/L	21.315 ppb	23:54:58
3	Mn 257.610†	1365433.5	1285926.9	1546.0 ug/L	1546.0 ppb	23:54:53
3	Mo 202.031†	49.3	38.9	7.0899 ug/L	7.0899 ppb	23:55:18
3	Ni 231.604†	3468.5	3194.6	88.684 ug/L	88.684 ppb	23:55:18
3	P 214.914†	1101.4	841.6	520.81 ug/L	520.81 ppb	23:55:18
3	Pb 220.353†	289.3	325.0	40.870 ug/L	40.870 ppb	23:55:18
3	S 181.975 Axial†	95.6	58.9	92.653 ug/L	92.653 ppb	23:55:18
3	Sb 206.836†	55.1	17.2	0.9472 ug/L	0.9472 ppb	23:55:18
3	Se 196.026†	-236.5	-203.4	25.913 ug/L	25.913 ppb	23:55:18
3	Si 251.611†	225085.1	211529.6	7206.8 ug/L	7206.8 ppb	23:54:53
3	Sn 189.927†	13.3	-1.0	-2.5061 ug/L	-2.5061 ppb	23:55:18
3	Ti 334.940†	999069.8	942394.2	1497.4 ug/L	1497.4 ppb	23:54:53
3	Tl 190.801†	-97.2	-63.9	-2.3363 ug/L	-2.3363 ppb	23:55:18
3	U 409.014†	-6524.5	-3721.5	-109.19 ug/L	-109.19 ppb	23:54:53
3	V 292.402†	6347.5	7327.5	44.644 ug/L	44.644 ppb	23:54:58
3	Zn 213.857†	25592.1	23520.8	246.26 ug/L	246.26 ppb	23:54:58
3	SiO2†	224979.1	211422.4	15346 ug/L	15346 ppb	23:55:34

Mean Data: 246443005|950496|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	933968.3	106.31 %	0.264			0.25%
Sc Radial	4328.1	98.5 %	1.37			1.39%
Y 371.029	864973.7	116.99 %	0.346			0.30%
Y RADIAL	5252.1	108.8 %	1.40			1.29%
Ag 328.068†	-3283.0	0.4766 ug/L	0.10998	0.4766 ppb	0.10998	23.07%
Al 396.153Radial†	12783.7	11178 ug/L	117.4	11178 ppb	117.4	1.05%
As 188.979†	-19.3	15.658 ug/L	4.3866	15.658 ppb	4.3866	28.02%
B 249.677†	358.3	0.4653 ug/L	0.05035	0.4653 ppb	0.05035	10.82%
Ba 233.527†	21514.8	181.53 ug/L	1.415	181.53 ppb	1.415	0.78%
Be 313.107†	-2045.1	2.5898 ug/L	0.02258	2.5898 ppb	0.02258	0.87%
Ca 317.933Radial†	1827.7	3629.3 ug/L	60.14	3629.3 ppb	60.14	1.66%
Cd 226.502†	430.9	0.2278 ug/L	0.10485	0.2278 ppb	0.10485	46.03%
Co 228.616†	576.7	9.4588 ug/L	0.11777	9.4588 ppb	0.11777	1.25%
Cr 267.716†	13839.0	172.34 ug/L	0.992	172.34 ppb	0.992	0.58%
Cu 324.752†	6063.7	21.390 ug/L	0.1512	21.390 ppb	0.1512	0.71%
Fe 238.204 Radial†	4279.5	51896 ug/L	587.3	51896 ppb	587.3	1.13%
K 766.490 Radial†	11163.7	2144.3 ug/L	14.08	2144.3 ppb	14.08	0.66%

Mg 279.077 IEC†	54.8	2433.6 ug/L	97.97	2433.6 ppb	97.97	4.03%
Mn 257.610†	1287200.6	1547.5 ug/L	1.81	1547.5 ppb	1.81	0.12%
Mo 202.031†	36.9	6.9608 ug/L	0.45072	6.9608 ppb	0.45072	6.48%
Na 589.592 Radial†	1217.4	351.16 ug/L	8.312	351.16 ppb	8.312	2.37%
Ni 231.604†	3179.4	88.260 ug/L	0.3679	88.260 ppb	0.3679	0.42%
P 214.914†	840.6	519.89 ug/L	3.058	519.89 ppb	3.058	0.59%
Pb 220.353†	324.1	40.741 ug/L	1.1493	40.741 ppb	1.1493	2.82%
S 181.975 Axial†	59.8	93.988 ug/L	1.3559	93.988 ppb	1.3559	1.44%
Sb 206.836†	11.9	-1.0610 ug/L	1.74080	-1.0610 ppb	1.74080	164.07%
Se 196.026†	-198.3	30.722 ug/L	5.7510	30.722 ppb	5.7510	18.72%
Si 251.611†	211490.3	7205.5 ug/L	7.07	7205.5 ppb	7.07	0.10%
Sn 189.927†	-4.5	-3.2340 ug/L	1.51147	-3.2340 ppb	1.51147	46.74%
Sr 421.552†	3925.7	25.386 ug/L	0.3658	25.386 ppb	0.3658	1.44%
Ti 334.940†	942435.4	1497.4 ug/L	0.30	1497.4 ppb	0.30	0.02%
Tl 190.801†	-68.0	-3.7250 ug/L	2.17999	-3.7250 ppb	2.17999	58.52%
U 409.014†	-3667.1	-107.73 ug/L	1.274	-107.73 ppb	1.274	1.18%
V 292.402†	7282.4	44.270 ug/L	0.3458	44.270 ppb	0.3458	0.78%
Zn 213.857†	23394.7	244.85 ug/L	2.130	244.85 ppb	2.130	0.87%
SiO2†	211227.3	15332 ug/L	23.6	15332 ppb	23.6	0.15%

Sequence No.: 55

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/23/2010 00:04:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4128.1	4128.1	93.9 %		00:06:44
1	Y RADIAL	4499.1	4499.1	93.24 %		00:06:44
1	Al 396.153Radial†	5358.1	5809.8	5054.5 ug/L	5054.5 ppb	00:06:44
1	Ca 317.933Radial†	2525.2	2669.2	5300.4 ug/L	5300.4 ppb	00:07:04
1	Fe 238.204 Radial†	413.7	429.4	5224.1 ug/L	5224.1 ppb	00:07:04
1	K 766.490 Radial†	28830.2	28212.1	5417.4 ug/L	5417.4 ppb	00:06:44
1	Mg 279.077 IEC†	113.6	118.1	5359.8 ug/L	5359.8 ppb	00:07:04
1	Na 589.592 Radial†	31169.1	33884.3	9774.0 ug/L	9774.0 ppb	00:06:44
1	Sr 421.552†	72877.3	77589.6	502.23 ug/L	502.23 ppb	00:06:44
1	Sc 361.383	904536.2	904536.2	102.96 %		00:08:02
1	Y 371.029	749202.5	749202.5	101.33 %		00:08:02
1	Ag 328.068†	111189.5	107549.4	518.36 ug/L	518.36 ppb	00:08:07
1	As 188.979†	1113.5	1105.9	546.75 ug/L	546.75 ppb	00:08:27
1	B 249.677†	20564.2	20441.0	507.12 ug/L	507.12 ppb	00:08:07
1	Ba 233.527†	65199.5	63332.0	530.67 ug/L	530.67 ppb	00:08:07
1	Be 313.107†	1339426.0	1304764.8	517.38 ug/L	517.38 ppb	00:08:02
1	Cd 226.502†	43341.7	42273.0	544.56 ug/L	544.56 ppb	00:08:07
1	Co 228.616†	24338.8	23690.1	547.47 ug/L	547.47 ppb	00:08:07
1	Cr 267.716†	45043.3	43668.8	528.90 ug/L	528.90 ppb	00:08:07
1	Cu 324.752†	176097.6	164831.2	505.24 ug/L	505.24 ppb	00:08:07
1	Mn 257.610†	450993.6	437576.1	524.66 ug/L	524.66 ppb	00:08:02
1	Mo 202.031†	6946.7	6739.4	527.61 ug/L	527.61 ppb	00:08:27
1	Ni 231.604†	20026.2	19377.3	537.64 ug/L	537.64 ppb	00:08:07
1	P 214.914†	4375.8	4054.0	2615.0 ug/L	2615.0 ppb	00:08:27
1	Pb 220.353†	4029.6	3966.3	539.66 ug/L	539.66 ppb	00:08:27
1	S 181.975 Axial†	728.8	676.6	1087.1 ug/L	1087.1 ppb	00:08:27
1	Sb 206.836†	1484.2	1406.8	548.62 ug/L	548.62 ppb	00:08:27
1	Se 196.026†	758.7	756.2	569.08 ug/L	569.08 ppb	00:08:27
1	Si 251.611†	79879.0	77058.9	2618.9 ug/L	2618.9 ppb	00:08:07
1	Sn 189.927†	2757.9	2665.1	537.31 ug/L	537.31 ppb	00:08:27
1	Ti 334.940†	333007.2	324601.3	515.52 ug/L	515.52 ppb	00:08:02
1	Tl 190.801†	1567.2	1549.7	535.82 ug/L	535.82 ppb	00:08:27
1	U 409.014†	16179.4	18139.5	499.98 ug/L	499.98 ppb	00:08:07
1	V 292.402†	71303.1	70600.4	526.47 ug/L	526.47 ppb	00:08:07
1	Zn 213.857†	51410.5	49342.8	529.16 ug/L	529.16 ppb	00:08:07
1	SiO2†	79270.4	76460.4	5535.5 ug/L	5535.5 ppb	00:09:35
2	Sc Radial	4191.9	4191.9	95.4 %		00:07:09
2	Y RADIAL	4578.9	4578.9	94.90 %		00:07:09
2	Al 396.153Radial†	5460.7	5830.4	5072.4 ug/L	5072.4 ppb	00:07:09
2	Ca 317.933Radial†	2504.4	2606.3	5175.7 ug/L	5175.7 ppb	00:07:29
2	Fe 238.204 Radial†	412.4	421.3	5125.4 ug/L	5125.4 ppb	00:07:29
2	K 766.490 Radial†	29100.4	28027.7	5382.0 ug/L	5382.0 ppb	00:07:09
2	Mg 279.077 IEC†	115.1	117.8	5345.1 ug/L	5345.1 ppb	00:07:29
2	Na 589.592 Radial†	31853.8	34096.6	9835.2 ug/L	9835.2 ppb	00:07:09
2	Sr 421.552†	74476.2	78083.8	505.43 ug/L	505.43 ppb	00:07:09
2	Sc 361.383	897360.2	897360.2	102.14 %		00:08:33
2	Y 371.029	743831.5	743831.5	100.60 %		00:08:33
2	Ag 328.068†	110507.7	107745.6	519.27 ug/L	519.27 ppb	00:08:38
2	As 188.979†	1096.4	1097.8	542.75 ug/L	542.75 ppb	00:08:58
2	B 249.677†	20413.5	20453.2	507.44 ug/L	507.44 ppb	00:08:38
2	Ba 233.527†	64682.5	63332.2	530.67 ug/L	530.67 ppb	00:08:38
2	Be 313.107†	1331927.3	1307826.7	518.60 ug/L	518.60 ppb	00:08:33
2	Cd 226.502†	42973.2	42249.0	544.26 ug/L	544.26 ppb	00:08:38
2	Co 228.616†	24188.5	23731.9	548.44 ug/L	548.44 ppb	00:08:38
2	Cr 267.716†	44641.7	43625.4	528.37 ug/L	528.37 ppb	00:08:38
2	Cu 324.752†	174760.1	164889.6	505.42 ug/L	505.42 ppb	00:08:38
2	Mn 257.610†	447904.1	438054.3	525.22 ug/L	525.22 ppb	00:08:33
2	Mo 202.031†	6908.7	6756.2	528.92 ug/L	528.92 ppb	00:08:58
2	Ni 231.604†	19925.0	19433.8	539.20 ug/L	539.20 ppb	00:08:38

2	P 214.914†	4347.0	4059.7	2618.9 ug/L	2618.9 ppb	00:08:58
2	Pb 220.353†	4028.1	3996.1	543.72 ug/L	543.72 ppb	00:08:58
2	S 181.975 Axial†	732.8	686.2	1102.4 ug/L	1102.4 ppb	00:08:58
2	Sb 206.836†	1470.3	1404.8	547.86 ug/L	547.86 ppb	00:08:58
2	Se 196.026†	743.9	747.6	562.50 ug/L	562.50 ppb	00:08:58
2	Si 251.611†	79292.9	77105.5	2620.5 ug/L	2620.5 ppb	00:08:38
2	Sn 189.927†	2732.1	2661.3	536.52 ug/L	536.52 ppb	00:08:58
2	Ti 334.940†	330624.0	324854.6	515.91 ug/L	515.91 ppb	00:08:33
2	Tl 190.801†	1552.0	1547.0	534.89 ug/L	534.89 ppb	00:08:58
2	U 409.014†	15863.1	17955.4	494.90 ug/L	494.90 ppb	00:08:38
2	V 292.402†	70715.9	70579.2	526.33 ug/L	526.33 ppb	00:08:38
2	Zn 213.857†	51040.9	49380.2	529.57 ug/L	529.57 ppb	00:08:38
2	SiO2†	78824.8	76639.8	5548.4 ug/L	5548.4 ppb	00:09:40
3	Sc Radial	4096.8	4096.8	93.2 %		00:07:34
3	Y RADIAL	4442.4	4442.4	92.07 %		00:07:34
3	Al 396.153Radial†	5307.8	5799.4	5045.2 ug/L	5045.2 ppb	00:07:34
3	Ca 317.933Radial†	2517.9	2681.9	5325.6 ug/L	5325.6 ppb	00:07:54
3	Fe 238.204 Radial†	418.7	438.2	5330.1 ug/L	5330.1 ppb	00:07:54
3	K 766.490 Radial†	28604.1	28203.7	5415.8 ug/L	5415.8 ppb	00:07:34
3	Mg 279.077 IEC†	118.3	124.1	5630.5 ug/L	5630.5 ppb	00:07:54
3	Na 589.592 Radial†	30952.6	33905.2	9780.0 ug/L	9780.0 ppb	00:07:34
3	Sr 421.552†	72309.1	77572.0	502.12 ug/L	502.12 ppb	00:07:34
3	Sc 361.383	895260.8	895260.8	101.90 %		00:09:04
3	Y 371.029	741928.4	741928.4	100.35 %		00:09:04
3	Ag 328.068†	110214.1	107711.1	519.18 ug/L	519.18 ppb	00:09:09
3	As 188.979†	1103.2	1107.0	547.32 ug/L	547.32 ppb	00:09:29
3	B 249.677†	20395.0	20481.9	508.12 ug/L	508.12 ppb	00:09:09
3	Ba 233.527†	64846.1	63641.2	533.26 ug/L	533.26 ppb	00:09:09
3	Be 313.107†	1329233.7	1308241.4	518.76 ug/L	518.76 ppb	00:09:04
3	Cd 226.502†	43093.0	42465.2	547.02 ug/L	547.02 ppb	00:09:09
3	Co 228.616†	24223.0	23821.3	550.51 ug/L	550.51 ppb	00:09:09
3	Cr 267.716†	44801.4	43884.7	531.52 ug/L	531.52 ppb	00:09:09
3	Cu 324.752†	174640.7	165173.6	506.30 ug/L	506.30 ppb	00:09:09
3	Mn 257.610†	447352.2	438541.1	525.81 ug/L	525.81 ppb	00:09:04
3	Mo 202.031†	6917.4	6780.6	530.84 ug/L	530.84 ppb	00:09:29
3	Ni 231.604†	19955.4	19509.4	541.30 ug/L	541.30 ppb	00:09:09
3	P 214.914†	4356.1	4078.7	2631.3 ug/L	2631.3 ppb	00:09:29
3	Pb 220.353†	3997.0	3974.8	540.82 ug/L	540.82 ppb	00:09:29
3	S 181.975 Axial†	733.5	688.6	1106.3 ug/L	1106.3 ppb	00:09:29
3	Sb 206.836†	1489.7	1427.2	556.43 ug/L	556.43 ppb	00:09:29
3	Se 196.026†	750.9	756.2	569.42 ug/L	569.42 ppb	00:09:29
3	Si 251.611†	79400.9	77393.5	2630.3 ug/L	2630.3 ppb	00:09:09
3	Sn 189.927†	2754.7	2689.8	542.27 ug/L	542.27 ppb	00:09:29
3	Ti 334.940†	329510.9	324521.4	515.37 ug/L	515.37 ppb	00:09:04
3	Tl 190.801†	1561.4	1559.8	539.28 ug/L	539.28 ppb	00:09:29
3	U 409.014†	15966.6	18093.4	498.68 ug/L	498.68 ppb	00:09:09
3	V 292.402†	70850.9	70874.1	528.51 ug/L	528.51 ppb	00:09:09
3	Zn 213.857†	51094.0	49549.5	531.35 ug/L	531.35 ppb	00:09:09
3	SiO2†	78873.0	76868.1	5565.0 ug/L	5565.0 ppb	00:09:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899052.4	102.34 %	0.554			0.54%
Sc Radial	4138.9	94.2 %	1.10			1.17%
Y 371.029	744987.5	100.76 %	0.510			0.51%
Y RADIAL	4506.8	93.40 %	1.422			1.52%
Ag 328.068†	107668.7	518.94 ug/L	0.502	518.94 ppb	0.502	0.10%
QC value within limits for Ag 328.068 Recovery = 103.79%						
Al 396.153Radial†	5813.2	5057.4 ug/L	13.85	5057.4 ppb	13.85	0.27%
QC value within limits for Al 396.153Radial Recovery = 101.15%						
As 188.979†	1103.6	545.61 ug/L	2.488	545.61 ppb	2.488	0.46%
QC value within limits for As 188.979 Recovery = 109.12%						
B 249.677†	20458.7	507.56 ug/L	0.507	507.56 ppb	0.507	0.10%
QC value within limits for B 249.677 Recovery = 101.51%						
Ba 233.527†	63435.1	531.53 ug/L	1.497	531.53 ppb	1.497	0.28%
QC value within limits for Ba 233.527 Recovery = 106.31%						
Be 313.107†	1306944.3	518.25 ug/L	0.751	518.25 ppb	0.751	0.14%
QC value within limits for Be 313.107 Recovery = 103.65%						
Ca 317.933Radial†	2652.5	5267.2 ug/L	80.30	5267.2 ppb	80.30	1.52%

QC value within limits for Ca 317.933 Radial Recovery = 105.34%							
Cd	226.502†	42329.1	545.28 ug/L	1.518	545.28 ppb	1.518	0.28%
QC value within limits for Cd 226.502 Recovery = 109.06%							
Co	228.616†	23747.7	548.81 ug/L	1.552	548.81 ppb	1.552	0.28%
QC value within limits for Co 228.616 Recovery = 109.76%							
Cr	267.716†	43726.3	529.60 ug/L	1.689	529.60 ppb	1.689	0.32%
QC value within limits for Cr 267.716 Recovery = 105.92%							
Cu	324.752†	164964.8	505.65 ug/L	0.566	505.65 ppb	0.566	0.11%
QC value within limits for Cu 324.752 Recovery = 101.13%							
Fe	238.204 Radial†	429.6	5226.5 ug/L	102.35	5226.5 ppb	102.35	1.96%
QC value within limits for Fe 238.204 Radial Recovery = 104.53%							
K	766.490 Radial†	28147.9	5405.1 ug/L	20.00	5405.1 ppb	20.00	0.37%
QC value within limits for K 766.490 Radial Recovery = 108.10%							
Mg	279.077 IEC†	120.0	5445.2 ug/L	160.71	5445.2 ppb	160.71	2.95%
QC value within limits for Mg 279.077 IEC Recovery = 108.90%							
Mn	257.610†	438057.2	525.23 ug/L	0.578	525.23 ppb	0.578	0.11%
QC value within limits for Mn 257.610 Recovery = 105.05%							
Mo	202.031†	6758.7	529.13 ug/L	1.624	529.13 ppb	1.624	0.31%
QC value within limits for Mo 202.031 Recovery = 105.83%							
Na	589.592 Radial†	33962.1	9796.4 ug/L	33.76	9796.4 ppb	33.76	0.34%
QC value within limits for Na 589.592 Radial Recovery = 97.96%							
Ni	231.604†	19440.2	539.38 ug/L	1.839	539.38 ppb	1.839	0.34%
QC value within limits for Ni 231.604 Recovery = 107.88%							
P	214.914†	4064.1	2621.7 ug/L	8.50	2621.7 ppb	8.50	0.32%
QC value within limits for P 214.914 Recovery = 104.87%							
Pb	220.353†	3979.1	541.40 ug/L	2.091	541.40 ppb	2.091	0.39%
QC value within limits for Pb 220.353 Recovery = 108.28%							
S	181.975 Axial†	683.8	1098.6 ug/L	10.18	1098.6 ppb	10.18	0.93%
QC value within limits for S 181.975 Axial Recovery = 109.86%							
Sb	206.836†	1412.9	550.97 ug/L	4.746	550.97 ppb	4.746	0.86%
QC value greater than the upper limit for Sb 206.836 Recovery = 110.19%							
Se	196.026†	753.4	567.00 ug/L	3.902	567.00 ppb	3.902	0.69%
QC value greater than the upper limit for Se 196.026 Recovery = 113.40%							
Si	251.611†	77186.0	2623.2 ug/L	6.16	2623.2 ppb	6.16	0.23%
QC value within limits for Si 251.611 Recovery = 104.93%							
Sn	189.927†	2672.1	538.70 ug/L	3.115	538.70 ppb	3.115	0.58%
QC value within limits for Sn 189.927 Recovery = 107.74%							
Sr	421.552†	77748.4	503.26 ug/L	1.881	503.26 ppb	1.881	0.37%
QC value within limits for Sr 421.552 Recovery = 100.65%							
Ti	334.940†	324659.1	515.60 ug/L	0.277	515.60 ppb	0.277	0.05%
QC value within limits for Ti 334.940 Recovery = 103.12%							
Tl	190.801†	1552.2	536.67 ug/L	2.312	536.67 ppb	2.312	0.43%
QC value within limits for Tl 190.801 Recovery = 107.33%							
U	409.014†	18062.8	497.85 ug/L	2.639	497.85 ppb	2.639	0.53%
QC value within limits for U 409.014 Recovery = 99.57%							
V	292.402†	70684.6	527.10 ug/L	1.221	527.10 ppb	1.221	0.23%
QC value within limits for V 292.402 Recovery = 105.42%							
Zn	213.857†	49424.2	530.03 ug/L	1.168	530.03 ppb	1.168	0.22%
QC value within limits for Zn 213.857 Recovery = 106.01%							
SiO2†		76656.1	5549.6 ug/L	14.79	5549.6 ppb	14.79	0.27%
QC value within limits for SiO2 Recovery = 103.78%							
QC Failed. Continue with analysis.							

Sequence No.: 56

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 00:11:55

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	4396.8	4396.8	100 %		00:13:48
1	Y RADIAL	4828.3	4828.3	100.1 %		00:13:48
1	Al 396.153Radial†	-92.9	11.3	9.8814 ug/L	9.8814 ppb	00:14:08
1	Ca 317.933Radial†	21.6	1.8	3.5448 ug/L	3.5448 ppb	00:14:08
1	Fe 238.204 Radial†	11.1	-0.0	-0.5212 ug/L	-0.5212 ppb	00:14:08
1	K 766.490 Radial†	2632.1	143.9	27.656 ug/L	27.656 ppb	00:13:48
1	Mg 279.077 IEC†	2.1	-0.8	-34.513 ug/L	-34.513 ppb	00:14:08
1	Na 589.592 Radial†	-651.1	43.1	12.433 ug/L	12.433 ppb	00:13:48
1	Sr 421.552†	32.8	19.3	0.1249 ug/L	0.1249 ppb	00:13:48
1	Sc 361.383	892246.4	892246.4	101.56 %		00:15:05
1	Y 371.029	750757.8	750757.8	101.54 %		00:15:05
1	Ag 328.068†	307.3	-140.4	-0.6687 ug/L	-0.6687 ppb	00:15:05
1	As 188.979†	-23.0	1.8	0.8744 ug/L	0.8744 ppb	00:15:25
1	B 249.677†	-394.3	79.9	1.9921 ug/L	1.9921 ppb	00:15:25
1	Ba 233.527†	-12.5	-5.2	-0.0430 ug/L	-0.0430 ppb	00:15:25
1	Be 313.107†	-3844.9	66.4	0.0261 ug/L	0.0261 ppb	00:15:05
1	Cd 226.502†	-171.1	9.2	0.1172 ug/L	0.1172 ppb	00:15:25
1	Co 228.616†	-64.0	-12.0	-0.2750 ug/L	-0.2750 ppb	00:15:25
1	Cr 267.716†	78.8	-1.8	-0.0200 ug/L	-0.0200 ppb	00:15:25
1	Cu 324.752†	5902.5	-391.1	-1.1969 ug/L	-1.1969 ppb	00:15:05
1	Mn 257.610†	474.1	17.1	0.0218 ug/L	0.0218 ppb	00:15:25
1	Mo 202.031†	14.8	7.0	0.5486 ug/L	0.5486 ppb	00:15:25
1	Ni 231.604†	73.3	-0.9	-0.0239 ug/L	-0.0239 ppb	00:15:25
1	P 214.914†	205.4	6.2	4.4164 ug/L	4.4164 ppb	00:15:25
1	Pb 220.353†	-64.3	-10.8	-1.4613 ug/L	-1.4613 ppb	00:15:25
1	S 181.975 Axial†	41.7	9.9	15.891 ug/L	15.891 ppb	00:15:25
1	Sb 206.836†	29.1	-6.1	-2.2618 ug/L	-2.2618 ppb	00:15:25
1	Se 196.026†	-26.5	-6.7	-4.8806 ug/L	-4.8806 ppb	00:15:25
1	Si 251.611†	561.0	29.1	0.9847 ug/L	0.9847 ppb	00:15:25
1	Sn 189.927†	15.7	2.0	0.3961 ug/L	0.3961 ppb	00:15:25
1	Ti 334.940†	-1250.0	-61.5	-0.0928 ug/L	-0.0928 ppb	00:15:05
1	Tl 190.801†	-26.5	1.5	0.5195 ug/L	0.5195 ppb	00:15:25
1	U 409.014†	-2599.2	-134.0	-3.7062 ug/L	-3.7062 ppb	00:15:05
1	V 292.402†	-1342.7	25.4	0.1871 ug/L	0.1871 ppb	00:15:05
1	Zn 213.857†	618.9	19.9	0.2169 ug/L	0.2169 ppb	00:15:25
1	SiO2†	572.0	32.5	2.3436 ug/L	2.3436 ppb	00:16:21
2	Sc Radial	4249.6	4249.6	96.7 %		00:14:13
2	Y RADIAL	4685.9	4685.9	97.12 %		00:14:13
2	Al 396.153Radial†	-106.3	-5.7	-5.0070 ug/L	-5.0070 ppb	00:14:33
2	Ca 317.933Radial†	23.8	4.9	9.7286 ug/L	9.7286 ppb	00:14:33
2	Fe 238.204 Radial†	10.8	0.0	0.0209 ug/L	0.0209 ppb	00:14:33
2	K 766.490 Radial†	2618.2	220.7	42.417 ug/L	42.417 ppb	00:14:13
2	Mg 279.077 IEC†	3.5	0.7	32.351 ug/L	32.351 ppb	00:14:33
2	Na 589.592 Radial†	-652.5	19.0	5.4939 ug/L	5.4939 ppb	00:14:13
2	Sr 421.552†	12.6	-0.4	-0.0028 ug/L	-0.0028 ppb	00:14:13
2	Sc 361.383	884068.4	884068.4	100.63 %		00:15:30
2	Y 371.029	744504.6	744504.6	100.70 %		00:15:30
2	Ag 328.068†	256.1	-188.5	-0.8974 ug/L	-0.8974 ppb	00:15:30
2	As 188.979†	-27.9	-3.2	-1.5859 ug/L	-1.5859 ppb	00:15:50
2	B 249.677†	-375.9	94.6	2.3584 ug/L	2.3584 ppb	00:15:50
2	Ba 233.527†	-1.8	5.3	0.0446 ug/L	0.0446 ppb	00:15:50
2	Be 313.107†	-3867.2	9.2	0.0036 ug/L	0.0036 ppb	00:15:30
2	Cd 226.502†	-176.3	2.4	0.0295 ug/L	0.0295 ppb	00:15:50
2	Co 228.616†	-72.0	-20.5	-0.4738 ug/L	-0.4738 ppb	00:15:50
2	Cr 267.716†	34.5	-45.0	-0.5417 ug/L	-0.5417 ppb	00:15:50
2	Cu 324.752†	6049.0	-191.8	-0.5841 ug/L	-0.5841 ppb	00:15:30
2	Mn 257.610†	487.1	34.3	0.0398 ug/L	0.0398 ppb	00:15:50
2	Mo 202.031†	8.6	1.0	0.0810 ug/L	0.0810 ppb	00:15:50
2	Ni 231.604†	79.4	5.9	0.1627 ug/L	0.1627 ppb	00:15:50

2	P 214.914†	202.8	5.5	3.7862 ug/L	3.7862 ppb	00:15:50
2	Pb 220.353†	-53.3	-0.4	-0.0587 ug/L	-0.0587 ppb	00:15:50
2	S 181.975 Axial†	44.1	12.7	20.354 ug/L	20.354 ppb	00:15:50
2	Sb 206.836†	43.3	8.3	3.1100 ug/L	3.1100 ppb	00:15:50
2	Se 196.026†	-21.0	-1.6	-1.1297 ug/L	-1.1297 ppb	00:15:50
2	Si 251.611†	561.9	35.1	1.1946 ug/L	1.1946 ppb	00:15:50
2	Sn 189.927†	12.9	-0.6	-0.1263 ug/L	-0.1263 ppb	00:15:50
2	Ti 334.940†	-1200.3	-23.5	-0.0354 ug/L	-0.0354 ppb	00:15:30
2	Tl 190.801†	-37.7	-9.8	-3.3779 ug/L	-3.3779 ppb	00:15:50
2	U 409.014†	-2692.3	-250.2	-6.9187 ug/L	-6.9187 ppb	00:15:30
2	V 292.402†	-1357.0	-1.0	-0.0186 ug/L	-0.0186 ppb	00:15:30
2	Zn 213.857†	622.0	28.7	0.3100 ug/L	0.3100 ppb	00:15:50
2	SiO2†	542.9	8.8	0.6381 ug/L	0.6381 ppb	00:16:26
3	Sc Radial	4344.2	4344.2	98.8 %		00:14:38
3	Y RADIAL	4727.7	4727.7	97.98 %		00:14:38
3	Al 396.153Radial†	-107.4	-4.4	-3.8589 ug/L	-3.8589 ppb	00:14:58
3	Ca 317.933Radial†	22.5	3.0	5.8706 ug/L	5.8706 ppb	00:14:58
3	Fe 238.204 Radial†	11.5	0.5	6.1723 ug/L	6.1723 ppb	00:14:58
3	K 766.490 Radial†	2653.8	197.7	38.010 ug/L	38.010 ppb	00:14:38
3	Mg 279.077 IEC†	1.4	-1.5	-66.789 ug/L	-66.789 ppb	00:14:58
3	Na 589.592 Radial†	-677.7	8.3	2.3929 ug/L	2.3929 ppb	00:14:38
3	Sr 421.552†	51.3	38.4	0.2483 ug/L	0.2483 ppb	00:14:38
3	Sc 361.383	901666.9	901666.9	102.63 %		00:15:55
3	Y 371.029	759485.7	759485.7	102.72 %		00:15:55
3	Ag 328.068†	213.7	-234.7	-1.1216 ug/L	-1.1216 ppb	00:15:55
3	As 188.979†	-16.8	8.1	3.9657 ug/L	3.9657 ppb	00:16:15
3	B 249.677†	-436.5	42.8	1.0661 ug/L	1.0661 ppb	00:16:15
3	Ba 233.527†	-6.8	0.5	0.0035 ug/L	0.0035 ppb	00:16:15
3	Be 313.107†	-3928.0	25.0	0.0099 ug/L	0.0099 ppb	00:15:55
3	Cd 226.502†	-174.5	7.6	0.0961 ug/L	0.0961 ppb	00:16:15
3	Co 228.616†	-61.0	-8.4	-0.1941 ug/L	-0.1941 ppb	00:16:15
3	Cr 267.716†	59.8	-21.1	-0.2537 ug/L	-0.2537 ppb	00:16:15
3	Cu 324.752†	6053.2	-305.0	-0.9326 ug/L	-0.9326 ppb	00:15:55
3	Mn 257.610†	484.4	22.3	0.0300 ug/L	0.0300 ppb	00:16:15
3	Mo 202.031†	10.2	2.4	0.1899 ug/L	0.1899 ppb	00:16:15
3	Ni 231.604†	66.8	-8.0	-0.2210 ug/L	-0.2210 ppb	00:16:15
3	P 214.914†	202.8	1.6	1.2521 ug/L	1.2521 ppb	00:16:15
3	Pb 220.353†	-36.1	17.4	2.3554 ug/L	2.3554 ppb	00:16:15
3	S 181.975 Axial†	37.6	5.5	8.8050 ug/L	8.8050 ppb	00:16:15
3	Sb 206.836†	33.9	-1.7	-0.6345 ug/L	-0.6345 ppb	00:16:15
3	Se 196.026†	-17.9	1.9	1.3721 ug/L	1.3721 ppb	00:16:15
3	Si 251.611†	568.5	30.6	1.0407 ug/L	1.0407 ppb	00:16:15
3	Sn 189.927†	18.1	4.2	0.8372 ug/L	0.8372 ppb	00:16:15
3	Ti 334.940†	-1202.7	-2.6	0.0038 ug/L	0.0038 ppb	00:15:55
3	Tl 190.801†	-39.8	-11.1	-3.8230 ug/L	-3.8230 ppb	00:16:15
3	U 409.014†	-2620.3	-127.7	-3.5328 ug/L	-3.5328 ppb	00:15:55
3	V 292.402†	-1456.1	-71.3	-0.5305 ug/L	-0.5305 ppb	00:15:55
3	Zn 213.857†	616.0	10.7	0.1173 ug/L	0.1173 ppb	00:16:15
3	SiO2†	591.3	45.4	3.2896 ug/L	3.2896 ppb	00:16:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892660.5	101.61 %		1.002			0.99%
Sc Radial	4330.2	98.5 %		1.70			1.72%
Y 371.029	751582.7	101.65 %		1.018			1.00%
Y RADIAL	4747.3	98.39 %		1.517			1.54%
Ag 328.068†	-187.8	-0.8959 ug/L		0.22645	-0.8959 ppb	0.22645	25.28%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.4	0.3385 ug/L		8.28428	0.3385 ppb	8.28428	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.2	1.0847 ug/L		2.78179	1.0847 ppb	2.78179	256.46%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	72.4	1.8055 ug/L		0.66605	1.8055 ppb	0.66605	36.89%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.2	0.0017 ug/L		0.04384	0.0017 ppb	0.04384	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	33.5	0.0132 ug/L		0.01161	0.0132 ppb	0.01161	88.24%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.2	6.3813 ug/L		3.12339	6.3813 ppb	3.12339	48.95%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	6.4	0.0809 ug/L	0.04578	0.0809 ppb	0.04578	56.56%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-13.6	-0.3143 ug/L	0.14393	-0.3143 ppb	0.14393	45.79%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-22.6	-0.2718 ug/L	0.26133	-0.2718 ppb	0.26133	96.15%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-296.0	-0.9045 ug/L	0.30735	-0.9045 ppb	0.30735	33.98%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.2	1.8906 ug/L	3.71789	1.8906 ppb	3.71789	196.65%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	187.4	36.028 ug/L	7.5776	36.028 ppb	7.5776	21.03%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.5	-22.984 ug/L	50.5659	-22.984 ppb	50.5659	220.01%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	24.5	0.0305 ug/L	0.00900	0.0305 ppb	0.00900	29.48%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	3.5	0.2732 ug/L	0.24465	0.2732 ppb	0.24465	89.55%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	23.5	6.7733 ug/L	5.14088	6.7733 ppb	5.14088	75.90%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-1.0	-0.0274 ug/L	0.19189	-0.0274 ppb	0.19189	700.82%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	4.4	3.1515 ug/L	1.67489	3.1515 ppb	1.67489	53.15%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	2.0	0.2785 ug/L	1.93054	0.2785 ppb	1.93054	693.29%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	9.3	15.016 ug/L	5.8238	15.016 ppb	5.8238	38.78%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.2	0.0712 ug/L	2.75456	0.0712 ppb	2.75456	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-2.1	-1.5460 ug/L	3.14708	-1.5460 ppb	3.14708	203.56%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	31.6	1.0733 ug/L	0.10868	1.0733 ppb	0.10868	10.13%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.8	0.3690 ug/L	0.48229	0.3690 ppb	0.48229	130.71%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	19.1	0.1235 ug/L	0.12554	0.1235 ppb	0.12554	101.67%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-29.2	-0.0414 ug/L	0.04858	-0.0414 ppb	0.04858	117.22%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-6.5	-2.2271 ug/L	2.38903	-2.2271 ppb	2.38903	107.27%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-170.6	-4.7192 ug/L	1.90674	-4.7192 ppb	1.90674	40.40%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-15.6	-0.1207 ug/L	0.36953	-0.1207 ppb	0.36953	306.26%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	19.7	0.2147 ug/L	0.09638	0.2147 ppb	0.09638	44.88%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		28.9	2.0904 ug/L	1.34374	2.0904 ppb	1.34374	64.28%
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: Thursday, February 25, 2010 10:21:12

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.587

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	7667.7	7667.657	92.696	1.2
Mg	24.0	65438.4	65438.352	810.719	1.2
Co	58.9	148768.2	148768.250	1242.721	0.8
Rh	102.9	281248.6	281248.630	3259.965	1.2
In	114.9	364299.1	364299.123	3937.746	1.1
Pb	208.0	327198.7	327198.660	900.422	0.3
[> Ba	137.9	337284.3	337284.262	1053.536	0.3
[Ba++	69.0	6381.2	0.019	0.000	1.2
[> Ce	139.9	411857.7	411857.650	5034.814	1.2
[CeO	155.9	10883.8	0.026	0.000	1.5
Bkgd	220.0	24.6	24.600	6.358	25.8

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.8	7423.9
Co	59	13	6.3	140852.6
In	115	13	6.8	347281.8

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	589	2072	0.604
Be	9.0	9.0	2056	2088	0.598
Mg	24.0	24.0	5695	2100	0.591
Mg	25.0	25.0	5935	2100	0.577
Mg	26.0	26.0	6177	2100	0.596
Co	58.9	59.0	14189	2125	0.594
Rh	102.9	102.9	24878	2180	0.579
In	114.9	114.9	27792	2200	0.585
Ce	139.9	139.9	33864	2220	0.581
Pb	206.0	206.0	49948	2305	0.587
Pb	207.0	207.0	50159	2240	0.631
Pb	208.0	208.0	50451	2265	0.710
U	238.1	238.1	57732	2275	0.744

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 19:46:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\Blank.457

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Li	7		ug/L		69	
| Be	9		ug/L		22	
| B	11		ug/L		494	
| Na	23		ug/L		12672	
| Mg	24		ug/L		333	
| Al	27		ug/L		1333	
| P	31		ug/L		5906	
| K	39		ug/L		553184	
| Ca	43		ug/L		422	
> | Sc	45		ug/L		430906	
| Ti	47		ug/L		435	
| V	51		ug/L		3683	
| Cr	52		ug/L		-1910	
| Cr	53		ug/L		152303	
| Mn	55		ug/L		1375	
| Fe	57		ug/L		6949	
| Co	59		ug/L		112	
| Ni	60		ug/L		268	
| Cu	63		ug/L		1409	
[Cu	65		ug/L		673	
[Zn	66		ug/L		1058	
| Zn	67		ug/L		16957	
| Zn	68		ug/L		2120	
> | Ge	74		ug/L		546428	
| As	75		ug/L		-568	
| Se	77		ug/L		9865	
| Se	82		ug/L		-17	
[Kr	83		ug/L		191	
[Sr	88		ug/L		181	
| Y	89		ug/L		57	
| Mo	98		ug/L		117	
| Ag	107		ug/L		57	
| Cd	111		ug/L		25	
| Cd	114		ug/L		48	
> | In	115		ug/L		347989	
| Sn	120		ug/L		294	
| Sb	121		ug/L		717	
[Sb	123		ug/L		583	
[Ba	135		ug/L		50	
| Ba	137		ug/L		63	
| Ho	165		ug/L		33	
> | Lu	175		ug/L		569787	
| Tl	205		ug/L		6326	
| Pb	208		ug/L		487	
| Bi	209		ug/L		575	
| Th	232		ug/L		714	
[U	238		ug/L		381	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 19:49:26

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Simple Linear	
Be	9Simple Linear	
B	11Simple Linear	
Na	23Simple Linear	
Mg	24Simple Linear	
Al	27Simple Linear	
P	31Simple Linear	
K	39Simple Linear	
Ca	43Simple Linear	
Sc	45Simple Linear	
Ti	47Simple Linear	
V	51Simple Linear	
Cr	52Simple Linear	
Cr	53Simple Linear	
Mn	55Simple Linear	
Fe	57Simple Linear	
Co	59Simple Linear	
Ni	60Simple Linear	
Cu	63Simple Linear	
Cu	65Simple Linear	
Zn	66Simple Linear	
Zn	67Simple Linear	
Zn	68Simple Linear	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Sr	88Simple Linear	
Y	89Simple Linear	
Mo	98Simple Linear	
Ag	107Simple Linear	
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Simple Linear	
Sn	120Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	
Ho	165Simple Linear	
Lu	175Linear Thru Zero	
Tl	205Simple Linear	
Pb	208Simple Linear	
Bi	209Simple Linear	
Th	232Simple Linear	
U	238Simple Linear	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 19:49:26

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 19:52:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.458

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	2.703	20789	0.049
Be	9	10.000	ug/L	2.675	4934	0.012
B	11	20.000	ug/L	1.503	9354	0.021
Na	23	1000.000	ug/L	19.125	3645353	8.592
Mg	24	1000.000	ug/L	5.742	2501187	5.917
Al	27	1000.000	ug/L	9.354	3503942	8.294
P	31	1000.000	ug/L	1.770	247054	0.571
K	39	1000.000	ug/L	7.256	6044355	13.012
Ca	43	1000.000	ug/L	2.469	14164	0.033
> Sc	45		ug/L		422613	422612.935
Ti	47	10.000	ug/L	0.986	7852	0.018
V	51	10.000	ug/L	1.881	95674	0.218
Cr	52	10.000	ug/L	1.684	68255	0.166
Cr	53		ug/L		160889	0.027
Mn	55	10.000	ug/L	0.515	119451	0.279
Fe	57	1000.000	ug/L	1.215	249552	0.574
Co	59	10.000	ug/L	0.267	93176	0.220
Ni	60	10.000	ug/L	3.755	20079	0.047
Cu	63		ug/L		48542	0.112
Cu	65	10.000	ug/L	2.191	24442	0.056
Zn	66	10.000	ug/L	2.028	16223	0.027
Zn	67		ug/L		19668	0.005
Zn	68		ug/L		13462	0.020
> Ge	74		ug/L		552769	552769.108
As	75	10.000	ug/L	2.132	16629	0.031
Se	77		ug/L		11256	0.002
Se	82	10.000	ug/L	5.491	1722	0.003
Kr	83		ug/L		153	-0.000
Sr	88	10.000	ug/L	1.066	206994	0.595
Y	89		ug/L		76	0.000
Mo	98	10.000	ug/L	3.645	49334	0.142
Ag	107	10.000	ug/L	1.877	86271	0.248
Cd	111	10.000	ug/L	3.052	21021	0.060
Cd	114		ug/L		49741	0.143
> In	115		ug/L		347777	347776.545
Sn	120	10.000	ug/L	0.188	86224	0.247
Sb	121	10.000	ug/L	3.988	69207	0.197
Sb	123		ug/L		53869	0.153
Ba	135		ug/L		20982	0.037
Ba	137	10.000	ug/L	1.837	37034	0.065
Ho	165		ug/L		37	0.000
> Lu	175		ug/L		571266	571266.063
Tl	205	10.000	ug/L	1.281	267965	0.458
Pb	208	10.000	ug/L	0.202	479282	0.838
Bi	209		ug/L		554	-0.000
Th	232	10.000	ug/L	1.587	608965	1.065
U	238	10.000	ug/L	0.763	638387	1.117

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 19:55:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 19:55:30

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ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 19:58:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.459

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.033	ug/L	1.157	202003	0.507
Be	9	100.034	ug/L	2.886	47905	0.120
B	11	200.057	ug/L	0.225	86448	0.216
Na	23	9998.984	ug/L	9.218	33863876	85.044
Mg	24	10002.353	ug/L	14.114	24138443	60.613
Al	27	10006.211	ug/L	6.454	35188021	88.482
P	31	9997.851	ug/L	2.975	2229230	5.588
K	39	10003.628	ug/L	11.471	54282837	135.066
Ca	43	10001.548	ug/L	1.784	131956	0.331
> Sc	45		ug/L		397963	397963.273
Ti	47	100.001	ug/L	2.163	70366	0.176
V	51	99.905	ug/L	3.434	793733	1.987
Cr	52	99.965	ug/L	2.155	636013	1.603
Cr	53		ug/L		213064	0.182
Mn	55	99.932	ug/L	2.142	1041625	2.615
Fe	57	9990.317	ug/L	12.527	2085273	5.231
Co	59	99.929	ug/L	2.545	817819	2.055
Ni	60	99.999	ug/L	2.031	186656	0.468
Cu	63		ug/L		431555	1.081
Cu	65	99.975	ug/L	2.748	218934	0.549
Zn	66	100.006	ug/L	1.616	145063	0.276
Zn	67		ug/L		39979	0.046
Zn	68		ug/L		108890	0.205
> Ge	74		ug/L		522034	522033.611
As	75	99.961	ug/L	0.354	155835	0.300
Se	77		ug/L		20330	0.021
Se	82	99.986	ug/L	0.567	16188	0.031
Kr	83		ug/L		197	0.000
Sr	88	99.876	ug/L	0.518	1732867	5.286
Y	89		ug/L		242	0.001
Mo	98	99.985	ug/L	0.352	457244	1.395
Ag	107	99.943	ug/L	1.948	768563	2.345
Cd	111	100.001	ug/L	1.401	198170	0.604
Cd	114		ug/L		454648	1.387
> In	115		ug/L		327791	327791.035
Sn	120	99.963	ug/L	1.152	781171	2.382
Sb	121	100.020	ug/L	0.682	659506	2.010
Sb	123		ug/L		516631	1.575
Ba	135		ug/L		200154	0.357
Ba	137	99.954	ug/L	1.376	346866	0.619
Ho	165		ug/L		44	0.000
> Lu	175		ug/L		560531	560530.557
Tl	205	99.812	ug/L	1.158	2162253	3.847
Pb	208	99.847	ug/L	1.548	4069760	7.260
Bi	209		ug/L		855	0.001
Th	232	99.845	ug/L	0.789	5159932	9.205
U	238	99.826	ug/L	0.983	5324574	9.499

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 20:01:35

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 20:01:35

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 20:01:35

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ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 20:04:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.460

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.453	ug/L	1.646	104401	0.251
Be	9	49.667	ug/L	2.194	24875	0.060
B	11	105.987	ug/L	3.042	48085	0.114
Na	23	4481.000	ug/L	4.739	15860973	38.112
Mg	24	5034.178	ug/L	1.806	12687429	30.506
Al	27	4701.019	ug/L	3.158	17290871	41.570
P	31	4735.656	ug/L	0.161	1106587	2.647
K	39	4615.341	ug/L	9.587	26455534	62.315
Ca	43	4862.924	ug/L	1.614	67259	0.161
> Sc	45		ug/L		415909	415908.640
Ti	47	49.325	ug/L	1.346	36495	0.087
V	51	51.259	ug/L	3.143	427438	1.019
Cr	52	50.685	ug/L	2.304	336135	0.813
Cr	53		ug/L		181124	0.082
Mn	55	52.115	ug/L	1.343	568500	1.364
Fe	57	4917.516	ug/L	2.385	1077573	2.575
Co	59	50.187	ug/L	2.319	429362	1.032
Ni	60	49.928	ug/L	1.630	97535	0.234
Cu	63		ug/L		228860	0.547
Cu	65	50.026	ug/L	1.943	114857	0.275
Zn	66	51.443	ug/L	0.951	77237	0.142
Zn	67		ug/L		29218	0.023
Zn	68		ug/L		58546	0.105
> Ge	74		ug/L		536808	536808.059
As	75	48.960	ug/L	0.950	78204	0.147
Se	77		ug/L		14913	0.010
Se	82	49.819	ug/L	2.584	8285	0.015
Kr	83		ug/L		158	-0.000
Sr	88	54.991	ug/L	1.942	967799	2.910
Y	89		ug/L		108	0.000
Mo	98	49.784	ug/L	2.712	230940	0.694
Ag	107	52.063	ug/L	1.615	406137	1.221
Cd	111	50.768	ug/L	2.246	102041	0.307
Cd	114		ug/L		240647	0.724
> In	115		ug/L		332565	332565.445
Sn	120	51.703	ug/L	3.612	409804	1.232
Sb	121	50.794	ug/L	2.955	339979	1.021
Sb	123		ug/L		266302	0.800
Ba	135		ug/L		102806	0.183
Ba	137	52.204	ug/L	1.465	181202	0.323
Ho	165		ug/L		62	0.000
> Lu	175		ug/L		560582	560582.323
Tl	205	53.300	ug/L	2.368	1157560	2.054
Pb	208	54.635	ug/L	0.727	2227346	3.973
Bi	209		ug/L		950	0.001
Th	232	50.827	ug/L	2.513	2626894	4.686
U	238	53.175	ug/L	1.861	2836373	5.060

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 20:07:39

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	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 20:07:39

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	98.906				
Be	9	99.335				
B	11	105.987				
Na	23	89.620				
Mg	24	100.684				
Al	27	93.089				
P	31	94.713				
K	39	92.307				
Ca	43	97.258				
Sc	45		96.5			
Ti	47	98.650				
V	51	102.517				
Cr	52	101.369				
Cr	53					
Mn	55	104.231				
Fe	57	98.350				
Co	59	100.374				
Ni	60	99.857				
Cu	63					
Cu	65	100.053				
Zn	66	102.885				
Zn	67					
Zn	68					
Ge	74		98.2			
As	75	97.920				
Se	77					
Se	82	99.639				
Kr	83					
Sr	88	109.982				
Y	89					
Mo	98	99.567				
Ag	107	104.126				
Cd	111	101.536				
Cd	114					
In	115		95.6			
Sn	120	103.406				
Sb	121	101.589				
Sb	123					
Ba	135					
Ba	137	104.409				
Ho	165					
Lu	175		98.4			
Tl	205	106.600				
Pb	208	109.270				
Bi	209					
Th	232	101.653				
U	238	106.351				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 1 Na 23ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 20:11:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.461

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.008	ug/L	73.120	83	0.000
Be	9	0.005	ug/L	384.803	24	0.000
B	11	4.871	ug/L	14.217	2644	0.005
Na	23	-0.979	ug/L	88.944	8669	-0.008
Mg	24	0.008	ug/L	2893.323	333	0.000
Al	27	0.105	ug/L	144.939	1667	0.001
P	31	0.452	ug/L	637.358	5759	0.000
K	39	1.683	ug/L	65.634	539330	0.023
Ca	43	0.803	ug/L	209.854	415	0.000
> Sc	45		ug/L		412774	412773.839
Ti	47	0.009	ug/L	194.006	423	0.000
V	51	0.291	ug/L	86.576	5919	0.006
Cr	52	-0.029	ug/L	79.519	-2019	-0.000
Cr	53		ug/L		148635	0.007
Mn	55	0.004	ug/L	15.962	1360	0.000
Fe	57	1.343	ug/L	84.776	6944	0.001
Co	59	0.003	ug/L	51.492	137	0.000
Ni	60	0.012	ug/L	16.242	279	0.000
Cu	63		ug/L		1376	0.000
Cu	65	0.039	ug/L	39.099	733	0.000
Zn	66	-0.058	ug/L	38.331	959	-0.000
Zn	67		ug/L		16883	0.000
Zn	68		ug/L		1999	-0.000
> Ge	74		ug/L		539907	539906.514
As	75	0.287	ug/L	119.204	-95	0.001
Se	77		ug/L		9222	-0.001
Se	82	0.143	ug/L	31.499	7	0.000
Kr	83		ug/L		166	-0.000
Sr	88	0.003	ug/L	35.911	238	0.000
Y	89		ug/L		67	0.000
Mo	98	0.032	ug/L	25.610	265	0.000
Ag	107	0.004	ug/L	14.505	86	0.000
Cd	111	0.006	ug/L	6.005	36	0.000
Cd	114		ug/L		62	0.000
> In	115		ug/L		341015	341014.903
Sn	120	0.024	ug/L	7.178	483	0.001
Sb	121	0.563	ug/L	16.728	4557	0.011
Sb	123		ug/L		3556	0.009
Ba	135		ug/L		57	0.000
Ba	137	0.006	ug/L	8.776	85	0.000
Ho	165		ug/L		27	-0.000
> Lu	175		ug/L		571025	571024.794
Tl	205	0.248	ug/L	22.901	11802	0.010
Pb	208	0.004	ug/L	53.359	657	0.000
Bi	209		ug/L		613	0.000
Th	232	0.041	ug/L	17.884	2859	0.004
U	238	0.007	ug/L	26.955	758	0.001

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 20:13:49

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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.8			
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		98.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 20:17:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.462

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.374	ug/L	1.911	22656	0.053
Be	9	0.533	ug/L	5.125	298	0.001
B	11	16.727	ug/L	2.346	8246	0.018
Na	23	248.791	ug/L	18.615	919153	2.116
Mg	24	17.100	ug/L	15.314	44737	0.104
Al	27	37.766	ug/L	3.811	144731	0.334
P	31	56.818	ug/L	5.082	19510	0.032
K	39	270.193	ug/L	6.783	2115830	3.648
Ca	43	215.500	ug/L	0.862	3478	0.007
> Sc	45		ug/L		429336	429335.727
Ti	47	8.603	ug/L	1.926	6927	0.015
V	51	11.263	ug/L	3.055	99798	0.224
Cr	52	10.718	ug/L	2.233	71864	0.172
Cr	53		ug/L		165664	0.032
Mn	55	5.851	ug/L	1.309	67093	0.153
Fe	57	115.984	ug/L	0.852	32995	0.061
Co	59	1.106	ug/L	2.502	9877	0.023
Ni	60	2.009	ug/L	6.211	4304	0.009
Cu	63		ug/L		5648	0.010
Cu	65	0.938	ug/L	2.255	2880	0.005
Zn	66	10.718	ug/L	1.073	17416	0.030
Zn	67		ug/L		20447	0.006
Zn	68		ug/L		14350	0.022
> Ge	74		ug/L		552723	552722.509
As	75	5.596	ug/L	5.220	8698	0.017
Se	77		ug/L		10555	0.001
Se	82	5.767	ug/L	2.511	972	0.002
Kr	83		ug/L		150	-0.000
Sr	88	12.283	ug/L	1.849	223110	0.650
Y	89		ug/L		67	0.000
Mo	98	0.550	ug/L	3.150	2746	0.008
Ag	107	1.084	ug/L	0.686	8776	0.025
Cd	111	1.081	ug/L	0.986	2266	0.007
Cd	114		ug/L		5344	0.015
> In	115		ug/L		343000	342999.709
Sn	120	5.468	ug/L	2.583	44972	0.130
Sb	121	3.310	ug/L	3.819	23513	0.067
Sb	123		ug/L		18256	0.052
Ba	135		ug/L		4441	0.007
Ba	137	2.174	ug/L	1.442	7942	0.013
Ho	165		ug/L		34	0.000
> Lu	175		ug/L		585498	585498.427
Tl	205	1.242	ug/L	3.309	34524	0.048
Pb	208	2.429	ug/L	0.665	103924	0.177
Bi	209		ug/L		606	0.000
Th	232	1.282	ug/L	1.669	69915	0.118
U	238	0.281	ug/L	1.936	16034	0.027

Sample ID: QC Std 3

Report Date/Time: Thursday, February 25, 2010 20:19:54

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	103.739				
Be	9	106.549				
B	11	111.515				
Na	23	99.517				
Mg	24	114.003				
Al	27	125.887				
P	31	113.636				
K	39	90.064				
Ca	43	107.750				
> Sc	45		99.6			
Ti	47	86.030				
V	51	112.626				
Cr	52	107.184				
Cr	53					
Mn	55	117.026				
Fe	57	115.984				
Co	59	110.635				
Ni	60	100.453				
Cu	63					
Cu	65	93.766				
Zn	66	107.177				
Zn	67					
Zn	68					
> Ge	74		101.2			
As	75	111.915				
Se	77					
Se	82	115.331				
Kr	83					
Sr	88	122.827				
Y	89					
Mo	98	109.996				
Ag	107	108.361				
Cd	111	108.074				
Cd	114					
> In	115		98.6			
Sn	120	109.360				
Sb	121	110.339				
Sb	123					
Ba	135					
Ba	137	108.677				
Ho	165					
> Lu	175		102.8			
Tl	205	124.213				
Pb	208	121.469				
Bi	209					
Th	232	128.184				
U	238	140.402				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 20:23:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.463

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.088	ug/L	3.697	217	0.000
Be	9	0.099	ug/L	15.136	61	0.000
B	11	1.757	ug/L	4.270	1089	0.002
Na	23	87148.721	ug/L	8.810	265375567	741.223
Mg	24	86666.853	ug/L	8.409	188025764	525.187
Al	27	86954.019	ug/L	3.541	275227387	768.913
P	31	85284.411	ug/L	1.475	17066264	47.669
K	39	87095.612	ug/L	8.901	421328877	1175.937
Ca	43	86857.407	ug/L	1.187	1027926	2.871
> Sc	45		ug/L		357937	357937.021
Ti	47	1537.401	ug/L	1.849	968127	2.704
V	51	0.539	ug/L	61.354	6894	0.011
Cr	52	2.394	ug/L	4.899	12157	0.038
Cr	53		ug/L		115652	-0.030
Mn	55	6.155	ug/L	0.604	58791	0.161
Fe	57	106048.007	ug/L	1.780	19881114	55.529
Co	59	0.293	ug/L	2.673	2250	0.006
Ni	60	3.209	ug/L	2.410	5602	0.015
Cu	63		ug/L		9660	0.024
Cu	65	3.116	ug/L	1.619	6682	0.017
Zn	66	3.684	ug/L	3.685	5756	0.010
Zn	67		ug/L		15479	0.002
Zn	68		ug/L		2496	0.001
> Ge	74		ug/L		475771	475770.754
As	75	-0.016	ug/L	2159.904	-515	-0.000
Se	77		ug/L		9103	0.001
Se	82	-1.044	ug/L	7.262	-169	-0.000
Kr	83		ug/L		398	0.000
Sr	88	3.145	ug/L	0.365	52051	0.166
Y	89		ug/L		605	0.002
Mo	98	1808.102	ug/L	1.056	7862522	25.220
Ag	107	0.115	ug/L	1.810	895	0.003
Cd	111	0.367	ug/L	45.659	713	0.002
Cd	114		ug/L		12900	0.041
> In	115		ug/L		311741	311741.369
Sn	120	0.250	ug/L	6.368	2118	0.006
Sb	121	0.218	ug/L	23.995	2008	0.004
Sb	123		ug/L		1569	0.003
Ba	135		ug/L		1377	0.003
Ba	137	0.707	ug/L	1.374	2347	0.004
Ho	165		ug/L		11181	0.021
> Lu	175		ug/L		523438	523437.842
Tl	205	-0.025	ug/L	12.318	5316	-0.001
Pb	208	0.236	ug/L	0.554	9415	0.017
Bi	209		ug/L		7172	0.013
Th	232	0.059	ug/L	36.953	3508	0.005
U	238	-0.002	ug/L	14.492	234	-0.000

Sample ID: QC Std 4

Report Date/Time: Thursday, February 25, 2010 20:26:01

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23	87.149				
|	Mg	24	86.667				
|	Al	27	86.954				
|	P	31	85.284				
|	K	39	87.096				
|	Ca	43	86.857				
>	Sc	45		83.1			
|	Ti	47	76.870				
|	V	51					
|	Cr	52	72.557				
|	Cr	53					
|	Mn	55	106.127				
|	Fe	57	106.048				
|	Co	59	124.664				
|	Ni	60	96.938				
|	Cu	63					
|	Cu	65	93.304				
|	Zn	66	97.971				
|	Zn	67					
|	Zn	68					
>	Ge	74		87.1			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88	106.248				
|	Y	89					
|	Mo	98	90.405				
|	Ag	107					
|	Cd	111	82.638				
|	Cd	114					
>	In	115		89.6			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137	88.550				
|	Ho	165					
>	Lu	175		91.9			
|	Tl	205					
|	Pb	208	124.674				
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 20:29:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\1100224\QC Std 5.464

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	18.171	ug/L	1.236	32777	0.092
Be	9	17.973	ug/L	0.385	7694	0.022
B	11	18.207	ug/L	0.381	7387	0.020
Na	23	83426.727	ug/L	1.505	251862578	709.567
Mg	24	80640.423	ug/L	5.867	173506400	488.668
Al	27	86851.940	ug/L	3.703	272564510	768.010
P	31	85119.840	ug/L	2.001	16890896	47.577
K	39	89047.317	ug/L	7.938	427207885	1202.288
Ca	43	87791.656	ug/L	2.584	1030253	2.902
> Sc	45		ug/L		354956	354956.074
Ti	47	1516.489	ug/L	1.055	946885	2.667
V	51	20.539	ug/L	2.390	147991	0.408
Cr	52	22.473	ug/L	1.410	126321	0.360
Cr	53		ug/L		127034	0.004
Mn	55	26.857	ug/L	1.816	250565	0.703
Fe	57	105113.802	ug/L	2.627	19540896	55.040
Co	59	20.545	ug/L	1.120	150065	0.423
Ni	60	22.013	ug/L	1.266	36824	0.103
Cu	63		ug/L		83008	0.231
Cu	65	21.558	ug/L	1.485	42552	0.118
Zn	66	21.519	ug/L	1.882	29037	0.059
Zn	67		ug/L		19085	0.009
Zn	68		ug/L		20161	0.039
> Ge	74		ug/L		473578	473578.073
As	75	20.209	ug/L	1.775	28191	0.061
Se	77		ug/L		11031	0.005
Se	82	18.728	ug/L	0.657	2739	0.006
Kr	83		ug/L		385	0.000
Sr	88	25.209	ug/L	0.813	413815	1.334
Y	89		ug/L		592	0.002
Mo	98	1807.691	ug/L	2.980	7816189	25.214
Ag	107	19.134	ug/L	1.728	139211	0.449
Cd	111	19.414	ug/L	1.700	36401	0.117
Cd	114		ug/L		95411	0.308
> In	115		ug/L		310064	310063.883
Sn	120	20.337	ug/L	2.326	150500	0.485
Sb	121	20.729	ug/L	2.389	129764	0.417
Sb	123		ug/L		100443	0.322
Ba	135		ug/L		37363	0.071
Ba	137	20.427	ug/L	1.039	66454	0.126
Ho	165		ug/L		11185	0.021
> Lu	175		ug/L		525071	525070.841
Tl	205	20.921	ug/L	2.251	429169	0.806
Pb	208	21.641	ug/L	0.151	826686	1.574
Bi	209		ug/L		7787	0.014
Th	232	22.132	ug/L	1.569	1071968	2.040
U	238	22.831	ug/L	0.434	1141025	2.172

Sample ID: QC Std 5

Report Date/Time: Thursday, February 25, 2010 20:32:07

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	90.853				
Be	9	89.865				
B	11	91.034				
Na	23	83.427				
Mg	24	80.640				
Al	27	86.852				
P	31	85.120				
K	39	89.047				
Ca	43	87.792				
> Sc	45		82.4			
Ti	47	75.824				
V	51	102.696				
Cr	52	96.452				
Cr	53					
Mn	55	104.096				
Fe	57	105.114				
Co	59	101.531				
Ni	60	94.438				
Cu	63					
Cu	65	92.364				
Zn	66	90.569				
Zn	67					
Zn	68					
> Ge	74		86.7			
As	75	101.047				
Se	77					
Se	82	93.642				
Kr	83					
Sr	88	109.794				
Y	89					
Mo	98	90.385				
Ag	107	95.671				
Cd	111	94.961				
Cd	114					
> In	115		89.1			
Sn	120	101.683				
Sb	121	103.645				
Sb	123					
Ba	135					
Ba	137	98.217				
Ho	165					
> Lu	175		92.2			
Tl	205	104.604				
Pb	208	107.193				
Bi	209					
Th	232	110.661				
U	238	114.157				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 20:35:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.465

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.804	ug/L	2.169	89827	0.248
Be	9	50.666	ug/L	4.565	22117	0.061
B	11	96.105	ug/L	3.427	38050	0.104
Na	23	4641.473	ug/L	2.436	14327024	39.477
Mg	24	4744.179	ug/L	9.234	10427285	28.749
Al	27	4545.967	ug/L	1.934	14583414	40.199
P	31	4596.643	ug/L	2.314	936720	2.569
K	39	4649.727	ug/L	11.700	23252700	62.779
Ca	43	4732.315	ug/L	1.466	57090	0.156
> Sc	45		ug/L		362727	362727.010
Ti	47	48.614	ug/L	2.508	31366	0.085
V	51	50.414	ug/L	3.285	366588	1.002
Cr	52	50.614	ug/L	1.046	292720	0.812
Cr	53		ug/L		168603	0.111
Mn	55	51.859	ug/L	3.323	493108	1.357
Fe	57	5025.916	ug/L	3.800	959888	2.632
Co	59	49.904	ug/L	1.574	372293	1.026
Ni	60	49.932	ug/L	2.593	85042	0.234
Cu	63		ug/L		199289	0.546
Cu	65	49.836	ug/L	3.029	99745	0.274
Zn	66	50.425	ug/L	2.381	67836	0.139
Zn	67		ug/L		25859	0.023
Zn	68		ug/L		51657	0.104
> Ge	74		ug/L		480980	480980.407
As	75	48.762	ug/L	3.267	69758	0.146
Se	77		ug/L		13378	0.010
Se	82	49.343	ug/L	2.188	7351	0.015
Kr	83		ug/L		150	-0.000
Sr	88	51.849	ug/L	1.341	861520	2.744
Y	89		ug/L		123	0.000
Mo	98	48.075	ug/L	0.100	210595	0.671
Ag	107	50.532	ug/L	0.472	372157	1.185
Cd	111	49.480	ug/L	0.920	93908	0.299
Cd	114		ug/L		220856	0.703
> In	115		ug/L		313903	313902.600
Sn	120	50.062	ug/L	0.757	374763	1.193
Sb	121	51.077	ug/L	1.928	322859	1.026
Sb	123		ug/L		252452	0.803
Ba	135		ug/L		94909	0.170
Ba	137	47.967	ug/L	3.095	166204	0.297
Ho	165		ug/L		64	0.000
> Lu	175		ug/L		559817	559816.932
Tl	205	50.663	ug/L	3.095	1098673	1.952
Pb	208	53.356	ug/L	2.559	2171362	3.880
Bi	209		ug/L		1098	0.001
Th	232	50.563	ug/L	4.041	2608372	4.661
U	238	52.423	ug/L	3.698	2790986	4.988

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 20:38:15

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	97.608				
Be	9	101.332				
B	11	96.105				
Na	23	92.829				
Mg	24	94.884				
Al	27	90.019				
P	31	91.933				
K	39	92.995				
Ca	43	94.646				
> Sc	45		84.2			
Ti	47	97.227				
V	51	100.828				
Cr	52	101.228				
Cr	53					
Mn	55	103.718				
Fe	57	100.518				
Co	59	99.809				
Ni	60	99.864				
Cu	63					
Cu	65	99.672				
Zn	66	100.850				
Zn	67					
Zn	68					
> Ge	74		88.0			
As	75	97.524				
Se	77					
Se	82	98.687				
Kr	83					
Sr	88	103.698				
Y	89					
Mo	98	96.150				
Ag	107	101.063				
Cd	111	98.960				
Cd	114					
> In	115		90.2			
Sn	120	100.124				
Sb	121	102.153				
Sb	123					
Ba	135					
Ba	137	95.935				
Ho	165					
> Lu	175		98.3			
Tl	205	101.326				
Pb	208	106.712				
Bi	209					
Th	232	101.127				
U	238	104.847				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 20:41:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.466

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.014	ug/L	15.933	83	0.000
Be	9	0.011	ug/L	172.858	23	0.000
B	11	2.876	ug/L	14.010	1532	0.003
Na	23	-0.506	ug/L	349.261	9003	-0.004
Mg	24	0.333	ug/L	139.304	1000	0.002
Al	27	0.383	ug/L	47.102	2334	0.003
P	31	0.942	ug/L	106.146	5123	0.001
K	39	10.146	ug/L	49.948	511333	0.137
Ca	43	4.098	ug/L	35.821	401	0.000
> Sc	45		ug/L		360000	360000.419
Ti	47	0.098	ug/L	15.283	425	0.000
V	51	-0.180	ug/L	83.324	1784	-0.004
Cr	52	-0.353	ug/L	19.488	-3634	-0.006
Cr	53		ug/L		139619	0.034
Mn	55	0.015	ug/L	8.568	1292	0.000
Fe	57	6.061	ug/L	13.120	6947	0.003
Co	59	0.003	ug/L	72.225	119	0.000
Ni	60	0.019	ug/L	44.808	256	0.000
Cu	63		ug/L		1146	-0.000
Cu	65	0.015	ug/L	147.338	592	0.000
Zn	66	-0.040	ug/L	46.958	891	-0.000
Zn	67		ug/L		15126	-0.000
Zn	68		ug/L		1791	-0.000
> Ge	74		ug/L		488054	488054.305
As	75	0.104	ug/L	437.216	-346	0.000
Se	77		ug/L		8248	-0.001
Se	82	0.223	ug/L	50.191	19	0.000
Kr	83		ug/L		150	-0.000
Sr	88	0.002	ug/L	95.099	203	0.000
Y	89		ug/L		62	0.000
Mo	98	0.053	ug/L	1.658	341	0.001
Ag	107	0.003	ug/L	67.223	71	0.000
Cd	111	0.003	ug/L	129.880	29	0.000
Cd	114		ug/L		55	0.000
> In	115		ug/L		317762	317761.648
Sn	120	0.025	ug/L	37.200	455	0.001
Sb	121	0.148	ug/L	25.757	1598	0.003
Sb	123		ug/L		1255	0.002
Ba	135		ug/L		54	0.000
Ba	137	0.003	ug/L	90.172	73	0.000
Ho	165		ug/L		34	0.000
> Lu	175		ug/L		563653	563652.979
Tl	205	0.632	ug/L	18.748	20000	0.024
Pb	208	0.003	ug/L	59.221	614	0.000
Bi	209		ug/L		701	0.000
Th	232	0.036	ug/L	9.052	2596	0.003
U	238	0.005	ug/L	37.590	638	0.000

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 20:44:24

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		83.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		89.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Thursday, February 25, 2010 20:47:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 10.467

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	902.640	ug/L	0.788	1489707	4.579
Be	9	963.608	ug/L	0.431	377204	1.159
B	11	1.508	ug/L	9.045	902	0.002
Na	23	46410.375	ug/L	4.006	128454799	394.733
Mg	24	48421.866	ug/L	6.035	95464819	293.429
Al	27	46785.938	ug/L	6.314	134665508	413.716
P	31	22754.505	ug/L	1.153	4142126	12.718
K	39	43154.068	ug/L	7.355	190087912	582.652
Ca	43	46483.489	ug/L	1.670	500087	1.536
> Sc	45		ug/L		325320	325319.752
Ti	47	42.103	ug/L	0.324	24414	0.074
V	51	885.120	ug/L	1.359	5728979	17.601
Cr	52	866.884	ug/L	1.958	4520935	13.900
Cr	53		ug/L		711888	1.835
Mn	55	946.628	ug/L	1.212	8059798	24.769
Fe	57	53968.504	ug/L	2.407	9200254	28.259
Co	59	845.793	ug/L	2.158	5659410	17.395
Ni	60	851.429	ug/L	0.720	1297715	3.989
Cu	63		ug/L		2970955	9.129
Cu	65	815.100	ug/L	1.297	1456133	4.474
Zn	66	2254.144	ug/L	1.211	2752574	6.220
Zn	67		ug/L		446721	0.979
Zn	68		ug/L		1783534	4.029
> Ge	74		ug/L		442374	442373.763
As	75	845.011	ug/L	0.173	1119734	2.532
Se	77		ug/L		54555	0.105
Se	82	466.582	ug/L	2.154	64048	0.145
Kr	83		ug/L		238	0.000
Sr	88	976.544	ug/L	1.314	15006777	51.685
Y	89		ug/L		519	0.002
Mo	98	908.569	ug/L	1.649	3679238	12.673
Ag	107	215.980	ug/L	0.980	1470909	5.067
Cd	111	851.288	ug/L	0.599	1493844	5.146
Cd	114		ug/L		3580069	12.333
> In	115		ug/L		290332	290332.212
Sn	120	879.416	ug/L	2.737	6083721	20.957
Sb	121	227.931	ug/L	1.725	1330129	4.580
Sb	123		ug/L		1058552	3.645
Ba	135		ug/L		1516573	2.857
Ba	137	844.932	ug/L	3.573	2776145	5.230
Ho	165		ug/L		180	0.000
> Lu	175		ug/L		530917	530917.400
Tl	205	470.017	ug/L	2.876	9620739	18.114
Pb	208	4622.252	ug/L	1.903	178416035	336.095
Bi	209		ug/L		5989	0.010
Th	232	2429.404	ug/L	2.029	118890665	223.964
U	238	5170.324	ug/L	1.937	261148763	491.959

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 20:50:28

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 20:50:28

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	90.264				
Be	9	96.361				
B	11					
Na	23	92.821				
Mg	24	96.844				
Al	27	93.572				
P	31	91.018				
K	39	86.308				
Ca	43	92.967				
> Sc	45		75.5			
Ti	47					
V	51	88.512				
Cr	52	86.688				
Cr	53					
Mn	55	94.663				
Fe	57	107.937				
Co	59	84.579				
Ni	60	85.143				
Cu	63					
Cu	65	81.510				
Zn	66	90.166				
Zn	67					
Zn	68					
> Ge	74		81.0			
As	75	84.501				
Se	77					
Se	82	93.316				
Kr	83					
Sr	88	97.654				
Y	89					
Mo	98	90.857				
Ag	107	86.392				
Cd	111	85.129				
Cd	114					
> In	115		83.4			
Sn	120	87.942				
Sb	121	91.172				
Sb	123					
Ba	135					
Ba	137	84.493				
Ho	165					
> Lu	175		93.2			
Tl	205	94.003				
Pb	208	92.445				
Bi	209					
Th	232	97.176				
U	238	103.406				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	K	39	LRS is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
QC Std 10	V	51	LRS is out of limits (+/- 10%)
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 20:50:28

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QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Ag	107LRS is out of limits (+/- 10%)
QC Std 10	Cd	111LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)
QC Std 10	Ba	137LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Thursday, February 25, 2010 20:53:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 11.468

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.315	ug/L	1.078	94668	0.250
Be	9	50.058	ug/L	0.773	22796	0.060
B	11	98.338	ug/L	2.803	40604	0.106
Na	23	4675.430	ug/L	0.950	15049481	39.766
Mg	24	4769.132	ug/L	1.209	10929224	28.900
Al	27	4930.484	ug/L	0.860	16488441	43.599
P	31	4613.703	ug/L	1.368	980347	2.579
K	39	4464.161	ug/L	8.484	23277196	60.274
Ca	43	4758.959	ug/L	1.870	59852	0.157
> Sc	45		ug/L		378174	378174.107
Ti	47	47.179	ug/L	1.542	31755	0.083
V	51	48.461	ug/L	1.857	367631	0.964
Cr	52	49.328	ug/L	0.925	297434	0.791
Cr	53		ug/L		167080	0.088
Mn	55	51.687	ug/L	1.479	512703	1.352
Fe	57	4936.229	ug/L	0.211	983586	2.585
Co	59	50.051	ug/L	1.590	389344	1.029
Ni	60	48.924	ug/L	1.847	86909	0.229
Cu	63		ug/L		207296	0.545
Cu	65	49.759	ug/L	1.703	103884	0.273
Zn	66	50.436	ug/L	0.919	70079	0.139
Zn	67		ug/L		27885	0.025
Zn	68		ug/L		53581	0.104
> Ge	74		ug/L		496656	496655.571
As	75	48.416	ug/L	1.495	71537	0.145
Se	77		ug/L		12541	0.007
Se	82	48.792	ug/L	1.936	7508	0.015
Kr	83		ug/L		160	-0.000
Sr	88	52.793	ug/L	1.177	882389	2.794
Y	89		ug/L		108	0.000
Mo	98	49.091	ug/L	1.919	216287	0.685
Ag	107	50.676	ug/L	0.738	375410	1.189
Cd	111	50.234	ug/L	1.602	95891	0.304
Cd	114		ug/L		222105	0.703
> In	115		ug/L		315750	315749.686
Sn	120	50.899	ug/L	2.207	383209	1.213
Sb	121	52.377	ug/L	0.717	332974	1.053
Sb	123		ug/L		262316	0.829
Ba	135		ug/L		96817	0.173
Ba	137	49.044	ug/L	1.379	169686	0.304
Ho	165		ug/L		60	0.000
> Lu	175		ug/L		558742	558741.763
Tl	205	52.521	ug/L	0.780	1137187	2.024
Pb	208	54.137	ug/L	0.484	2199934	3.936
Bi	209		ug/L		989	0.001
Th	232	51.800	ug/L	1.078	2669014	4.775
U	238	54.058	ug/L	0.139	2874360	5.144

Sample ID: QC Std 11

Report Date/Time: Thursday, February 25, 2010 20:56:33

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 11

Report Date/Time: Thursday, February 25, 2010 20:56:33

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	98.629				
Be	9	100.115				
B	11	98.338				
Na	23	93.509				
Mg	24	95.383				
Al	27	97.633				
P	31	92.274				
K	39	89.283				
Ca	43	95.179				
> Sc	45		87.8			
Ti	47	94.358				
V	51	96.922				
Cr	52	98.657				
Cr	53					
Mn	55	103.374				
Fe	57	98.725				
Co	59	100.101				
Ni	60	97.849				
Cu	63					
Cu	65	99.518				
Zn	66	100.872				
Zn	67					
Zn	68					
> Ge	74		90.9			
As	75	96.832				
Se	77					
Se	82	97.585				
Kr	83					
Sr	88	105.585				
Y	89					
Mo	98	98.182				
Ag	107	101.353				
Cd	111	100.468				
Cd	114					
> In	115		90.7			
Sn	120	101.797				
Sb	121	104.754				
Sb	123					
Ba	135					
Ba	137	98.087				
Ho	165					
> Lu	175		98.1			
Tl	205	105.043				
Pb	208	108.275				
Bi	209					
Th	232	103.601				
U	238	108.116				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 11 K 39CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Thursday, February 25, 2010 20:59:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 12.469

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.064	ug/L	19.592	186	0.000
Be	9	0.029	ug/L	33.599	33	0.000
B	11	2.723	ug/L	24.263	1571	0.003
Na	23	0.818	ug/L	34.615	14007	0.007
Mg	24	1.166	ug/L	75.836	3000	0.007
Al	27	1.315	ug/L	71.515	5668	0.012
P	31	1.731	ug/L	77.646	5653	0.001
K	39	3.218	ug/L	114.173	511341	0.043
Ca	43	-0.048	ug/L	2902.773	377	-0.000
> Sc	45		ug/L		385148	385147.560
Ti	47	0.013	ug/L	252.544	398	0.000
V	51	0.300	ug/L	153.626	5542	0.006
Cr	52	-0.229	ug/L	27.469	-3118	-0.004
Cr	53		ug/L		132839	-0.008
Mn	55	0.017	ug/L	18.398	1398	0.000
Fe	57	-0.184	ug/L	1054.726	6169	-0.000
Co	59	0.018	ug/L	9.701	243	0.000
Ni	60	0.017	ug/L	116.716	269	0.000
Cu	63		ug/L		1320	0.000
Cu	65	0.034	ug/L	31.690	674	0.000
Zn	66	-0.031	ug/L	65.096	927	-0.000
Zn	67		ug/L		15549	0.000
Zn	68		ug/L		1992	0.000
> Ge	74		ug/L		500727	500727.105
As	75	0.272	ug/L	106.460	-110	0.001
Se	77		ug/L		7616	-0.003
Se	82	0.190	ug/L	38.088	14	0.000
Kr	83		ug/L		156	-0.000
Sr	88	0.014	ug/L	9.321	414	0.001
Y	89		ug/L		57	0.000
Mo	98	0.098	ug/L	17.325	552	0.001
Ag	107	0.008	ug/L	9.977	111	0.000
Cd	111	0.012	ug/L	18.721	47	0.000
Cd	114		ug/L		122	0.000
> In	115		ug/L		324322	324321.956
Sn	120	0.109	ug/L	13.121	1116	0.003
Sb	121	0.961	ug/L	11.374	6923	0.019
Sb	123		ug/L		5419	0.015
Ba	135		ug/L		73	0.000
Ba	137	0.013	ug/L	17.541	106	0.000
Ho	165		ug/L		32	-0.000
> Lu	175		ug/L		563240	563240.427
Tl	205	0.590	ug/L	19.975	19049	0.023
Pb	208	0.067	ug/L	9.287	3224	0.005
Bi	209		ug/L		560	-0.000
Th	232	0.103	ug/L	10.179	6055	0.010
U	238	0.093	ug/L	7.816	5346	0.009

Sample ID: QC Std 12

Report Date/Time: Thursday, February 25, 2010 21:02:43

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		91.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202036903

Sample Date/Time: Thursday, February 25, 2010 21:06:06

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\1202036903.470

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.027	ug/L	4.971	116	0.000
Be	9	0.005	ug/L	157.227	23	0.000
B	11	0.916	ug/L	11.630	836	0.001
Na	23	5.492	ug/L	44.321	29699	0.047
Mg	24	0.430	ug/L	112.329	1333	0.003
Al	27	7.278	ug/L	7.527	26358	0.064
P	31	28.079	ug/L	15.670	11488	0.016
K	39	-7.472	ug/L	74.674	462736	-0.101
Ca	43	9.831	ug/L	10.104	510	0.000
> Sc	45		ug/L		391033	391032.570
Ti	47	0.335	ug/L	29.177	626	0.001
V	51	0.176	ug/L	311.434	4665	0.004
Cr	52	0.309	ug/L	15.123	200	0.005
Cr	53		ug/L		108506	-0.076
Mn	55	0.229	ug/L	2.515	3588	0.006
Fe	57	13.656	ug/L	14.621	9097	0.007
Co	59	0.009	ug/L	3.842	173	0.000
Ni	60	-0.019	ug/L	61.143	208	-0.000
Cu	63		ug/L		907	-0.001
Cu	65	-0.065	ug/L	15.808	471	-0.000
Zn	66	0.662	ug/L	4.477	1855	0.002
Zn	67		ug/L		12715	-0.005
Zn	68		ug/L		2471	0.001
> Ge	74		ug/L		492988	492988.476
As	75	0.244	ug/L	21.831	-152	0.001
Se	77		ug/L		5918	-0.006
Se	82	0.448	ug/L	36.729	53	0.000
Kr	83		ug/L		139	-0.000
Sr	88	0.034	ug/L	1.396	752	0.002
Y	89		ug/L		143	0.000
Mo	98	0.129	ug/L	25.171	701	0.002
Ag	107	0.002	ug/L	112.610	67	0.000
Cd	111	0.011	ug/L	30.903	45	0.000
Cd	114		ug/L		66	0.000
> In	115		ug/L		326300	326300.441
Sn	120	0.114	ug/L	9.215	1164	0.003
Sb	121	0.073	ug/L	17.898	1151	0.001
Sb	123		ug/L		879	0.001
Ba	135		ug/L		180	0.000
Ba	137	0.060	ug/L	3.220	278	0.000
Ho	165		ug/L		34	0.000
> Lu	175		ug/L		575758	575758.133
Tl	205	0.441	ug/L	14.527	16179	0.017
Pb	208	0.101	ug/L	4.115	4700	0.007
Bi	209		ug/L		403	-0.000
Th	232	0.166	ug/L	28.343	9544	0.015
U	238	0.035	ug/L	21.783	2280	0.003

Sample ID: 1202036903

Report Date/Time: Thursday, February 25, 2010 21:08:48

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: 1202036903

Report Date/Time: Thursday, February 25, 2010 21:08:48

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		90.7			
|	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		90.2			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		93.8			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		101.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036903

Report Date/Time: Thursday, February 25, 2010 21:08:48

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ICPMS#5 - Summary Report

Sample ID: 1202036908

Sample Date/Time: Thursday, February 25, 2010 21:12:12

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950498|40|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\1202036908.471

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	2.558	ug/L	0.962	5044	0.013
Be	9	20.466	ug/L	0.585	9475	0.025
B	11	37.565	ug/L	0.436	16020	0.041
Na	23	294.938	ug/L	4.393	974514	2.509
Mg	24	1192.898	ug/L	9.316	2776261	7.229
Al	27	2706.151	ug/L	4.223	9189304	23.930
P	31	210.335	ug/L	1.014	50405	0.118
K	39	1040.114	ug/L	1.881	5885132	14.043
Ca	43	2510.315	ug/L	2.468	32237	0.083
> Sc	45		ug/L		383980	383979.798
Ti	47	107.790	ug/L	2.136	73167	0.190
V	51	34.119	ug/L	0.941	263793	0.678
Cr	52	62.646	ug/L	1.391	383990	1.004
Cr	53		ug/L		174407	0.101
Mn	55	144.655	ug/L	2.092	1454553	3.785
Fe	57	4433.151	ug/L	1.775	897507	2.321
Co	59	26.171	ug/L	1.310	206767	0.538
Ni	60	36.112	ug/L	1.296	65196	0.169
Cu	63		ug/L		194224	0.503
Cu	65	45.425	ug/L	1.699	96335	0.249
Zn	66	156.565	ug/L	0.246	218316	0.432
Zn	67		ug/L		48791	0.066
Zn	68		ug/L		163615	0.321
> Ge	74		ug/L		503081	503081.194
As	75	28.280	ug/L	1.086	42113	0.085
Se	77		ug/L		15893	0.014
Se	82	76.209	ug/L	1.787	11886	0.024
Kr	83		ug/L		163	-0.000
Sr	88	62.823	ug/L	1.272	1058392	3.325
Y	89		ug/L		56905	0.179
Mo	98	13.266	ug/L	0.487	58995	0.185
Ag	107	4.470	ug/L	0.879	33424	0.105
Cd	111	16.090	ug/L	1.591	30972	0.097
Cd	114		ug/L		73616	0.231
> In	115		ug/L		318247	318246.699
Sn	120	7.675	ug/L	2.722	58462	0.183
Sb	121	12.627	ug/L	1.095	81398	0.254
Sb	123		ug/L		63678	0.198
Ba	135		ug/L		101020	0.179
Ba	137	51.438	ug/L	1.917	179653	0.318
Ho	165		ug/L		4127	0.007
> Lu	175		ug/L		564112	564112.457
Tl	205	36.854	ug/L	0.324	807451	1.420
Pb	208	25.837	ug/L	0.885	1060154	1.879
Bi	209		ug/L		10195	0.017
Th	232	2.426	ug/L	2.699	126839	0.224
U	238	0.575	ug/L	3.183	31220	0.055

Sample ID: 1202036908

Report Date/Time: Thursday, February 25, 2010 21:14:55

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		92.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE Ti		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 246443001

Sample Date/Time: Thursday, February 25, 2010 21:18:19

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498[2]baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\246443001.472

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	13.582	ug/L	0.413	28303	0.069
|	Be	9	1.794	ug/L	7.233	905	0.002
|	B	11	4.147	ug/L	4.607	2307	0.004
|	Na	23	305.059	ug/L	11.165	1075687	2.595
|	Mg	24	2333.319	ug/L	14.429	5779387	14.140
|	Al	27	13952.335	ug/L	11.818	50594668	123.377
|	P	31	194.499	ug/L	1.304	50166	0.109
|	K	39	2049.184	ug/L	2.024	11862123	27.667
|	Ca	43	2440.144	ug/L	1.589	33471	0.081
>	Sc	45		ug/L		409880	409879.915
|	Ti	47	409.874	ug/L	2.624	295696	0.721
|	V	51	19.814	ug/L	1.682	164957	0.394
|	Cr	52	12.846	ug/L	4.260	82547	0.206
|	Cr	53		ug/L		103499	-0.101
|	Mn	55	718.232	ug/L	2.219	7701320	18.793
|	Fe	57	15969.530	ug/L	1.544	3433604	8.362
|	Co	59	5.743	ug/L	1.443	48504	0.118
|	Ni	60	12.231	ug/L	2.267	23731	0.057
|	Cu	63		ug/L		69832	0.167
|	Cu	65	15.429	ug/L	1.667	35342	0.085
[	Zn	66	74.381	ug/L	0.649	94687	0.205
|	Zn	67		ug/L		26802	0.028
|	Zn	68		ug/L		72835	0.155
>	Ge	74		ug/L		457070	457070.041
|	As	75	4.723	ug/L	1.642	5992	0.014
|	Se	77		ug/L		4762	-0.008
|	Se	82	0.567	ug/L	21.921	66	0.000
|	Kr	83		ug/L		237	0.000
[	Sr	88	27.153	ug/L	0.230	441548	1.437
|	Y	89		ug/L		940522	3.062
|	Mo	98	3.856	ug/L	0.540	16623	0.054
|	Ag	107	0.284	ug/L	3.531	2100	0.007
|	Cd	111	1.113	ug/L	5.094	2088	0.007
|	Cd	114		ug/L		1293	0.004
>	In	115		ug/L		307132	307132.013
|	Sn	120	1.412	ug/L	0.396	10592	0.034
|	Sb	121	0.245	ug/L	5.854	2144	0.005
|	Sb	123		ug/L		1669	0.004
[	Ba	135		ug/L		311215	0.529
|	Ba	137	149.703	ug/L	0.529	544797	0.927
|	Ho	165		ug/L		73514	0.125
>	Lu	175		ug/L		587851	587850.783
|	Tl	205	0.655	ug/L	12.292	21389	0.025
|	Pb	208	34.951	ug/L	1.549	1494202	2.541
|	Bi	209		ug/L		10258	0.016
|	Th	232	19.543	ug/L	1.903	1059661	1.802
[U	238	17.423	ug/L	1.234	974799	1.658

Sample ID: 246443001

Report Date/Time: Thursday, February 25, 2010 21:21:02

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: 246443001

Report Date/Time: Thursday, February 25, 2010 21:21:02

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		83.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202036904

Sample Date/Time: Thursday, February 25, 2010 21:24:26

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\1202036904.473

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	14.825	ug/L	0.647	29325	0.075
Be	9	2.160	ug/L	2.370	1031	0.003
B	11	3.881	ug/L	6.404	2076	0.004
Na	23	274.610	ug/L	6.198	921256	2.336
Mg	24	2499.782	ug/L	4.903	5889984	15.148
Al	27	16908.869	ug/L	4.802	58202889	149.521
P	31	200.092	ug/L	3.976	48817	0.112
K	39	2156.550	ug/L	2.257	11831503	29.117
Ca	43	3030.329	ug/L	2.230	39336	0.100
> Sc	45		ug/L		389084	389084.209
Ti	47	519.942	ug/L	1.588	356035	0.914
V	51	23.778	ug/L	2.574	187201	0.473
Cr	52	12.338	ug/L	1.145	75236	0.198
Cr	53		ug/L		94613	-0.110
Mn	55	775.906	ug/L	0.429	7899896	20.302
Fe	57	18647.866	ug/L	1.892	3804116	9.764
Co	59	6.606	ug/L	0.566	52957	0.136
Ni	60	12.779	ug/L	0.380	23533	0.060
Cu	63		ug/L		69917	0.176
Cu	65	16.193	ug/L	0.814	35195	0.089
Zn	66	78.958	ug/L	1.917	95106	0.218
Zn	67		ug/L		25742	0.028
Zn	68		ug/L		74586	0.168
> Ge	74		ug/L		432787	432786.661
As	75	5.244	ug/L	4.819	6357	0.016
Se	77		ug/L		4195	-0.008
Se	82	1.247	ug/L	18.771	154	0.000
Kr	83		ug/L		237	0.000
Sr	88	32.960	ug/L	1.938	513845	1.744
Y	89		ug/L		955391	3.244
Mo	98	1.832	ug/L	1.690	7626	0.026
Ag	107	0.289	ug/L	0.501	2042	0.007
Cd	111	1.269	ug/L	0.612	2280	0.008
Cd	114		ug/L		1290	0.004
> In	115		ug/L		294520	294520.262
Sn	120	1.179	ug/L	1.349	8525	0.028
Sb	121	0.206	ug/L	0.621	1829	0.004
Sb	123		ug/L		1437	0.003
Ba	135		ug/L		351686	0.607
Ba	137	172.463	ug/L	1.111	618877	1.068
Ho	165		ug/L		76424	0.132
> Lu	175		ug/L		579724	579723.672
Tl	205	0.431	ug/L	5.353	16085	0.017
Pb	208	39.964	ug/L	1.752	1684720	2.906
Bi	209		ug/L		11933	0.020
Th	232	21.471	ug/L	2.173	1147885	1.979
U	238	21.774	ug/L	2.661	1200979	2.072

Sample ID: 1202036904

Report Date/Time: Thursday, February 25, 2010 21:27:09

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		90.3			
|	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		79.2			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		84.6			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		101.7			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE Ti		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202036906

Sample Date/Time: Thursday, February 25, 2010 21:30:34

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\1202036906.474

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	42.949	ug/L	1.094	80958	0.218
Be	9	25.494	ug/L	2.300	11409	0.031
B	11	49.837	ug/L	2.317	20410	0.054
Na	23	1220.439	ug/L	2.543	3866669	10.380
Mg	24	3781.277	ug/L	0.790	8510276	22.914
Al	27	21439.828	ug/L	3.730	70376042	189.587
P	31	1008.926	ug/L	2.011	214459	0.564
K	39	3394.623	ug/L	1.132	17499234	45.833
Ca	43	3635.188	ug/L	1.557	44977	0.120
> Sc	45		ug/L		371352	371352.322
Ti	47	514.024	ug/L	1.089	335993	0.904
V	51	47.376	ug/L	1.013	353056	0.942
Cr	52	37.181	ug/L	0.835	219752	0.596
Cr	53		ug/L		103927	-0.074
Mn	55	911.844	ug/L	1.523	8859532	23.859
Fe	57	21514.927	ug/L	0.764	4189101	11.266
Co	59	29.800	ug/L	1.946	227724	0.613
Ni	60	35.991	ug/L	3.002	62824	0.169
Cu	63		ug/L		156587	0.419
Cu	65	37.991	ug/L	0.682	78010	0.209
Zn	66	115.187	ug/L	1.984	128809	0.318
Zn	67		ug/L		30282	0.044
Zn	68		ug/L		99163	0.242
> Ge	74		ug/L		402848	402847.727
As	75	44.228	ug/L	1.650	52968	0.133
Se	77		ug/L		4432	-0.007
Se	82	10.397	ug/L	1.947	1288	0.003
Kr	83		ug/L		255	0.000
Sr	88	59.523	ug/L	1.851	879134	3.150
Y	89		ug/L		1053736	3.776
Mo	98	26.279	ug/L	1.516	102368	0.367
Ag	107	25.821	ug/L	1.913	169060	0.606
Cd	111	6.824	ug/L	0.873	11529	0.041
Cd	114		ug/L		21606	0.077
> In	115		ug/L		279036	279036.417
Sn	120	18.091	ug/L	1.043	120533	0.431
Sb	121	64.870	ug/L	1.124	364304	1.304
Sb	123		ug/L		285309	1.021
Ba	135		ug/L		406521	0.713
Ba	137	200.324	ug/L	1.532	707138	1.240
Ho	165		ug/L		88097	0.154
> Lu	175		ug/L		570214	570213.701
Tl	205	53.900	ug/L	1.168	1190789	2.077
Pb	208	135.522	ug/L	0.472	5619417	9.854
Bi	209		ug/L		12581	0.021
Th	232	46.986	ug/L	1.427	2470687	4.332
U	238	45.723	ug/L	0.739	2481166	4.351

Sample ID: 1202036906

Report Date/Time: Thursday, February 25, 2010 21:33:18

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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	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		86.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		73.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		80.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE Ti		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202036907

Sample Date/Time: Thursday, February 25, 2010 21:36:42

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\1202036907.475

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	40.784	ug/L	0.746	78846	0.207
Be	9	23.700	ug/L	1.649	10878	0.029
B	11	47.088	ug/L	1.343	19804	0.051
Na	23	1078.768	ug/L	4.403	3505440	9.175
Mg	24	3603.431	ug/L	4.804	8314605	21.836
Al	27	21866.939	ug/L	8.178	73609536	193.364
P	31	938.579	ug/L	2.666	204980	0.525
K	39	3270.589	ug/L	6.269	17300205	44.158
Ca	43	3490.717	ug/L	2.709	44307	0.115
> Sc	45		ug/L		380814	380814.167
Ti	47	487.526	ug/L	1.819	326848	0.857
V	51	45.480	ug/L	2.201	347624	0.904
Cr	52	33.974	ug/L	2.656	205736	0.545
Cr	53		ug/L		104640	-0.079
Mn	55	977.247	ug/L	1.709	9738072	25.571
Fe	57	20989.943	ug/L	2.376	4191259	10.991
Co	59	28.227	ug/L	2.597	221152	0.581
Ni	60	35.376	ug/L	2.771	63341	0.166
Cu	63		ug/L		150476	0.392
Cu	65	35.935	ug/L	1.492	75706	0.197
Zn	66	108.280	ug/L	2.695	126693	0.299
Zn	67		ug/L		29681	0.039
Zn	68		ug/L		95604	0.223
> Ge	74		ug/L		421365	421364.720
As	75	40.721	ug/L	1.853	50975	0.122
Se	77		ug/L		4460	-0.007
Se	82	9.493	ug/L	1.740	1229	0.003
Kr	83		ug/L		245	0.000
Sr	88	55.177	ug/L	1.489	842012	2.920
Y	89		ug/L		1024449	3.553
Mo	98	24.259	ug/L	2.240	97633	0.338
Ag	107	23.892	ug/L	0.923	161628	0.560
Cd	111	6.112	ug/L	0.681	10672	0.037
Cd	114		ug/L		20360	0.070
> In	115		ug/L		288302	288302.256
Sn	120	17.156	ug/L	1.361	118104	0.409
Sb	121	57.314	ug/L	1.775	332606	1.152
Sb	123		ug/L		260973	0.904
Ba	135		ug/L		407637	0.692
Ba	137	189.872	ug/L	1.541	692290	1.175
Ho	165		ug/L		85609	0.145
> Lu	175		ug/L		588986	588986.267
Tl	205	48.572	ug/L	0.625	1109029	1.872
Pb	208	128.087	ug/L	1.023	5485839	9.313
Bi	209		ug/L		15078	0.025
Th	232	44.397	ug/L	1.333	2411283	4.093
U	238	38.966	ug/L	1.564	2184167	3.708

Sample ID: 1202036907

Report Date/Time: Thursday, February 25, 2010 21:39:26

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		88.4			
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		77.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		82.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.4			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47	Upper, S, EETi	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202036905

Sample Date/Time: Thursday, February 25, 2010 21:42:52

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950498|10|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\1202036905.476

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	3.101	ug/L	1.197	5134	0.016
Be	9	0.423	ug/L	3.860	181	0.001
B	11	2.527	ug/L	18.353	1251	0.003
Na	23	73.836	ug/L	6.589	212234	0.628
Mg	24	471.687	ug/L	5.545	922903	2.858
Al	27	3303.177	ug/L	7.346	9433005	29.209
P	31	52.662	ug/L	7.289	13929	0.029
K	39	448.382	ug/L	2.749	2369975	6.054
Ca	43	553.883	ug/L	2.068	6229	0.018
> Sc	45		ug/L		323021	323020.539
Ti	47	91.259	ug/L	1.508	52155	0.160
V	51	4.324	ug/L	18.092	30469	0.086
Cr	52	2.487	ug/L	2.830	11446	0.040
Cr	53		ug/L		103326	-0.033
Mn	55	161.541	ug/L	1.195	1366191	4.227
Fe	57	3446.477	ug/L	2.884	587949	1.805
Co	59	1.301	ug/L	3.983	8721	0.027
Ni	60	2.896	ug/L	1.386	4582	0.014
Cu	63		ug/L		13568	0.039
Cu	65	3.484	ug/L	2.346	6681	0.019
Zn	66	15.987	ug/L	1.387	19037	0.044
Zn	67		ug/L		14338	0.004
Zn	68		ug/L		15247	0.033
> Ge	74		ug/L		413443	413443.205
As	75	1.340	ug/L	6.367	1229	0.004
Se	77		ug/L		4972	-0.006
Se	82	0.473	ug/L	17.914	48	0.000
Kr	83		ug/L		151	0.000
Sr	88	5.405	ug/L	1.810	78945	0.286
Y	89		ug/L		175527	0.637
Mo	98	0.784	ug/L	4.659	3104	0.011
Ag	107	0.050	ug/L	3.219	367	0.001
Cd	111	0.202	ug/L	7.849	356	0.001
Cd	114		ug/L		260	0.001
> In	115		ug/L		275503	275503.422
Sn	120	0.331	ug/L	2.753	2407	0.008
Sb	121	0.009	ug/L	20.380	617	0.000
Sb	123		ug/L		498	0.000
Ba	135		ug/L		57604	0.108
Ba	137	30.920	ug/L	0.914	102064	0.191
Ho	165		ug/L		13660	0.026
> Lu	175		ug/L		532934	532933.528
Tl	205	0.072	ug/L	22.112	7400	0.003
Pb	208	7.548	ug/L	0.417	292931	0.549
Bi	209		ug/L		2456	0.004
Th	232	4.339	ug/L	1.502	213850	0.400
U	238	3.797	ug/L	1.728	192874	0.361

Sample ID: 1202036905

Report Date/Time: Thursday, February 25, 2010 21:45:36

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: 1202036905

Report Date/Time: Thursday, February 25, 2010 21:45:36

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		75.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		75.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		79.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 21:49:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 8.477

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.464	ug/L	0.536	84450	0.251
Be	9	51.697	ug/L	2.602	20930	0.062
B	11	99.829	ug/L	1.134	36650	0.108
Na	23	4744.756	ug/L	1.763	13581673	40.355
Mg	24	4835.511	ug/L	4.625	9865794	29.302
Al	27	4733.181	ug/L	2.656	14087096	41.854
P	31	4630.051	ug/L	1.998	874825	2.588
K	39	4679.675	ug/L	7.296	21712522	63.183
Ca	43	4775.394	ug/L	1.615	53405	0.158
> Sc	45		ug/L		336365	336365.491
Ti	47	45.679	ug/L	2.245	27346	0.080
V	51	49.175	ug/L	3.458	331550	0.978
Cr	52	49.952	ug/L	1.491	267856	0.801
Cr	53		ug/L		156579	0.112
Mn	55	51.861	ug/L	2.772	457253	1.357
Fe	57	5046.001	ug/L	1.455	893897	2.642
Co	59	50.286	ug/L	2.926	347762	1.034
Ni	60	49.276	ug/L	2.837	77821	0.231
Cu	63		ug/L		184471	0.545
Cu	65	49.137	ug/L	1.391	91223	0.270
Zn	66	50.594	ug/L	1.947	62694	0.140
Zn	67		ug/L		23907	0.023
Zn	68		ug/L		47636	0.104
> Ge	74		ug/L		443040	443040.204
As	75	49.138	ug/L	3.683	64744	0.147
Se	77		ug/L		11834	0.009
Se	82	49.807	ug/L	2.506	6835	0.015
Kr	83		ug/L		146	-0.000
Sr	88	51.043	ug/L	1.219	776179	2.702
Y	89		ug/L		157	0.000
Mo	98	48.470	ug/L	0.677	194332	0.676
Ag	107	50.779	ug/L	0.470	342268	1.191
Cd	111	50.056	ug/L	1.090	86935	0.303
Cd	114		ug/L		203962	0.710
> In	115		ug/L		287293	287293.498
Sn	120	50.940	ug/L	1.494	348959	1.214
Sb	121	52.098	ug/L	2.061	301382	1.047
Sb	123		ug/L		237898	0.826
Ba	135		ug/L		87524	0.163
Ba	137	47.322	ug/L	1.022	157596	0.293
Ho	165		ug/L		66	0.000
> Lu	175		ug/L		537801	537800.765
Tl	205	52.060	ug/L	0.675	1084949	2.006
Pb	208	54.260	ug/L	0.405	2122271	3.945
Bi	209		ug/L		931	0.001
Th	232	51.581	ug/L	1.089	2557950	4.755
U	238	54.415	ug/L	0.895	2784791	5.178

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 21:51:43

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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	98.928				
Be	9	103.394				
B	11	99.829				
Na	23	94.895				
Mg	24	96.710				
Al	27	93.726				
P	31	92.601				
K	39	93.594				
Ca	43	95.508				
> Sc	45		78.1			
Ti	47	91.359				
V	51	98.350				
Cr	52	99.904				
Cr	53					
Mn	55	103.723				
Fe	57	100.920				
Co	59	100.572				
Ni	60	98.552				
Cu	63					
Cu	65	98.275				
Zn	66	101.189				
Zn	67					
Zn	68					
> Ge	74		81.1			
As	75	98.275				
Se	77					
Se	82	99.614				
Kr	83					
Sr	88	102.085				
Y	89					
Mo	98	96.941				
Ag	107	101.558				
Cd	111	100.111				
Cd	114					
> In	115		82.6			
Sn	120	101.879				
Sb	121	104.196				
Sb	123					
Ba	135					
Ba	137	94.644				
Ho	165					
> Lu	175		94.4			
Tl	205	104.119				
Pb	208	108.520				
Bi	209					
Th	232	103.163				
U	238	108.829				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 Sc 45 Int Std for QC Sc 45

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 21:55:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 9.478

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.064	ug/L	12.810	162	0.000
Be	9	0.028	ug/L	22.633	29	0.000
B	11	2.941	ug/L	16.751	1442	0.003
Na	23	-0.030	ug/L	7363.091	9671	-0.000
Mg	24	0.367	ug/L	2.312	1000	0.002
Al	27	0.892	ug/L	19.960	3667	0.008
P	31	0.825	ug/L	238.066	4722	0.000
K	39	5.291	ug/L	76.875	451702	0.071
Ca	43	7.032	ug/L	61.732	404	0.000
> Sc	45		ug/L		333400	333399.588
Ti	47	0.094	ug/L	36.971	391	0.000
V	51	0.278	ug/L	229.826	4646	0.006
Cr	52	-0.076	ug/L	127.346	-1890	-0.001
Cr	53		ug/L		125116	0.022
Mn	55	0.034	ug/L	19.809	1361	0.001
Fe	57	5.416	ug/L	19.052	6320	0.003
Co	59	0.009	ug/L	23.114	150	0.000
Ni	60	0.019	ug/L	62.433	237	0.000
Cu	63		ug/L		1055	-0.000
Cu	65	0.023	ug/L	35.742	562	0.000
Zn	66	-0.035	ug/L	28.108	814	-0.000
Zn	67		ug/L		13440	-0.001
Zn	68		ug/L		1549	-0.000
> Ge	74		ug/L		442816	442815.728
As	75	0.320	ug/L	91.800	-35	0.001
Se	77		ug/L		7154	-0.002
Se	82	0.382	ug/L	8.688	39	0.000
Kr	83		ug/L		143	-0.000
Sr	88	0.005	ug/L	18.091	227	0.000
Y	89		ug/L		82	0.000
Mo	98	0.024	ug/L	46.177	196	0.000
Ag	107	0.006	ug/L	9.609	89	0.000
Cd	111	0.009	ug/L	122.988	37	0.000
Cd	114		ug/L		48	0.000
> In	115		ug/L		290349	290349.391
Sn	120	0.022	ug/L	18.851	400	0.001
Sb	121	0.088	ug/L	29.490	1114	0.002
Sb	123		ug/L		873	0.001
Ba	135		ug/L		57	0.000
Ba	137	0.004	ug/L	81.305	74	0.000
Ho	165		ug/L		30	-0.000
> Lu	175		ug/L		540364	540363.610
Tl	205	0.512	ug/L	23.935	16649	0.020
Pb	208	0.009	ug/L	26.162	796	0.001
Bi	209		ug/L		524	-0.000
Th	232	0.035	ug/L	15.887	2419	0.003
U	238	0.009	ug/L	11.117	830	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 21:57:52

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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45		77.4			
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		81.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115		83.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175		94.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 Sc 45 Int Std for QC Sc 45

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 246443002

Sample Date/Time: Thursday, February 25, 2010 22:01:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\246443002.479

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	9.744	ug/L	1.069	16303	0.049
Be	9	1.321	ug/L	2.978	539	0.002
B	11	3.392	ug/L	4.790	1582	0.004
Na	23	270.442	ug/L	8.791	766853	2.300
Mg	24	1198.279	ug/L	1.090	2387755	7.261
Al	27	9293.002	ug/L	4.665	27009184	82.176
P	31	236.302	ug/L	0.836	47935	0.132
K	39	1360.964	ug/L	5.392	6460784	18.375
Ca	43	1684.971	ug/L	3.092	18635	0.056
> Sc	45		ug/L		328825	328824.823
Ti	47	310.440	ug/L	2.539	179797	0.546
V	51	15.800	ug/L	2.470	106096	0.314
Cr	52	5.427	ug/L	1.179	27155	0.087
Cr	53		ug/L		86267	-0.091
Mn	55	525.882	ug/L	1.442	4525274	13.760
Fe	57	10815.871	ug/L	1.163	1867546	5.663
Co	59	4.326	ug/L	0.837	29345	0.089
Ni	60	6.586	ug/L	0.757	10350	0.031
Cu	63		ug/L		32002	0.094
Cu	65	8.542	ug/L	1.515	15928	0.047
Zn	66	48.618	ug/L	1.021	52969	0.134
Zn	67		ug/L		17819	0.015
Zn	68		ug/L		40350	0.100
> Ge	74		ug/L		389295	389294.789
As	75	4.267	ug/L	8.667	4566	0.013
Se	77		ug/L		3997	-0.008
Se	82	0.679	ug/L	34.482	71	0.000
Kr	83		ug/L		165	0.000
Sr	88	14.860	ug/L	1.077	209150	0.786
Y	89		ug/L		702504	2.643
Mo	98	1.271	ug/L	3.523	4798	0.018
Ag	107	0.199	ug/L	3.286	1284	0.005
Cd	111	0.864	ug/L	2.532	1407	0.005
Cd	114		ug/L		607	0.002
> In	115		ug/L		265746	265745.911
Sn	120	1.621	ug/L	0.480	10488	0.039
Sb	121	0.177	ug/L	11.494	1495	0.004
Sb	123		ug/L		1151	0.003
Ba	135		ug/L		148195	0.271
Ba	137	76.500	ug/L	0.884	259156	0.474
Ho	165		ug/L		57891	0.106
> Lu	175		ug/L		547141	547141.238
Tl	205	0.279	ug/L	15.666	11967	0.011
Pb	208	23.896	ug/L	1.683	951007	1.738
Bi	209		ug/L		5638	0.009
Th	232	15.004	ug/L	2.890	757320	1.383
U	238	6.310	ug/L	3.904	328753	0.600

Sample ID: 246443002

Report Date/Time: Thursday, February 25, 2010 22:03:59

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: 246443002

Report Date/Time: Thursday, February 25, 2010 22:03:59

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.3			
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		71.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		76.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte
Ti 47 Upper, S, EEETi

MassOut of Limits Message
47Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 246443003

Sample Date/Time: Thursday, February 25, 2010 22:07:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\246443003.480

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	22.663	ug/L	2.017	39979	0.115
Be	9	2.233	ug/L	4.242	951	0.003
B	11	4.860	ug/L	3.150	2221	0.005
Na	23	293.123	ug/L	4.913	875734	2.493
Mg	24	3159.781	ug/L	4.283	6649982	19.148
Al	27	18586.522	ug/L	4.609	57061656	164.356
P	31	256.821	ug/L	1.888	54606	0.144
K	39	2688.148	ug/L	2.398	13050172	36.295
Ca	43	3240.511	ug/L	1.386	37539	0.107
> Sc	45		ug/L		347286	347285.616
Ti	47	484.476	ug/L	0.662	296232	0.852
V	51	27.444	ug/L	1.403	192500	0.546
Cr	52	13.307	ug/L	1.873	72551	0.213
Cr	53		ug/L		82587	-0.116
Mn	55	695.301	ug/L	0.863	6319534	18.193
Fe	57	21508.971	ug/L	2.933	3917328	11.263
Co	59	8.357	ug/L	0.872	59778	0.172
Ni	60	12.719	ug/L	2.857	20905	0.060
Cu	63		ug/L		68807	0.195
Cu	65	17.658	ug/L	0.859	34202	0.097
Zn	66	100.619	ug/L	1.381	108195	0.278
Zn	67		ug/L		25904	0.036
Zn	68		ug/L		83140	0.211
> Ge	74		ug/L		386975	386975.270
As	75	5.427	ug/L	6.276	5894	0.016
Se	77		ug/L		3566	-0.009
Se	82	0.686	ug/L	19.865	70	0.000
Kr	83		ug/L		221	0.000
Sr	88	32.629	ug/L	1.007	465000	1.727
Y	89		ug/L		923208	3.430
Mo	98	1.420	ug/L	0.517	5424	0.020
Ag	107	0.290	ug/L	0.692	1872	0.007
Cd	111	1.003	ug/L	14.359	1654	0.006
Cd	114		ug/L		1118	0.004
> In	115		ug/L		269203	269202.890
Sn	120	2.250	ug/L	2.816	14656	0.054
Sb	121	0.189	ug/L	2.096	1575	0.004
Sb	123		ug/L		1219	0.003
Ba	135		ug/L		322970	0.581
Ba	137	163.732	ug/L	0.903	563161	1.014
Ho	165		ug/L		77634	0.140
> Lu	175		ug/L		555617	555617.070
Tl	205	0.318	ug/L	5.463	12983	0.012
Pb	208	42.938	ug/L	1.562	1734946	3.122
Bi	209		ug/L		12031	0.021
Th	232	20.687	ug/L	1.489	1060204	1.907
U	238	18.149	ug/L	1.352	959787	1.727

Sample ID: 246443003

Report Date/Time: Thursday, February 25, 2010 22:10:05

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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	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		80.6			
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		70.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		77.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Ti 47 Upper, S, EEETi		47Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 246443004

Sample Date/Time: Thursday, February 25, 2010 22:13:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\246443004.481

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	27.989	ug/L	0.742	47980	0.142
Be	9	1.921	ug/L	2.834	798	0.002
B	11	4.207	ug/L	1.598	1921	0.005
Na	23	261.479	ug/L	5.679	760779	2.224
Mg	24	2952.022	ug/L	5.635	6040282	17.889
Al	27	16437.978	ug/L	6.207	49073024	145.357
P	31	247.372	ug/L	1.692	51302	0.138
K	39	2686.575	ug/L	6.491	12679672	36.273
Ca	43	2583.148	ug/L	1.669	29154	0.085
> Sc	45		ug/L		337560	337559.679
Ti	47	433.194	ug/L	2.008	257484	0.762
V	51	21.814	ug/L	1.656	149312	0.434
Cr	52	10.748	ug/L	0.610	56677	0.172
Cr	53		ug/L		76620	-0.127
Mn	55	656.322	ug/L	0.783	5798137	17.173
Fe	57	16724.811	ug/L	1.198	2961771	8.758
Co	59	5.457	ug/L	1.810	37974	0.112
Ni	60	12.793	ug/L	0.805	20439	0.060
Cu	63		ug/L		77494	0.226
Cu	65	20.689	ug/L	1.219	38860	0.114
Zn	66	70.073	ug/L	1.789	73296	0.193
Zn	67		ug/L		19904	0.022
Zn	68		ug/L		55969	0.145
> Ge	74		ug/L		375310	375309.512
As	75	4.821	ug/L	3.186	5032	0.014
Se	77		ug/L		3280	-0.009
Se	82	0.533	ug/L	23.758	50	0.000
Kr	83		ug/L		183	0.000
Sr	88	27.598	ug/L	1.004	390109	1.461
Y	89		ug/L		796430	2.983
Mo	98	1.299	ug/L	2.638	4927	0.018
Ag	107	0.254	ug/L	1.849	1637	0.006
Cd	111	0.944	ug/L	5.490	1542	0.006
Cd	114		ug/L		909	0.003
> In	115		ug/L		266984	266983.506
Sn	120	1.325	ug/L	1.964	8655	0.032
Sb	121	0.142	ug/L	3.285	1313	0.003
Sb	123		ug/L		1003	0.002
Ba	135		ug/L		280643	0.508
Ba	137	143.646	ug/L	0.936	491611	0.889
Ho	165		ug/L		68432	0.124
> Lu	175		ug/L		552774	552773.987
Tl	205	0.286	ug/L	3.440	12234	0.011
Pb	208	33.265	ug/L	0.409	1337476	2.419
Bi	209		ug/L		10492	0.018
Th	232	17.891	ug/L	1.446	912343	1.649
U	238	12.290	ug/L	0.433	646797	1.169

Sample ID: 246443004

Report Date/Time: Thursday, February 25, 2010 22:16:12

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		78.3			
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		68.7			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		76.7			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EETi		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 246443005

Sample Date/Time: Thursday, February 25, 2010 22:19:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\246443005.482

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	38.910	ug/L	0.658	67262	0.197
Be	9	1.305	ug/L	5.882	552	0.002
B	11	2.472	ug/L	0.605	1299	0.003
Na	23	289.746	ug/L	8.854	848936	2.464
Mg	24	2590.426	ug/L	2.832	5345508	15.698
Al	27	10477.589	ug/L	10.925	31574116	92.651
P	31	205.857	ug/L	1.079	43845	0.115
K	39	1961.931	ug/L	7.473	9461528	26.489
Ca	43	1825.036	ug/L	0.729	20875	0.060
> Sc	45		ug/L		340514	340514.103
Ti	47	395.975	ug/L	2.520	237451	0.696
V	51	16.533	ug/L	2.636	114852	0.329
Cr	52	9.464	ug/L	1.714	50156	0.152
Cr	53		ug/L		77822	-0.125
Mn	55	706.687	ug/L	0.574	6297564	18.491
Fe	57	13356.043	ug/L	1.413	2386695	6.994
Co	59	3.959	ug/L	2.370	27807	0.081
Ni	60	13.165	ug/L	3.168	21208	0.062
Cu	63		ug/L		33669	0.096
Cu	65	8.710	ug/L	1.202	16811	0.048
Zn	66	79.866	ug/L	2.472	84976	0.220
Zn	67		ug/L		21472	0.025
Zn	68		ug/L		63873	0.163
> Ge	74		ug/L		382254	382253.796
As	75	3.489	ug/L	5.592	3599	0.010
Se	77		ug/L		3275	-0.009
Se	82	0.601	ug/L	25.452	59	0.000
Kr	83		ug/L		180	0.000
Sr	88	16.562	ug/L	2.381	235039	0.877
Y	89		ug/L		715009	2.668
Mo	98	1.461	ug/L	1.250	5550	0.020
Ag	107	0.275	ug/L	3.445	1771	0.006
Cd	111	0.934	ug/L	2.792	1532	0.006
Cd	114		ug/L		901	0.003
> In	115		ug/L		267986	267985.593
Sn	120	3.023	ug/L	1.371	19529	0.072
Sb	121	0.130	ug/L	2.332	1253	0.003
Sb	123		ug/L		984	0.002
Ba	135		ug/L		192757	0.346
Ba	137	99.709	ug/L	3.274	343663	0.617
Ho	165		ug/L		61911	0.111
> Lu	175		ug/L		556946	556946.034
Tl	205	0.173	ug/L	5.116	9904	0.007
Pb	208	25.027	ug/L	1.762	1013730	1.820
Bi	209		ug/L		6026	0.010
Th	232	14.520	ug/L	1.342	746055	1.339
U	238	15.705	ug/L	2.608	832321	1.494

Sample ID: 246443005

Report Date/Time: Thursday, February 25, 2010 22:22:20

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: 246443005

Report Date/Time: Thursday, February 25, 2010 22:22:20

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		79.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		70.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		77.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE Ti		47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 22:31:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 8.484

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.517	ug/L	0.510	82512	0.261
Be	9	54.112	ug/L	2.314	20562	0.065
B	11	99.908	ug/L	3.312	34415	0.108
Na	23	4725.120	ug/L	2.597	12691322	40.188
Mg	24	4678.341	ug/L	5.989	8946991	28.350
Al	27	4736.870	ug/L	3.817	13219284	41.887
P	31	4672.120	ug/L	2.708	828371	2.611
K	39	4493.471	ug/L	6.044	19550762	60.669
Ca	43	4687.745	ug/L	1.810	49203	0.155
> Sc	45		ug/L		315548	315548.044
Ti	47	46.646	ug/L	2.311	26202	0.082
V	51	50.148	ug/L	3.505	317385	0.997
Cr	52	50.239	ug/L	3.027	252797	0.806
Cr	53		ug/L		142269	0.097
Mn	55	52.503	ug/L	3.923	434532	1.374
Fe	57	5073.579	ug/L	3.282	843440	2.657
Co	59	50.814	ug/L	2.175	329858	1.045
Ni	60	49.928	ug/L	2.829	74005	0.234
Cu	63		ug/L		171879	0.541
Cu	65	49.536	ug/L	1.611	86291	0.272
Zn	66	50.563	ug/L	1.566	58642	0.140
Zn	67		ug/L		21392	0.021
Zn	68		ug/L		44114	0.103
> Ge	74		ug/L		414496	414496.024
As	75	48.644	ug/L	1.304	59996	0.146
Se	77		ug/L		10630	0.008
Se	82	49.882	ug/L	1.629	6407	0.015
Kr	83		ug/L		133	-0.000
Sr	88	52.469	ug/L	1.356	748663	2.777
Y	89		ug/L		160	0.000
Mo	98	48.995	ug/L	2.215	184291	0.683
Ag	107	50.914	ug/L	1.147	321994	1.194
Cd	111	50.455	ug/L	1.996	82223	0.305
Cd	114		ug/L		195099	0.724
> In	115		ug/L		269545	269544.965
Sn	120	51.309	ug/L	0.532	329812	1.223
Sb	121	52.936	ug/L	2.411	287282	1.064
Sb	123		ug/L		224503	0.831
Ba	135		ug/L		84268	0.161
Ba	137	45.911	ug/L	0.731	148544	0.284
Ho	165		ug/L		62	0.000
> Lu	175		ug/L		522443	522442.642
Tl	205	52.649	ug/L	1.502	1065954	2.029
Pb	208	55.098	ug/L	0.753	2093543	4.006
Bi	209		ug/L		908	0.001
Th	232	52.348	ug/L	0.647	2522014	4.826
U	238	54.890	ug/L	2.081	2729063	5.223

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 22:34:36

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	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference	Duplicate Rel. % Difference
Li	7	103.034				
Be	9	108.224				
B	11	99.908				
Na	23	94.502				
Mg	24	93.567				
Al	27	93.799				
P	31	93.442				
K	39	89.869				
Ca	43	93.755				
> Sc	45		73.2			
Ti	47	93.292				
V	51	100.297				
Cr	52	100.478				
Cr	53					
Mn	55	105.005				
Fe	57	101.472				
Co	59	101.628				
Ni	60	99.857				
Cu	63					
Cu	65	99.072				
Zn	66	101.126				
Zn	67					
Zn	68					
> Ge	74		75.9			
As	75	97.287				
Se	77					
Se	82	99.764				
Kr	83					
Sr	88	104.939				
Y	89					
Mo	98	97.989				
Ag	107	101.828				
Cd	111	100.910				
Cd	114					
> In	115		77.5			
Sn	120	102.618				
Sb	121	105.872				
Sb	123					
Ba	135					
Ba	137	91.822				
Ho	165					
> Lu	175		91.7			
Tl	205	105.298				
Pb	208	110.197				
Bi	209					
Th	232	104.697				
U	238	109.779				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	K	39	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	
In 115 Int Std for QC In		115	
QC Std 8	Pb	208	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 22:38:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 9.485

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.058	ug/L	16.277	141	0.000
Be	9	0.036	ug/L	23.524	29	0.000
B	11	2.688	ug/L	17.810	1257	0.003
Na	23	-0.930	ug/L	58.817	6668	-0.008
Mg	24	0.239	ug/L	265.585	667	0.001
Al	27	1.491	ug/L	46.567	5001	0.013
P	31	0.805	ug/L	80.237	4379	0.000
K	39	-0.992	ug/L	581.048	392661	-0.013
Ca	43	5.846	ug/L	13.648	363	0.000
> Sc	45		ug/L		309446	309446.059
Ti	47	0.089	ug/L	18.354	361	0.000
V	51	0.130	ug/L	126.001	3429	0.003
Cr	52	-0.122	ug/L	78.363	-1979	-0.002
Cr	53		ug/L		114438	0.016
Mn	55	0.036	ug/L	8.000	1277	0.001
Fe	57	3.529	ug/L	23.551	5559	0.002
Co	59	0.008	ug/L	12.413	130	0.000
Ni	60	0.009	ug/L	139.965	205	0.000
Cu	63		ug/L		1008	-0.000
Cu	65	0.016	ug/L	60.103	510	0.000
Zn	66	-0.062	ug/L	27.718	719	-0.000
Zn	67		ug/L		12058	-0.001
Zn	68		ug/L		1341	-0.001
> Ge	74		ug/L		407199	407198.856
As	75	0.320	ug/L	54.772	-31	0.001
Se	77		ug/L		6244	-0.003
Se	82	0.480	ug/L	19.835	48	0.000
Kr	83		ug/L		132	-0.000
Sr	88	0.003	ug/L	56.669	178	0.000
Y	89		ug/L		77	0.000
Mo	98	0.021	ug/L	42.529	170	0.000
Ag	107	0.002	ug/L	94.271	56	0.000
Cd	111	0.008	ug/L	69.463	33	0.000
Cd	114		ug/L		55	0.000
> In	115		ug/L		268940	268939.901
Sn	120	0.017	ug/L	3.799	333	0.000
Sb	121	0.079	ug/L	36.644	983	0.002
Sb	123		ug/L		810	0.001
Ba	135		ug/L		51	0.000
Ba	137	0.003	ug/L	36.285	66	0.000
Ho	165		ug/L		26	-0.000
> Lu	175		ug/L		521259	521258.527
Tl	205	0.463	ug/L	20.335	15119	0.018
Pb	208	0.006	ug/L	12.126	666	0.000
Bi	209		ug/L		427	-0.000
Th	232	0.031	ug/L	17.752	2139	0.003
U	238	0.006	ug/L	12.505	664	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 22:40:46

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	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	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		71.8			
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		74.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		77.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		91.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
Ge 74 Int Std for QC	Ge	74	
In 115 Int Std for QC	In	115	

QC Action

Sample ID: QC Std 9
 Report Date/Time: Thursday, February 25, 2010 22:40:46
 Page 3

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Friday, February 26, 2010 11:18:31

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.603

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	6234.4	6234.361	127.289	2.0
Mg	24.0	57804.7	57804.724	634.808	1.1
Co	58.9	120145.6	120145.644	2214.442	1.8
Rh	102.9	237714.5	237714.452	3759.446	1.6
In	114.9	317715.9	317715.886	6439.940	2.0
Pb	208.0	252739.1	252739.143	1341.129	0.5
[> Ba	137.9	282978.7	282978.675	4411.050	1.6
[Ba++	69.0	4776.7	0.017	0.000	0.9
[> Ce	139.9	348109.3	348109.319	4167.249	1.2
[CeO	155.9	9142.5	0.026	0.001	2.6
Bkgd	220.0	25.3	25.300	3.094	12.2

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.0	6386.8
Co	59	13	6.3	120406.0
In	115	13	6.8	326979.4

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	592	2050	0.662
Be	9.0	9.0	2055	2075	0.632
Mg	24.0	24.0	5681	2080	0.603
Mg	25.0	25.0	5945	2080	0.611
Mg	26.0	26.0	6169	2080	0.626
Co	58.9	58.9	14187	2110	0.616
Rh	102.9	102.9	24877	2160	0.614
In	114.9	114.9	27791	2180	0.628
Ce	139.9	139.9	33863	2200	0.619
Pb	206.0	206.0	49948	2295	0.596
Pb	207.0	207.0	50159	2240	0.629
Pb	208.0	208.0	50451	2265	0.689
U	238.1	238.0	57722	2275	0.723

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, February 26, 2010 11:26:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\Blank.598

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		18	
> Sc	45		ug/L		560099	
Ni	60		ug/L		97	
> Ge	74		ug/L		722387	
As	75		ug/L		63	
Se	77		ug/L		5741	
Se	82		ug/L		-8	
Kr	83		ug/L		190	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Ni	60	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
Be	9								
> Sc	45								
Ni	60								
> Ge	74								
As	75								
Se	77								
Se	82								
Kr	83								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Friday, February 26, 2010 11:27:01

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, February 26, 2010 11:28:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.599

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	1.958	6608	0.011
> Sc	45		ug/L		593768	593767.993
Ni	60	10.000	ug/L	3.909	26590	0.045
> Ge	74		ug/L		723048	723047.704
As	75	10.000	ug/L	2.185	19955	0.028
Se	77		ug/L		11781	0.008
Se	82	10.000	ug/L	2.266	2095	0.003
Kr	83		ug/L		167	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

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					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Friday, February 26, 2010 11:29:29

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ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, February 26, 2010 11:31:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.600

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.039	ug/L	0.641	64705	0.115
> Sc	45		ug/L		560157	560157.380
Ni	60	99.994	ug/L	1.768	248471	0.443
> Ge	74		ug/L		705376	705376.388
As	75	100.029	ug/L	1.637	199923	0.283
Se	77		ug/L		26189	0.029
Se	82	99.984	ug/L	0.485	20194	0.029
Kr	83		ug/L		189	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recovery	Dilution %	Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45										
Ni	60										
> Ge	74										
As	75										
Se	77										
Se	82										
Kr	83										

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Friday, February 26, 2010 11:31:58

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ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, February 26, 2010 11:33:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.601

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.223	ug/L	3.932	33404	0.059
Sc	45		ug/L		564703	564703.097
Ni	60	50.275	ug/L	1.065	126006	0.223
Ge	74		ug/L		708299	708299.351
As	75	48.942	ug/L	1.973	98262	0.139
Se	77		ug/L		18120	0.018
Se	82	49.126	ug/L	1.722	9958	0.014
Kr	83		ug/L		190	0.000

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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	102.445				
Sc	45		100.8			
Ni	60	100.550				
Ge	74		98.0			
As	75	97.883				
Se	77					
Se	82	98.253				
Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Friday, February 26, 2010 11:34:27

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, February 26, 2010 11:36:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.602

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.000	ug/L	7229.170	18	-0.000
Sc	45		ug/L		550015	550014.847
Ni	60	0.003	ug/L	82.371	103	0.000
Ge	74		ug/L		716861	716860.759
As	75	0.165	ug/L	151.126	401	0.000
Se	77		ug/L		6387	0.001
Se	82	0.063	ug/L	157.885	5	0.000
Kr	83		ug/L		172	-0.000

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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		98.2				
Ni	60						
Ge	74		99.2				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Friday, February 26, 2010 11:37:01

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ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, February 26, 2010 11:38:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.603

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.572	ug/L	9.464	392	0.001
> Sc	45		ug/L		566297	566297.342
[Ni	60	2.203	ug/L	1.288	5629	0.010
> Ge	74		ug/L		702596	702595.661
| As	75	5.467	ug/L	11.800	10958	0.015
| Se	77		ug/L		12599	0.010
| Se	82	5.712	ug/L	6.576	1141	0.002
[Kr	83		ug/L		158	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	114.436					
> Sc	45		101.1				
[Ni	60	110.141					
> Ge	74		97.3				
| As	75	109.338					
| Se	77						
| Se	82	114.246					
[Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Friday, February 26, 2010 11:39:31

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ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, February 26, 2010 11:41:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.604

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.086	ug/L	10.868	66	0.000
> Sc	45		ug/L		502732	502732.333
Ni	60	3.502	ug/L	2.917	7891	0.016
> Ge	74		ug/L		629302	629302.056
As	75	-0.012	ug/L	4938.014	47	-0.000
Se	77		ug/L		11965	0.011
Se	82	-0.962	ug/L	18.220	-180	-0.000
Kr	83		ug/L		459	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		89.8			
Ni	60	105.805				
> Ge	74		87.1			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Friday, February 26, 2010 11:42:01

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, February 26, 2010 11:44:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 5.605

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.077	ug/L	4.063	10432	0.022
Sc	45		ug/L		473416	473415.862
Ni	60	23.646	ug/L	2.573	49700	0.105
Ge	74		ug/L		609142	609142.239
As	75	20.882	ug/L	1.203	36093	0.059
Se	77		ug/L		15033	0.017
Se	82	20.278	ug/L	1.334	3532	0.006
Kr	83		ug/L		463	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	95.383				
Sc	45		84.5			
Ni	60	101.441				
Ge	74		84.3			
As	75	104.408				
Se	77					
Se	82	101.389				
Kr	83					

QC Out of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Friday, February 26, 2010 11:44:32

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 11:46:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.606

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.606	ug/L	3.771	32292	0.060
|>	Sc	45		ug/L		542120	542119.674
[	Ni	60	51.152	ug/L	0.547	123067	0.227
[>	Ge	74		ug/L		691087	691087.239
|	As	75	48.425	ug/L	1.366	94870	0.137
|	Se	77		ug/L		17754	0.018
|	Se	82	50.093	ug/L	1.712	9908	0.014
[	Kr	83		ug/L		191	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	103.211				
|>	Sc	45		96.8			
[	Ni	60	102.304				
[>	Ge	74		95.7			
|	As	75	96.850				
|	Se	77					
|	Se	82	100.186				
[	Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, February 26, 2010 11:47:04

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 11:49:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.607

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.004	ug/L	32.385	20	0.000
> Sc	45		ug/L		528997	528996.810
Ni	60	0.004	ug/L	27.461	100	0.000
> Ge	74		ug/L		703211	703211.330
As	75	0.007	ug/L	2887.830	79	0.000
Se	77		ug/L		6615	0.001
Se	82	-0.044	ug/L	32.449	-17	-0.000
Kr	83		ug/L		180	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		94.4			
Ni	60					
> Ge	74		97.3			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 11:49:38

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ICPMS#5 - Summary Report

Sample ID: 1202036903

Sample Date/Time: Friday, February 26, 2010 11:51:36

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\1202036903.608

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.007	ug/L	58.657	21	0.000
> Sc	45		ug/L		525829	525828.612
Ni	60	0.065	ug/L	13.380	242	0.000
> Ge	74		ug/L		665153	665153.276
As	75	-0.293	ug/L	73.835	-494	-0.001
Se	77		ug/L		7929	0.004
Se	82	0.506	ug/L	19.448	89	0.000
Kr	83		ug/L		153	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		93.9			
Ni	60					
> Ge	74		92.1			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036903

Report Date/Time: Friday, February 26, 2010 11:52:08

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ICPMS#5 - Summary Report

Sample ID: 1202036908

Sample Date/Time: Friday, February 26, 2010 11:54:07

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950498|40|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\1202036908.609

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	20.835	ug/L	3.672	13735	0.024
> Sc	45		ug/L		570632	570632.179
Ni	60	37.172	ug/L	1.996	94138	0.165
> Ge	74		ug/L		703612	703612.497
As	75	29.228	ug/L	1.489	58316	0.083
Se	77		ug/L		21908	0.023
Se	82	79.646	ug/L	1.634	16041	0.023
Kr	83		ug/L		176	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9								
> Sc	45				101.9				
Ni	60								
> Ge	74				97.4				
As	75								
Se	77								
Se	82								
Kr	83								

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036908

Report Date/Time: Friday, February 26, 2010 11:54:39

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ICPMS#5 - Summary Report

Sample ID: 246443001

Sample Date/Time: Friday, February 26, 2010 11:56:38

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\246443001.610

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.880	ug/L	4.731	1322	0.002
> Sc	45		ug/L		600621	600621.371
Ni	60	13.883	ug/L	2.204	37082	0.062
> Ge	74		ug/L		651861	651860.573
As	75	5.029	ug/L	4.710	9345	0.014
Se	77		ug/L		6861	0.003
Se	82	0.865	ug/L	17.067	154	0.000
Kr	83		ug/L		317	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
> Sc	45		107.2			
Ni	60					
> Ge	74		90.2			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443001

Report Date/Time: Friday, February 26, 2010 11:57:10

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ICPMS#5 - Summary Report

Sample ID: 1202036904

Sample Date/Time: Friday, February 26, 2010 11:59:09

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\1202036904.611

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.241	ug/L	1.198	1578	0.003
> Sc	45		ug/L		602452	602451.873
[Ni	60	14.385	ug/L	2.193	38531	0.064
> Ge	74		ug/L		643904	643903.830
| As	75	5.538	ug/L	2.018	10160	0.016
| Se	77		ug/L		6097	0.002
| Se	82	1.436	ug/L	8.751	258	0.000
[Kr	83		ug/L		317	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		107.6			
[Ni	60					
> Ge	74		89.1			
| As	75					
| Se	77					
| Se	82					
[Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036904

Report Date/Time: Friday, February 26, 2010 11:59:42

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ICPMS#5 - Summary Report

Sample ID: 1202036906

Sample Date/Time: Friday, February 26, 2010 12:01:42

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\1202036906.612

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	25.784	ug/L	1.584	18091	0.030
> Sc	45		ug/L		607161	607160.759
Ni	60	39.052	ug/L	0.956	105263	0.173
> Ge	74		ug/L		628688	628688.279
As	75	47.824	ug/L	1.115	85232	0.135
Se	77		ug/L		6632	0.003
Se	82	10.870	ug/L	5.057	1950	0.003
Kr	83		ug/L		370	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		108.4			
Ni	60					
> Ge	74		87.0			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036906

Report Date/Time: Friday, February 26, 2010 12:02:15

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ICPMS#5 - Summary Report

Sample ID: 1202036907

Sample Date/Time: Friday, February 26, 2010 12:04:14

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\1202036907.613

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	24.555	ug/L	1.966	17123	0.028
> Sc	45		ug/L		603488	603488.193
Ni	60	39.271	ug/L	2.573	105158	0.174
> Ge	74		ug/L		627640	627640.267
As	75	45.586	ug/L	0.246	81111	0.129
Se	77		ug/L		6585	0.003
Se	82	10.518	ug/L	1.286	1884	0.003
Kr	83		ug/L		359	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		107.7			
Ni	60					
> Ge	74		86.9			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036907

Report Date/Time: Friday, February 26, 2010 12:04:48

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ICPMS#5 - Summary Report

Sample ID: 1202036905

Sample Date/Time: Friday, February 26, 2010 12:06:48

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950498|10|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\1202036905.614

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.429	ug/L	10.087	281	0.000
Sc	45		ug/L		530317	530317.012
Ni	60	3.165	ug/L	4.267	7529	0.014
Ge	74		ug/L		660675	660675.191
As	75	1.007	ug/L	12.697	1945	0.003
Se	77		ug/L		6904	0.003
Se	82	0.585	ug/L	52.951	104	0.000
Kr	83		ug/L		183	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		94.7			
Ni	60					
Ge	74		91.5			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036905

Report Date/Time: Friday, February 26, 2010 12:07:22

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, February 26, 2010 12:09:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 8.615

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.896	ug/L	3.073	30303	0.059
|>	Sc	45		ug/L		515628	515628.162
[	Ni	60	51.977	ug/L	1.311	118929	0.231
[>	Ge	74		ug/L		669977	669977.391
|	As	75	49.000	ug/L	0.880	93069	0.139
|	Se	77		ug/L		16156	0.016
|	Se	82	50.561	ug/L	3.255	9693	0.014
[	Kr	83		ug/L		174	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Dil Duplicate	Rel. % Difference
[	Be	9	101.791					
|>	Sc	45		92.1				
[	Ni	60	103.954					
[>	Ge	74		92.7				
|	As	75	98.000					
|	Se	77						
|	Se	82	101.123					
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Friday, February 26, 2010 12:09:53

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, February 26, 2010 12:11:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 9.616

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.006	ug/L	109.881	19	0.000
> Sc	45		ug/L		475381	475380.509
Ni	60	0.013	ug/L	53.373	109	0.000
> Ge	74		ug/L		639234	639234.264
As	75	-0.146	ug/L	75.411	-209	-0.000
Se	77		ug/L		5328	0.000
Se	82	0.315	ug/L	10.586	51	0.000
Kr	83		ug/L		168	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		84.9			
Ni	60					
> Ge	74		88.5			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Friday, February 26, 2010 12:12:27

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443002

Sample Date/Time: Friday, February 26, 2010 12:14:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\246443002.617

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.253	ug/L	2.633	813	0.001
> Sc	45		ug/L		549991	549990.828
Ni	60	7.268	ug/L	2.540	17816	0.032
> Ge	74		ug/L		627165	627164.596
As	75	4.553	ug/L	10.284	8145	0.013
Se	77		ug/L		5754	0.001
Se	82	1.083	ug/L	13.439	188	0.000
Kr	83		ug/L		265	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		98.2			
Ni	60					
> Ge	74		86.8			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443002

Report Date/Time: Friday, February 26, 2010 12:14:58

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443003

Sample Date/Time: Friday, February 26, 2010 12:16:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\246443003.618

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.351	ug/L	0.820	1595	0.003
|>	Sc	45		ug/L		580911	580911.007
[	Ni	60	14.159	ug/L	2.226	36572	0.063
[>	Ge	74		ug/L		625662	625662.249
|	As	75	5.530	ug/L	1.870	9856	0.016
|	Se	77		ug/L		5352	0.001
|	Se	82	1.189	ug/L	18.995	206	0.000
[	Kr	83		ug/L		350	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9								
|>	Sc	45				103.7				
[	Ni	60								
[>	Ge	74				86.6				
|	As	75								
|	Se	77								
|	Se	82								
[	Kr	83								

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443003

Report Date/Time: Friday, February 26, 2010 12:17:29

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443004

Sample Date/Time: Friday, February 26, 2010 12:19:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\246443004.619

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.874	ug/L	2.163	1272	0.002
> Sc	45		ug/L		579472	579472.259
Ni	60	13.257	ug/L	1.016	34174	0.059
> Ge	74		ug/L		626048	626047.993
As	75	4.644	ug/L	4.217	8290	0.013
Se	77		ug/L		5135	0.000
Se	82	0.761	ug/L	25.286	130	0.000
Kr	83		ug/L		303	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		103.5			
Ni	60					
> Ge	74		86.7			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443004

Report Date/Time: Friday, February 26, 2010 12:20:01

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443005

Sample Date/Time: Friday, February 26, 2010 12:22:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498[2]baj

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\246443005.620

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.269	ug/L	4.059	855	0.001
| > Sc	45		ug/L		570865	570865.334
[Ni	60	14.426	ug/L	1.678	36620	0.064
| > Ge	74		ug/L		618505	618505.342
| As	75	3.168	ug/L	6.833	5607	0.009
| Se	77		ug/L		5035	0.000
| Se	82	0.840	ug/L	15.743	142	0.000
[Kr	83		ug/L		275	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
| > Sc	45		101.9			
[Ni	60					
| > Ge	74		85.6			
| As	75					
| Se	77					
| Se	82					
[Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443005

Report Date/Time: Friday, February 26, 2010 12:22:33

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 12:27:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.622

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.357	ug/L	1.880	30053	0.060
Sc	45		ug/L		497054	497054.479
Ni	60	52.136	ug/L	1.446	114994	0.231
Ge	74		ug/L		654485	654485.463
As	75	48.568	ug/L	1.274	90092	0.138
Se	77		ug/L		14873	0.015
Se	82	49.734	ug/L	3.115	9313	0.014
Kr	83		ug/L		172	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	104.714				
Sc	45		88.7			
Ni	60	104.271				
Ge	74		90.6			
As	75	97.137				
Se	77					
Se	82	99.469				
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, February 26, 2010 12:27:38

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 12:29:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be ni as and se.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.623

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.007	ug/L	133.795	20	0.000
Sc	45		ug/L		491101	491100.869
Ni	60	0.010	ug/L	29.816	107	0.000
Ge	74		ug/L		653680	653679.941
As	75	0.001	ug/L	10462.890	59	0.000
Se	77		ug/L		4842	-0.001
Se	82	0.246	ug/L	31.923	39	0.000
Kr	83		ug/L		169	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		87.7			
Ni	60					
Ge	74		90.5			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 12:30:12

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, February 26, 2010 16:21:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\Blank.718

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		653329	
[U	238		ug/L		680	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Friday, February 26, 2010 16:21:47

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, February 26, 2010 16:23:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.719

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		663108	663108.368
[U	238	10.000	ug/L	1.116	601577	0.906

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					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Friday, February 26, 2010 16:23:24

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, February 26, 2010 16:24:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.720

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		607657	607656.690
[U	238	99.900	ug/L	0.234	5001886	8.230

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

Sample ID: Standard 2

Report Date/Time: Friday, February 26, 2010 16:25:01

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, February 26, 2010 16:26:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.721

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		657853	657853.112
[	U	238	47.945	ug/L	0.827	2599074	3.950

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					100.7					
[	U	238		95.890								

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Friday, February 26, 2010 16:26:39

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, February 26, 2010 16:28:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.722

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		652487	652486.881
[U	238	0.013	ug/L	6.266	1396	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 %	Duplicate Rel. % Difference
[> Lu	175		99.9			
[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

9

Sample ID: QC Std 2

Report Date/Time: Friday, February 26, 2010 16:28:21

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, February 26, 2010 16:29:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.723

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		666748	666747.583
[	U	238	0.213	ug/L	0.309	12385	0.018

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		102.1			
[	U	238	106.420				

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 3

Report Date/Time: Friday, February 26, 2010 16:30:02

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, February 26, 2010 16:31:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.724

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		564796	564796.001
[U	238	-0.007	ug/L	4.081	257	-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 %	Duplicate Rel. % Difference
[> Lu	175		86.4			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Friday, February 26, 2010 16:31:41

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, February 26, 2010 16:33:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 5.725

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		663786	663785.736
[U	238	20.200	ug/L	1.864	1105236	1.664

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			101.6			
[U	238	101.001					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Friday, February 26, 2010 16:33:20

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 16:34:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.726

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		646968	646967.599
[U	238	48.497	ug/L	1.075	2585692	3.995

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 %	Duplicate Rel. % Difference
[> Lu	175			99.0		
[U	238	96.994				

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, February 26, 2010 16:35:00

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 16:36:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.727

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		622510	622510.141
[	U 238	0.012	ug/L	9.880	1253	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		95.3			
[	U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 16:36:42

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202036903

Sample Date/Time: Friday, February 26, 2010 16:38:11

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202036903.728

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		634881	634880.553
U	U	238	0.001	ug/L	58.489	705	0.000

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			97.2		
U	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: 1202036903

Report Date/Time: Friday, February 26, 2010 16:38:21

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202036908

Sample Date/Time: Friday, February 26, 2010 16:39:49

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950498|40|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202036908.729

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		626572	626572.145
[U	238	0.556	ug/L	0.772	29348	0.046

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			95.9		
[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: 1202036908

Report Date/Time: Friday, February 26, 2010 16:40:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443001

Sample Date/Time: Friday, February 26, 2010 16:41:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\246443001.730

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		648290	648290.068
[U	238	17.632	ug/L	0.464	942385	1.453

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		99.2			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443001

Report Date/Time: Friday, February 26, 2010 16:41:40

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202036904

Sample Date/Time: Friday, February 26, 2010 16:43:09

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202036904.731

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		657713	657712.988
[U	238	21.726	ug/L	1.353	1177837	1.790

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					

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: 1202036904

Report Date/Time: Friday, February 26, 2010 16:43:20

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202036906

Sample Date/Time: Friday, February 26, 2010 16:44:49

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202036906.732

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		653977	653976.865
[	U 238	44.500	ug/L	1.760	2398066	3.666

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		100.1			
[	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: 1202036906

Report Date/Time: Friday, February 26, 2010 16:45:01

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202036907

Sample Date/Time: Friday, February 26, 2010 16:46:30

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202036907.733

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		656132	656131.813
[U	238	40.338	ug/L	1.504	2181244	3.323

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

Sample ID: 1202036907

Report Date/Time: Friday, February 26, 2010 16:46:42

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202036905

Sample Date/Time: Friday, February 26, 2010 16:48:12

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950498|10|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202036905.734

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		649854	649853.934
[U	238	3.620	ug/L	0.688	194452	0.298

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			99.5		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036905

Report Date/Time: Friday, February 26, 2010 16:48:24

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 16:49:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.735

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		648252	648252.493
[	U	238	48.531	ug/L	1.082	2592627	3.998

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		99.2			
[U	238	97.062				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, February 26, 2010 16:50:04

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 16:51:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.736

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175			ug/L		614229	614228.876
[U	238	0.003		ug/L	17.130	778	0.000

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		94.0				
[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

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 16:51:46

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443002

Sample Date/Time: Friday, February 26, 2010 16:53:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\246443002.737

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		645991	645991.494
[	U	238	6.273	ug/L	1.383	334500	0.517

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			98.9		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443002

Report Date/Time: Friday, February 26, 2010 16:53:24

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443003

Sample Date/Time: Friday, February 26, 2010 16:54:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\246443003.738

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		649556	649555.695
[	U	238	18.043	ug/L	0.823	966204	1.486

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		99.4			
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message .

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443003

Report Date/Time: Friday, February 26, 2010 16:55:04

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443004

Sample Date/Time: Friday, February 26, 2010 16:56:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\246443004.739

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		645777	645777.466
[	U	238	12.026	ug/L	1.501	640468	0.991

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			98.8		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443004

Report Date/Time: Friday, February 26, 2010 16:56:44

Page 1

ICPMS#5 - Summary Report

Sample ID: 246443005

Sample Date/Time: Friday, February 26, 2010 16:58:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950498|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\246443005.740

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		643826	643825.656
[U	238	15.624	ug/L	1.484	829393	1.287

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		98.5			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246443005

Report Date/Time: Friday, February 26, 2010 16:58:25

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 17:01:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.742

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		649099	649098.900
[	U	238	48.536	ug/L	1.963	2595850	3.999

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 %	Duplicate Rel. % Difference
[>	Lu	175		99.4			
[	U	238	97.072				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Friday, February 26, 2010 17:01:46

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 17:03:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.743

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		613101	613100.830
[U	238	0.003	ug/L	24.213	807	0.000

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		93.8				
[U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 17:03:28

Page 1

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\022510S1.SIF

Batch ID:

Results Data Set: 02510S1

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: SOIL

Method Last Saved: 1/4/2010 13:53:20

Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/25/2010 09:15:36

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0014	0.0002	09:16:28	Yes
2		[0.00]	0.0002	0.0011	0.0002	09:16:57	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	22.81				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/25/2010 09:17:16

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0025	0.0124	0.0027	09:18:06	Yes
2		[0.2]	0.0024	0.0120	0.0026	09:18:36	Yes
Mean:		[0.2]	0.0025				
SD:		0.0	0.0000				
%RSD:		0.0	1.42				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01235 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/25/2010 09:18:55

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0063	0.0303	0.0065	09:19:46	Yes
2		[0.5]	0.0062	0.0295	0.0064	09:20:16	Yes
Mean:		[0.5]	0.0063				
SD:		0.0	0.0000				
%RSD:		0.0	0.78				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999983 Slope: 0.01252 Intercept: -0.00001

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/25/2010 09:20:35

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0255	0.1204	0.0257	09:21:27	Yes
2		[2.0]	0.0254	0.1192	0.0256	09:21:56	Yes
Mean:		[2.0]	0.0255				
SD:		0.0	0.0001				
%RSD:		0.0	0.25				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999990 Slope: 0.01275 Intercept: -0.00006

Sequence No.: 5
Sample ID: S5.0
Analyst:

Autosampler Location: 5
Date Collected: 2/25/2010 09:22:16
Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0632	0.2951	0.0634	09:23:08	Yes
2		[5.0]	0.0633	0.2954	0.0635	09:23:38	Yes
Mean:		[5.0]	0.0632				
SD:		0.0	0.0001				
%RSD:		0.0	0.13				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999995 Slope: 0.01266 Intercept: -0.00001

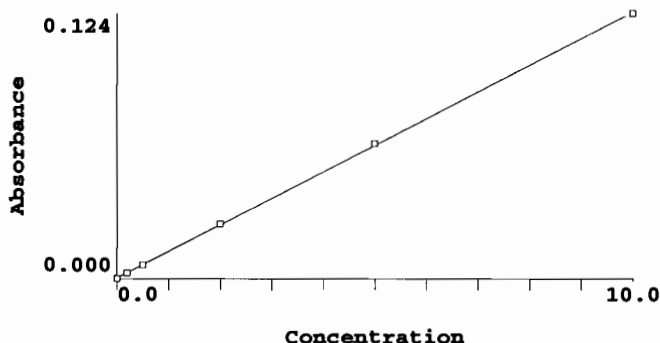
Sequence No.: 6
Sample ID: S10.0
Analyst:

Autosampler Location: 6
Date Collected: 2/25/2010 09:23:58
Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1241	0.5791	0.1243	09:24:48	Yes
2		[10.0]	0.1235	0.5778	0.1237	09:25:17	Yes
Mean:		[10.0]	0.1238				
SD:		0.0	0.0004				
%RSD:		0.0	0.35				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999938 Slope: 0.01241 Intercept: 0.00027

-----
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	-0.022	0.00	22.8
S0.2	0.0025	0.2	0.177	0.00	1.4
S0.5	0.0063	0.5	0.482	0.00	0.8
S2.0	0.0255	2.0	2.030	0.00	0.2

S5.0	0.0632	5.0	5.075	0.00	0.1
S10.0	0.1238	10.0	9.958	0.00	0.3

Correlation Coef.: 0.999938 Slope: 0.01241 Intercept: 0.00027

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 2/25/2010 09:25:36

Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.138	5.138	0.0640	0.2993	0.0642	09:26:28	Yes
2	5.132	5.132	0.0639	0.2974	0.0641	09:26:58	Yes
Mean:	5.135	5.135	0.0640				
SD:	0.004	0.004	0.0001				
%RSD:	0.080	0.080	0.08				

QC value within limits for Hg 253.7 Recovery = 102.69%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 2/25/2010 09:27:17

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0001	-0.0007	0.0001	09:28:09	Yes
2	-0.029	-0.029	-0.0001	-0.0005	0.0001	09:28:39	Yes
Mean:	-0.028	-0.028	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	5.002	5.002	21.68				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CRDL

Analyst:

Autosampler Location: 11

Date Collected: 2/25/2010 09:28:59

Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.186	0.186	0.0026	0.0120	0.0028	09:29:50	Yes
2	0.183	0.183	0.0025	0.0116	0.0027	09:30:20	Yes
Mean:	0.184	0.184	0.0026				
SD:	0.002	0.002	0.0000				
%RSD:	1.020	1.020	0.91				

QC value within limits for Hg 253.7 Recovery = 92.17%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/25/2010 09:30:40

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.098	5.098	0.0635	0.2963	0.0637	09:31:30	Yes
2	5.041	5.041	0.0628	0.2935	0.0630	09:32:00	Yes
Mean:	5.069	5.069	0.0632				
SD:	0.040	0.040	0.0005				
%RSD:	0.789	0.789	0.79				

QC value within limits for Hg 253.7 Recovery = 101.39%
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/25/2010 09:32:19

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	0.0000	0.0002	09:33:10	Yes
2	-0.028	-0.028	-0.0001	-0.0005	0.0001	09:33:40	Yes
Mean:	-0.026	-0.026	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	11.46	11.46	75.50				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202039360|951582|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 2/25/2010 09:33:59

Data Type: Original

Replicate Data: 1202039360|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.024	-0.024	-0.0000	0.0005	0.0002	09:34:50	Yes
2	-0.027	-0.027	-0.0001	-0.0003	0.0001	09:35:20	Yes
Mean:	-0.025	-0.025	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	9.649	9.649	69.27				

Sequence No.: 13

Sample ID: 1202039361|951582|1

Analyst: JXL

Autosampler Location: 13

Date Collected: 2/25/2010 09:35:40

Data Type: Original

Replicate Data: 1202039361|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.081	2.081	0.0261	0.1213	0.0263	09:36:33	Yes
2	2.077	2.077	0.0260	0.1211	0.0262	09:37:03	Yes
Mean:	2.079	2.079	0.0261				
SD:	0.003	0.003	0.0000				
%RSD:	0.138	0.138	0.14				

Sequence No.: 14

Sample ID: 246346001|951582|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 2/25/2010 09:37:23

Data Type: Original

Replicate Data: 246346001|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.219	0.219	0.0030	0.0148	0.0032	09:38:14	Yes
2	0.223	0.223	0.0030	0.0150	0.0032	09:38:43	Yes
Mean:	0.221	0.221	0.0030				
SD:	0.003	0.003	0.0000				
%RSD:	1.410	1.410	1.28				

Sequence No.: 15

Sample ID: 1202039362|951582|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 2/25/2010 09:39:02

Data Type: Original

Replicate Data: 1202039362|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

Replicate Data: 246346003|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.339	0.339	0.0045	0.0214	0.0047	09:48:10	Yes
2	0.332	0.332	0.0044	0.0210	0.0046	09:48:40	Yes
Mean:	0.336	0.336	0.0044				
SD:	0.005	0.005	0.0001				
%RSD:	1.449	1.449	1.36				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 246346004|951582|1

Date Collected: 2/25/2010 09:49:00

Analyst: JXL

Data Type: Original

Replicate Data: 246346004|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.656	4.656	0.0580	0.2704	0.0582	09:49:50	Yes
2	4.657	4.657	0.0581	0.2699	0.0582	09:50:20	Yes
Mean:	4.656	4.656	0.0580				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.03				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/25/2010 09:50:40

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.308	5.308	0.0661	0.3057	0.0663	09:51:30	Yes
2	5.287	5.287	0.0659	0.3020	0.0661	09:52:00	Yes
Mean:	5.297	5.297	0.0660				
SD:	0.014	0.014	0.0002				
%RSD:	0.273	0.273	0.27				

QC value within limits for Hg 253.7 Recovery = 105.95%
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/25/2010 09:52:19

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.030	-0.030	-0.0001	-0.0009	0.0001	09:53:10	Yes
2	-0.027	-0.027	-0.0001	-0.0002	0.0001	09:53:40	Yes
Mean:	-0.028	-0.028	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	7.038	7.038	31.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 246346005|951582|1

Date Collected: 2/25/2010 09:53:59

Analyst: JXL

Data Type: Original

Replicate Data: 246346005|951582|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.297	0.297	0.0040	0.0188	0.0041	09:54:50	Yes
2	0.293	0.293	0.0039	0.0187	0.0041	09:55:20	Yes

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.244	0.244	0.0033	0.0171	0.0035	10:03:16	Yes
2	0.237	0.237	0.0032	0.0166	0.0034	10:03:46	Yes
Mean:	0.241	0.241	0.0033				
SD:	0.005	0.005	0.0001				
%RSD:	2.044	2.044	1.87				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 246346011|951582|1

Date Collected: 2/25/2010 10:04:05

Analyst: JXL

Data Type: Original

Replicate Data: 246346011|951582|1

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.305	0.305	0.0041	0.0199	0.0042	10:04:56	Yes
2	0.295	0.295	0.0039	0.0186	0.0041	10:05:26	Yes
Mean:	0.300	0.300	0.0040				
SD:	0.007	0.007	0.0001				
%RSD:	2.342	2.342	2.18				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 246346012|951582|1

Date Collected: 2/25/2010 10:05:45

Analyst: JXL

Data Type: Original

Replicate Data: 246346012|951582|1

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.677	0.677	0.0087	0.0406	0.0089	10:06:36	Yes
2	0.673	0.673	0.0086	0.0406	0.0088	10:07:05	Yes
Mean:	0.675	0.675	0.0086				
SD:	0.003	0.003	0.0000				
%RSD:	0.477	0.477	0.46				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 1202039366|951586|1

Date Collected: 2/25/2010 10:07:25

Analyst: JXL

Data Type: Original

Replicate Data: 1202039366|951586|1

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.034	-0.034	-0.0001	-0.0004	0.0000	10:08:15	Yes
2	-0.030	-0.030	-0.0001	0.0001	0.0001	10:08:45	Yes
Mean:	-0.032	-0.032	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	8.949	8.949	28.64				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 1202039367|951586|1

Date Collected: 2/25/2010 10:09:05

Analyst: JXL

Data Type: Original

Replicate Data: 1202039367|951586|1

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.166	2.166	0.0271	0.1257	0.0273	10:09:55	Yes
2	2.166	2.166	0.0271	0.1249	0.0273	10:10:25	Yes
Mean:	2.166	2.166	0.0271				
SD:	0.000	0.000	0.0000				
%RSD:	0.001	0.001	0.00				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/25/2010 10:10:44

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.153	5.153	0.0642	0.2965	0.0644	10:11:35	Yes
2	5.138	5.138	0.0640	0.2944	0.0642	10:12:05	Yes
Mean:	5.145	5.145	0.0641				
SD:	0.011	0.011	0.0001				
%RSD:	0.205	0.205	0.20				

QC value within limits for Hg 253.7 Recovery = 102.90%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/25/2010 10:12:24

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	-0.0000	0.0006	0.0002	10:13:14	Yes
2	-0.023	-0.023	-0.0000	0.0011	0.0002	10:13:44	Yes
Mean:	-0.023	-0.023	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.455	0.455	10.09				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 246346013|951586|1

Date Collected: 2/25/2010 10:14:03

Analyst: JXL

Data Type: Original

Replicate Data: 246346013|951586|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.947	0.947	0.0120	0.0565	0.0122	10:14:54	Yes
2	0.959	0.959	0.0122	0.0572	0.0124	10:15:24	Yes
Mean:	0.953	0.953	0.0121				
SD:	0.009	0.009	0.0001				
%RSD:	0.910	0.910	0.89				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 1202039368|951586|1

Date Collected: 2/25/2010 10:15:44

Analyst: JXL

Data Type: Original

Replicate Data: 1202039368|951586|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.294	0.294	0.0039	0.0195	0.0041	10:16:35	Yes
2	0.293	0.293	0.0039	0.0196	0.0041	10:17:05	Yes
Mean:	0.293	0.293	0.0039				
SD:	0.001	0.001	0.0000				
%RSD:	0.438	0.438	0.41				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 1202039369|951586|1

Date Collected: 2/25/2010 10:17:25

Analyst: JXL

Data Type: Original

Replicate Data: 1202039369|951586|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.540	2.540	0.0318	0.1479	0.0320	10:18:16	Yes

Replicate Data: 246346016|951586|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.292	0.292	0.0039	0.0174	0.0041	10:26:42	Yes
2	0.299	0.299	0.0040	0.0193	0.0042	10:27:12	Yes
Mean:	0.295	0.295	0.0039				
SD:	0.005	0.005	0.0001				
%RSD:	1.614	1.614	1.50				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 246346017|951586|1

Date Collected: 2/25/2010 10:27:31

Analyst: JXL

Data Type: Original

Replicate Data: 246346017|951586|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.360	0.360	0.0047	0.0230	0.0049	10:28:22	Yes
2	0.367	0.367	0.0048	0.0225	0.0050	10:28:52	Yes
Mean:	0.364	0.364	0.0048				
SD:	0.005	0.005	0.0001				
%RSD:	1.476	1.476	1.39				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 246346018|951586|1

Date Collected: 2/25/2010 10:29:12

Analyst: JXL

Data Type: Original

Replicate Data: 246346018|951586|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.329	0.329	0.0044	0.0228	0.0045	10:30:02	Yes
2	0.315	0.315	0.0042	0.0197	0.0044	10:30:32	Yes
Mean:	0.322	0.322	0.0043				
SD:	0.010	0.010	0.0001				
%RSD:	3.051	3.051	2.86				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/25/2010 10:30:52

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.282	5.282	0.0658	0.3047	0.0660	10:31:42	Yes
2	5.315	5.315	0.0662	0.3054	0.0664	10:32:12	Yes
Mean:	5.298	5.298	0.0660				
SD:	0.024	0.024	0.0003				
%RSD:	0.448	0.448	0.45				

QC value within limits for Hg 253.7 Recovery = 105.97%
All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/25/2010 10:32:31

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	0.0000	0.0013	0.0002	10:33:21	Yes
2	-0.024	-0.024	-0.0000	0.0006	0.0002	10:33:51	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	18.14	18.14	629.26				

QC value within limits for Hg 253.7 Recovery = Not calculated

1	0.270	0.270	0.0036	0.0171	0.0038	10:41:43	Yes
2	0.269	0.269	0.0036	0.0174	0.0038	10:42:13	Yes
Mean:	0.270	0.270	0.0036				
SD:	0.001	0.001	0.0000				
%RSD:	0.248	0.248	0.23				

Sequence No.: 53

Autosampler Location: 47

Sample ID: 246346024|951586|1

Date Collected: 2/25/2010 10:42:32

Analyst: JXL

Data Type: Original

Replicate Data: 246346024|951586|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.219	0.219	0.0030	0.0142	0.0032	10:43:24	Yes
2	0.216	0.216	0.0029	0.0136	0.0031	10:43:54	Yes
Mean:	0.217	0.217	0.0030				
SD:	0.003	0.003	0.0000				
%RSD:	1.281	1.281	1.16				

Sequence No.: 54

Autosampler Location: 48

Sample ID: 1202039410|951611|1

Date Collected: 2/25/2010 10:44:14

Analyst: JXL

Data Type: Original

Replicate Data: 1202039410|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	0.0000	0.0012	0.0002	10:45:05	Yes
2	-0.029	-0.029	-0.0001	0.0001	0.0001	10:45:35	Yes
Mean:	-0.025	-0.025	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	21.18	21.18	161.33				

Sequence No.: 55

Autosampler Location: 49

Sample ID: 1202039411|951611|10

Date Collected: 2/25/2010 10:45:55

Analyst: JXL

Data Type: Original

Replicate Data: 1202039411|951611|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.737	3.737	0.0466	0.2151	0.0468	10:46:47	Yes
2	3.733	3.733	0.0466	0.2134	0.0468	10:47:17	Yes
Mean:	3.735	3.735	0.0466				
SD:	0.003	0.003	0.0000				
%RSD:	0.072	0.072	0.07				

Sequence No.: 56

Autosampler Location: 50

Sample ID: 246432001|951611|1

Date Collected: 2/25/2010 10:47:38

Analyst: JXL

Data Type: Original

Replicate Data: 246432001|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.205	0.205	0.0028	0.0136	0.0030	10:48:29	Yes
2	0.214	0.214	0.0029	0.0148	0.0031	10:48:59	Yes
Mean:	0.210	0.210	0.0029				
SD:	0.006	0.006	0.0001				
%RSD:	2.969	2.969	2.69				

Sequence No.: 57

Autosampler Location: 51

Sample ID: 1202039412|951611|1

Date Collected: 2/25/2010 10:49:19

Analyst: JXL

Data Type: Original

Replicate Data: 1202039412|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.220	0.220	0.0030	0.0145	0.0032	10:50:09	Yes
2	0.222	0.222	0.0030	0.0144	0.0032	10:50:39	Yes
Mean:	0.221	0.221	0.0030				
SD:	0.001	0.001	0.0000				
%RSD:	0.619	0.619	0.56				

Sequence No.: 58

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/25/2010 10:50:59

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.158	5.158	0.0643	0.2975	0.0645	10:51:49	Yes
2	5.155	5.155	0.0642	0.2964	0.0644	10:52:19	Yes
Mean:	5.157	5.157	0.0643				
SD:	0.003	0.003	0.0000				
%RSD:	0.050	0.050	0.05				

QC value within limits for Hg 253.7 Recovery = 103.13%

All analyte(s) passed QC.

Sequence No.: 59

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/25/2010 10:52:38

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	-0.0001	0.0000	0.0001	10:53:29	Yes
2	-0.026	-0.026	-0.0001	0.0004	0.0001	10:53:59	Yes
Mean:	-0.026	-0.026	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.467	1.467	8.83				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 60

Autosampler Location: 52

Sample ID: 1202039413|951611|1

Date Collected: 2/25/2010 10:54:18

Analyst: JXL

Data Type: Original

Replicate Data: 1202039413|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.461	2.461	0.0308	0.1433	0.0310	10:55:10	Yes
2	2.472	2.472	0.0309	0.1427	0.0311	10:55:39	Yes
Mean:	2.466	2.466	0.0309				
SD:	0.008	0.008	0.0001				
%RSD:	0.321	0.321	0.32				

Sequence No.: 61

Autosampler Location: 53

Sample ID: 1202039415|951611|1

Date Collected: 2/25/2010 10:55:59

Analyst: JXL

Data Type: Original

Replicate Data: 1202039415|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.477	2.477	0.0310	0.1431	0.0312	10:56:50	Yes
2	2.465	2.465	0.0309	0.1433	0.0310	10:57:20	Yes
Mean:	2.471	2.471	0.0309				

SD: 0.008 0.008 0.0001
%RSD: 0.338 0.338 0.34

Sequence No.: 62

Sample ID: 1202039414|951611|5

Analyst: JXL

Autosampler Location: 54

Date Collected: 2/25/2010 10:57:39

Data Type: Original

Replicate Data: 1202039414|951611|5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.022	0.022	0.0005	0.0036	0.0007	10:58:30	Yes
2	0.016	0.016	0.0005	0.0026	0.0007	10:59:00	Yes
Mean:	0.019	0.019	0.0005				
SD:	0.004	0.004	0.0000				
%RSD:	20.34	20.34	9.45				

Sequence No.: 63

Sample ID: 246432002|951611|1

Analyst: JXL

Autosampler Location: 55

Date Collected: 2/25/2010 10:59:20

Data Type: Original

Replicate Data: 246432002|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.954	1.954	0.0245	0.1136	0.0247	11:00:10	Yes
2	1.950	1.950	0.0245	0.1137	0.0247	11:00:40	Yes
Mean:	1.952	1.952	0.0245				
SD:	0.003	0.003	0.0000				
%RSD:	0.145	0.145	0.14				

Sequence No.: 64

Sample ID: 246432003|951611|1

Analyst: JXL

Autosampler Location: 56

Date Collected: 2/25/2010 11:01:00

Data Type: Original

Replicate Data: 246432003|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.487	1.487	0.0187	0.0875	0.0189	11:01:51	Yes
2	1.484	1.484	0.0187	0.0876	0.0189	11:02:21	Yes
Mean:	1.485	1.485	0.0187				
SD:	0.002	0.002	0.0000				
%RSD:	0.165	0.165	0.16				

Sequence No.: 65

Sample ID: 246432004|951611|1

Analyst: JXL

Autosampler Location: 57

Date Collected: 2/25/2010 11:02:41

Data Type: Original

Replicate Data: 246432004|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.173	0.173	0.0024	0.0119	0.0026	11:03:32	Yes
2	0.176	0.176	0.0025	0.0119	0.0027	11:04:02	Yes
Mean:	0.175	0.175	0.0024				
SD:	0.002	0.002	0.0000				
%RSD:	1.163	1.163	1.03				

Sequence No.: 66

Sample ID: 246432005|951611|1

Analyst: JXL

Autosampler Location: 58

Date Collected: 2/25/2010 11:04:21

Data Type: Original

Replicate Data: 246432005|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.126	0.126	0.0018	0.0090	0.0020	11:05:13	Yes
2	0.125	0.125	0.0018	0.0094	0.0020	11:05:43	Yes
Mean:	0.125	0.125	0.0018				
SD:	0.001	0.001	0.0000				
%RSD:	0.662	0.662	0.56				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 246432006|951611|1

Date Collected: 2/25/2010 11:06:03

Analyst: JXL

Data Type: Original

Replicate Data: 246432006|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.296	0.296	0.0039	0.0197	0.0041	11:06:54	Yes
2	0.282	0.282	0.0038	0.0183	0.0040	11:07:24	Yes
Mean:	0.289	0.289	0.0039				
SD:	0.010	0.010	0.0001				
%RSD:	3.522	3.522	3.27				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 246432007|951611|1

Date Collected: 2/25/2010 11:07:43

Analyst: JXL

Data Type: Original

Replicate Data: 246432007|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.532	0.532	0.0069	0.0322	0.0071	11:08:35	Yes
2	0.537	0.537	0.0069	0.0331	0.0071	11:09:05	Yes
Mean:	0.534	0.534	0.0069				
SD:	0.003	0.003	0.0000				
%RSD:	0.600	0.600	0.58				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 246432008|951611|1

Date Collected: 2/25/2010 11:09:25

Analyst: JXL

Data Type: Original

Replicate Data: 246432008|951611|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.107	0.107	0.0016	0.0079	0.0018	11:10:17	Yes
2	0.115	0.115	0.0017	0.0090	0.0019	11:10:47	Yes
Mean:	0.111	0.111	0.0016				
SD:	0.006	0.006	0.0001				
%RSD:	5.337	5.337	4.46				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/25/2010 11:11:07

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.074	5.074	0.0632	0.2944	0.0634	11:11:57	Yes
2	5.049	5.049	0.0629	0.2923	0.0631	11:12:27	Yes
Mean:	5.061	5.061	0.0631				
SD:	0.018	0.018	0.0002				
%RSD:	0.360	0.360	0.36				

QC value within limits for Hg 253.7 Recovery = 101.23%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 2/25/2010 11:12:46
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0001	-0.0001	0.0001	11:13:37	Yes
2	-0.023	-0.023	-0.0000	0.0007	0.0002	11:14:06	Yes
Mean:	-0.025	-0.025	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	9.000	9.000	75.47				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 246432009|951611|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 2/25/2010 11:14:26
Data Type: Original

Replicate Data: 246432009|951611|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.288	0.288	0.0038	0.0194	0.0040	11:15:17	Yes
2	0.286	0.286	0.0038	0.0187	0.0040	11:15:47	Yes
Mean:	0.287	0.287	0.0038				
SD:	0.001	0.001	0.0000				
%RSD:	0.462	0.462	0.43				

=====

Sequence No.: 73
Sample ID: 246432010|951611|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 2/25/2010 11:16:07
Data Type: Original

Replicate Data: 246432010|951611|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.113	0.113	0.0017	0.0087	0.0019	11:16:58	Yes
2	0.113	0.113	0.0017	0.0087	0.0019	11:17:28	Yes
Mean:	0.113	0.113	0.0017				
SD:	0.000	0.000	0.0000				
%RSD:	0.171	0.171	0.14				

=====

Sequence No.: 74
Sample ID: 246443001|951611|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 2/25/2010 11:17:48
Data Type: Original

Replicate Data: 246443001|951611|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.126	0.126	0.0018	0.0090	0.0020	11:18:39	Yes
2	0.129	0.129	0.0019	0.0095	0.0021	11:19:09	Yes
Mean:	0.127	0.127	0.0019				
SD:	0.002	0.002	0.0000				
%RSD:	1.492	1.492	1.27				

=====

Sequence No.: 75
Sample ID: 246443002|951611|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 2/25/2010 11:19:29
Data Type: Original

Replicate Data: 246443002|951611|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.017	0.017	0.0005	0.0029	0.0007	11:20:20	Yes
2	0.027	0.027	0.0006	0.0039	0.0008	11:20:50	Yes

Mean: 0.022 0.022 0.0005
SD: 0.008 0.008 0.0001
%RSD: 34.55 34.55 17.25

Sequence No.: 76

Sample ID: 246443003|951611|1

Analyst: JXL

Autosampler Location: 66

Date Collected: 2/25/2010 11:21:10

Data Type: Original

Replicate Data: 246443003|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.122	0.122	0.0018	0.0083	0.0020	11:22:01	Yes
2	0.117	0.117	0.0017	0.0082	0.0019	11:22:31	Yes
Mean:	0.119	0.119	0.0018				
SD:	0.004	0.004	0.0000				
%RSD:	3.256	3.256	2.75				

Sequence No.: 77

Sample ID: 246443004|951611|1

Analyst: JXL

Autosampler Location: 67

Date Collected: 2/25/2010 11:22:50

Data Type: Original

Replicate Data: 246443004|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.114	0.114	0.0017	0.0091	0.0019	11:23:41	Yes
2	0.110	0.110	0.0016	0.0086	0.0018	11:24:11	Yes
Mean:	0.112	0.112	0.0017				
SD:	0.003	0.003	0.0000				
%RSD:	2.938	2.938	2.46				

Sequence No.: 78

Sample ID: 246443005|951611|1

Analyst: JXL

Autosampler Location: 68

Date Collected: 2/25/2010 11:24:31

Data Type: Original

Replicate Data: 246443005|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0008	0.0044	0.0009	11:25:22	Yes
2	0.042	0.042	0.0008	0.0048	0.0010	11:25:52	Yes
Mean:	0.041	0.041	0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	5.895	5.895	3.84				

Sequence No.: 79

Sample ID: 246477002|951611|1

Analyst: JXL

Autosampler Location: 69

Date Collected: 2/25/2010 11:26:12

Data Type: Original

Replicate Data: 246477002|951611|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.808	2.808	0.0351	0.1666	0.0353	11:27:02	Yes
2	2.804	2.804	0.0351	0.1656	0.0352	11:27:32	Yes
Mean:	2.806	2.806	0.0351				
SD:	0.003	0.003	0.0000				
%RSD:	0.109	0.109	0.11				

Sequence No.: 80

Sample ID: 1202047345|954979|1

Analyst: JXL

Autosampler Location: 70

Date Collected: 2/25/2010 11:27:52

Data Type: Original

Replicate Data: 1202047345|954979|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0001	0.0012	0.0003	11:28:43	Yes
2	-0.026	-0.026	-0.0001	-0.0000	0.0001	11:29:13	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.008	0.008	0.0001				
%RSD:	36.57	36.57	837.81				

Sequence No.: 81

Autosampler Location: 71

Sample ID: 1202047346|954979|10

Date Collected: 2/25/2010 11:29:33

Analyst: JXL

Data Type: Original

Replicate Data: 1202047346|954979|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.576	3.576	0.0446	0.2094	0.0448	11:30:25	Yes
2	3.589	3.589	0.0448	0.2089	0.0450	11:30:54	Yes
Mean:	3.582	3.582	0.0447				
SD:	0.009	0.009	0.0001				
%RSD:	0.247	0.247	0.25				

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/25/2010 11:31:14

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.066	5.066	0.0631	0.2975	0.0633	11:32:05	Yes
2	5.080	5.080	0.0633	0.2957	0.0635	11:32:34	Yes
Mean:	5.073	5.073	0.0632				
SD:	0.010	0.010	0.0001				
%RSD:	0.197	0.197	0.20				

QC value within limits for Hg 253.7 Recovery = 101.45%

All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/25/2010 11:32:53

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.022	-0.022	0.0000	0.0005	0.0002	11:33:44	Yes
2	-0.018	-0.018	0.0000	0.0013	0.0002	11:34:14	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	12.26	12.26	139.81				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 246741001|954979|1

Date Collected: 2/25/2010 11:34:34

Analyst: JXL

Data Type: Original

Replicate Data: 246741001|954979|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.256	0.256	0.0034	0.0172	0.0036	11:35:25	Yes
2	0.255	0.255	0.0034	0.0175	0.0036	11:35:55	Yes
Mean:	0.255	0.255	0.0034				
SD:	0.001	0.001	0.0000				
%RSD:	0.208	0.208	0.19				

Miscellaneous

Prep LogBook

Analyst: BCDJ
 Batch: 950494
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202036899	U1062540-1	.521	g
MS	1202036897	U11268741-01	.25	mL
MS	1202036897	U11268744-06	.25	mL
MSD	1202036898	U11268741-01	.25	mL
MSD	1202036898	U11268744-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202036894		SW846 3050B	20-FEB-2010 08:05	0.591 g	50 mL	84.60237	SOIL
LCS	1202036899		SW846 3050B	20-FEB-2010 08:05	0.521 g	50 mL	95.96929	SOIL
SAMPLE	246443001		SW846 3050B	20-FEB-2010 08:05	0.52 g	50 mL	96.15385	SOIL
DUP	1202036895	246443001	SW846 3050B	20-FEB-2010 08:05	0.506 g	50 mL	98.81423	SOIL
SDILT	1202036896	246443001	SW846 3050B	20-FEB-2010 08:05	0.52 g	50 mL	96.15385	SOIL
MS	1202036897	246443001	SW846 3050B	20-FEB-2010 08:05	0.514 g	50 mL	97.27626	SOIL
MSD	1202036898	246443001	SW846 3050B	20-FEB-2010 08:05	0.521 g	50 mL	95.96929	SOIL
SAMPLE	246443002		SW846 3050B	20-FEB-2010 08:05	0.529 g	50 mL	94.51796	SOIL
SAMPLE	246443003		SW846 3050B	20-FEB-2010 08:05	0.523 g	50 mL	95.60229	SOIL
SAMPLE	246443004		SW846 3050B	20-FEB-2010 08:05	0.507 g	50 mL	98.61933	SOIL
SAMPLE	246443005		SW846 3050B	20-FEB-2010 08:05	0.542 g	50 mL	92.25092	SOIL
SAMPLE	246477002		SW846 3050B	20-FEB-2010 08:05	0.538 g	50 mL	92.9368	SOIL

Reagent/Solvent Lot ID Amount Description
 1265209 10 mL HYDROCHLORIC ACID
 1268732 1.25 mL Nitric Acid CONC.

Comments: The QC sample is a brown, moist, rocky, soil.

Prep LogBook

Analyst: BCD1 Verified by: _____

Batch: 950497

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202036903		SW846 3050B	20-FEB-2010 08:33	0.581 g	50 mL	86.05852	.511	g
LCS	1202036908		SW846 3050B	20-FEB-2010 08:33	0.511 g	50 mL	97.84736	.5	mL
SAMPLE	246443001		SW846 3050B	20-FEB-2010 08:33	0.527 g	50 mL	94.87666	.5	mL
DUP	1202036904	246443001	SW846 3050B	20-FEB-2010 08:33	0.537 g	50 mL	93.10987	.5	mL
SDILT	1202036905	246443001	SW846 3050B	20-FEB-2010 08:33	0.527 g	50 mL	94.87666	.5	mL
MS	1202036906	246443001	SW846 3050B	20-FEB-2010 08:33	0.527 g	50 mL	94.87666	.5	mL
MSD	1202036907	246443001	SW846 3050B	20-FEB-2010 08:33	0.514 g	50 mL	97.27626	.5	mL
SAMPLE	246443002		SW846 3050B	20-FEB-2010 08:33	0.524 g	50 mL	95.41985	.5	mL
SAMPLE	246443003		SW846 3050B	20-FEB-2010 08:33	0.541 g	50 mL	92.42144	.5	mL
SAMPLE	246443004		SW846 3050B	20-FEB-2010 08:33	0.551 g	50 mL	90.7441	.5	mL
SAMPLE	246443005		SW846 3050B	20-FEB-2010 08:33	0.539 g	50 mL	92.76438	.5	mL
SAMPLE	246477002		SW846 3050B	20-FEB-2010 08:33	0.544 g	50 mL	91.91176	.5	mL

Reagent/Solvent Lot ID	Amount	Description
1250038-02	1.5 mL	Hydrogen Peroxide 30%
1268732	5 mL	Nitric Acid CONC.

Comments The QC sample is a brown, moist, rocky soil.

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page#

Prep LogBook

Analyst: TXB3
Batch: 951608
Lab SOP: GL-MA-E-010 REV# 23

Verified by:

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202039411	U1031809A	.201	g
MS	1202039413	WHG100224-14	.3	mL
MSD	1202039415	WHG100224-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202039410		SW846 7471A Prep	24-FEB-2010 16:00	0.509 g	30 mL	58.9391	SOIL
LCS	1202039411		SW846 7471A Prep	24-FEB-2010 16:00	0.201 g	30 mL	149.25373	SOIL
SAMPLE	246432001		SW846 7471A Prep	24-FEB-2010 16:00	0.6 g	30 mL	50	SOIL
DUP	1202039412	246432001	SW846 7471A Prep	24-FEB-2010 16:00	0.553 g	30 mL	54.24955	SOIL
MS	1202039413	246432001	SW846 7471A Prep	24-FEB-2010 16:00	0.503 g	30 mL	59.64215	SOIL
MSD	1202039415	246432001	SW846 7471A Prep	24-FEB-2010 16:00	0.543 g	30 mL	55.24862	SOIL
SDILT	1202039414	246432001	SW846 7471A Prep	24-FEB-2010 16:00	0.6 g	30 mL	50	SOIL
SAMPLE	246432002		SW846 7471A Prep	24-FEB-2010 16:00	0.535 g	30 mL	56.07477	SOIL
SAMPLE	246432003		SW846 7471A Prep	24-FEB-2010 16:00	0.524 g	30 mL	57.25191	SOIL
SAMPLE	246432004		SW846 7471A Prep	24-FEB-2010 16:00	0.528 g	30 mL	56.81818	SOIL
SAMPLE	246432005		SW846 7471A Prep	24-FEB-2010 16:00	0.551 g	30 mL	54.44646	SOIL
SAMPLE	246432006		SW846 7471A Prep	24-FEB-2010 16:00	0.531 g	30 mL	56.49718	SOIL
SAMPLE	246432007		SW846 7471A Prep	24-FEB-2010 16:00	0.534 g	30 mL	56.17978	SOIL
SAMPLE	246432008		SW846 7471A Prep	24-FEB-2010 16:00	0.525 g	30 mL	57.14286	SOIL
SAMPLE	246432009		SW846 7471A Prep	24-FEB-2010 16:00	0.504 g	30 mL	59.52381	SOIL
SAMPLE	246432010		SW846 7471A Prep	24-FEB-2010 16:00	0.573 g	30 mL	52.35602	SOIL
SAMPLE	246443001		SW846 7471A Prep	24-FEB-2010 16:00	0.59 g	30 mL	50.84746	SOIL
SAMPLE	246443002		SW846 7471A Prep	24-FEB-2010 16:00	0.503 g	30 mL	59.64215	SOIL
SAMPLE	246443003		SW846 7471A Prep	24-FEB-2010 16:00	0.549 g	30 mL	54.64481	SOIL
SAMPLE	246443004		SW846 7471A Prep	24-FEB-2010 16:00	0.584 g	30 mL	51.36986	SOIL
SAMPLE	246443005		SW846 7471A Prep	24-FEB-2010 16:00	0.582 g	30 mL	51.54639	SOIL
SAMPLE	246477002		SW846 7471A Prep	24-FEB-2010 16:00	0.571 g	30 mL	52.5394	SOIL

Reagent/Solvent Lot ID	Amount	Description
1274394-A	1.125 mL	Hydrochloric Acid Conc.
1274391-1	.375 mL	NITRIC ACID
1274397-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent
WHG100224-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100224-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100224-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100224-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100224-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV

Prep Data Logbook Version 1.1

Comments Sample 246432001 is a rocky light brown soil.
Digestion Start Date: 24-FEB-10 16:00
Digestion End Date: 24-FEB-10 16:30

GEL Laboratories LLC

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Prep LogBook

WHG100224-12 750 uL Mercury Working 2nd Source S 5.0/ICV

DATA EXCEPTION REPORT

Mo.Day Yr. 05-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: 950496	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 246443(10-1624),246477(10-1647) Application Issues: Failed Recovery for MS/PS Failed RPD for DUP Failed Recovery for MSD/PSD			
Specification and Requirements		DER Disposition:	
Exception Description: 1. Failed Recovery for MS/PS: QC 1202036897MS 2. Failed RPD for DUP: QC 1202036895DUP 3. Failed Recovery for MSD/PSD: QC 1202036898MSD		1. The matrix spike recovery failed outside of the control limits for calcium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for chromium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

Originator's Name:

Helen Camello 05-MAR-10

Data Validator/Group Leader:

Christopher Louviere 05-MAR-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/-0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02Si
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 01-MAR-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** 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: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100210-48 **Opened:** 11-FEB-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **Received:** 10-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 04-MAR-10 **Lot Number :** 1018807
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100211-40 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100211-41 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI

Standard Logbook

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: UI100219-11 **Opened:** 19-FEB-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 19-FEB-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI100219-60 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Standard Logbook

Serial ID: UI100219-61 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2Si
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI1268741-01 **Opened:** 11-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 11-FEB-10
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI1268744-06 **Opened:** 11-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 11-FEB-10
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100224-01 **Opened:** 24-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 24-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 25-FEB-10 **Solvent :** 1mL HNO3 + TypeI H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100224-02 **Opened:** 24-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 25-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100224-07 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 26-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100224-08 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 26-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100224-09 Opened: 24-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORKCALS2.0 Received: 24-FEB-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 26-FEB-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury Working 1st Source CAL S 2.0
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100224-10 Opened: 24-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORKCALS5.0CCV Received: 24-FEB-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 26-FEB-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury Working 1st Source CAL S 5.0/CCV
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100224-11 Opened: 24-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORKCALS10.0 Received: 24-FEB-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 26-FEB-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: Mercury Working 1st Source CAL S 10.0
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100224-12 Opened: 24-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORKS5.0ICV Received: 24-FEB-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 26-FEB-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury Working 2nd Source S 5.0/ICV
 Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100224-14 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100222-42 **Opened:** 22-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 23-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1272839
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100222-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100222-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100222-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100222-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100222-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100222-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100222-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100222-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100222-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100222-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100222-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100222-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100222-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100222-43 **Opened:** 22-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 22-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 23-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1272839
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100222-44 **Opened:** 22-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 23-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1272839
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100222-45 **Opened:** 22-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 23-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1272839
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100222-46 **Opened:** 22-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 23-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1272839
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100222-47 **Opened:** 22-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 23-FEB-10 **Solvent :** 3%HCL &1%HNO3-1272839
Employee: Helen Camello
Supplier: O2si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100224-04B **Opened:** 24-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100225-04 **Opened:** 25-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100225-04A **Opened:** 25-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100224-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100224-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100225-05 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100225-06 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100225-07 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-08 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-70 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 25-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100226-04 **Opened:** 26-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 26-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 27-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100226-04A **Opened:** 26-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 26-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100226-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100226-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100226-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100226-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100226-05 **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 26-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100226-06 **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 26-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100226-07 **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 26-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 27-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100226-08 **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 26-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 100202 **Opened:** 02-FEB-10 **Lot Number :** 200930201
Name: I-HCL **Received:** 02-FEB-10
Type: Reagent/Solvent **Expires:** 02-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1250038-02 **Opened:** 04-JAN-10 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 04-JAN-10
Type: Reagent/Solvent **Expires:** 04-JAN-11
Employee: Bryan Davis
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1265209 **Opened:** 04-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 04-FEB-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Bryan Davis
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1268732 **Opened:** 11-FEB-10 **Lot Number :** H12022 L
Name: I-HNO3 **Received:** 11-FEB-10
Type: Reagent/Solvent **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1272768 **Opened:** 22-FEB-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCL-ICPMS **Received:** 22-FEB-10
Type: Reagent/Solvent **Expires:** 01-MAR-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCL Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1272839 **Opened:** 22-FEB-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 12-FEB-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 28-FEB-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 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

Standard Logbook

Serial ID: 1274394-A **Opened:** 24-FEB-10 **Lot Number :** J02039
Name: B-HCl-MER **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 01-MAR-10
Employee: Tara Griffin
Supplier: J T Baker
Description: Hydrochloric Acid Conc.
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.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1624**

Method/Analysis Information

Product: pH

Analytical Batch: 950208 **Method:** SW9045C pH

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
246443001	RE15-10-8361
246443002	RE15-10-8362
246443003	RE15-10-8359
246443004	RE15-10-8358
246443005	RE15-10-8360
1202036080	246437012(RE15-10-8337) Sample Duplicate (DUP)
1202036081	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Electrode analysis was performed on a PerpHect pH Meter Orion 370.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 246437012 (RE15-10-8337).

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: 1202036080 (RE15-10-8337), 246443001 (RE15-10-8361), 246443002 (RE15-10-8362), 246443003 (RE15-10-8359), 246443004 (RE15-10-8358) and 246443005 (RE15-10-8360).

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 950200 and 950203 **Method:** SW9012A Cyanide and Total

Prep Batch : 950199 and 950201 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
246443001	RE15-10-8361
246443002	RE15-10-8362
246443003	RE15-10-8359
246443004	RE15-10-8358
246443005	RE15-10-8360
1202036036	Method Blank (MB)
1202036037	246338001(RE46-10-11592) Sample Duplicate (DUP)
1202036038	246338002(RE46-10-11593) Sample Duplicate (DUP)
1202036039	246338001(RE46-10-11592) Matrix Spike (MS)
1202036040	246338002(RE46-10-11593) Matrix Spike (MS)
1202036041	246338001(RE46-10-11592) Matrix Spike Duplicate (MSD)
1202036042	246338002(RE46-10-11593) Matrix Spike Duplicate (MSD)
1202036043	Laboratory Control Sample (LCS)
1202036044	Method Blank (MB)
1202036045	246443005(RE15-10-8360) Sample Duplicate (DUP)
1202036046	246477002(WSTCB-10-10161) Sample Duplicate (DUP)
1202036047	246443005(RE15-10-8360) Matrix Spike (MS)
1202036048	246477002(WSTCB-10-10161) Matrix Spike (MS)
1202036049	246443005(RE15-10-8360) Matrix Spike Duplicate (MSD)
1202036050	246477002(WSTCB-10-10161) Matrix Spike Duplicate (MSD)
1202036051	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

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

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 246338001 (RE46-10-11592), 246338002 (RE46-10-11593)- Batch 950200, 246443005 (RE15-10-8360) and 246477002 (WSTCB-10-10161)- Batch 950203.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202036038 (RE46-10-11593)- Batch 950200 and 1202036046 (WSTCB-10-10161)- Batch 950203.

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: 1202036043 (LCS)- Batch 950200 and 1202036051 (LCS)- Batch 950203.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Method/Analysis Information

Product: Ion Chromatography

Analytical Batch: 955348 **Method:** EPA 300.0 Nitrate in Soil

Prep Batch : 955347 **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
246443001	RE15-10-8361
246443002	RE15-10-8362
246443003	RE15-10-8359
246443004	RE15-10-8358
246443005	RE15-10-8360
1202048233	Method Blank (MB)
1202048234	246443001(RE15-10-8361) Sample Duplicate (DUP)
1202048235	246566011(RE46-10-11493) Sample Duplicate (DUP)
1202048236	246443001(RE15-10-8361) Matrix Spike (MS)
1202048237	246566011(RE46-10-11493) Matrix Spike (MS)
1202048238	246443001(RE15-10-8361) Matrix Spike Duplicate (MSD)
1202048239	246566011(RE46-10-11493) Matrix Spike Duplicate (MSD)
1202048240	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 MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 246443001 (RE15-10-8361) and 246566011 (RE46-10-11493).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The spike recovery falls outside of the established acceptance limits due to matrix interference: 1202048237 (RE46-10-11493).

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the established acceptance limits due to matrix interference: 1202048239 (RE46-10-11493).

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 following samples were re-extracted and re-analyzed due to analyst error: 1202048233 (MB), 1202048236 (RE15-10-8361), 1202048238 (RE15-10-8361) and 1202048240 (LCS).

Miscellaneous Information**Data Exception (DER) Documentation**

The following DER was generated for this SDG: 800046 1202048237 (RE46-10-11493) and 1202048239 (RE46-10-11493).

Manual Integrations

Manual integrations were not required for the samples in this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Certification Statement

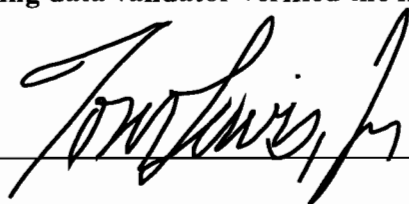
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

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

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

Reviewer: _____



Date: _____

05Mar10

Sample Data Summary

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1624 GEL Work Order: 246443

The Qualifiers in this report are defined as follows:

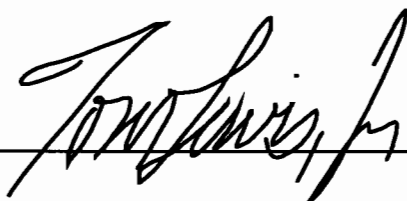
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Davis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm 111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8361
Sample ID: 246443001
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 18%

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 21.4C	H	6.53	0.010	0.100	SU	1	EXF1	02/08/10	1146	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.8	268	ug/kg	1	AXC2	02/16/10	1335	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.366	1.22	mg/kg	1	MAR1	02/27/10	0604	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8362
Sample ID: 246443002
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 25%

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 21.0C	H	6.08	0.010	0.100	SU	1	EXF1	02/08/10	1203	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	88.9	327	ug/kg	1	AXC2	02/16/10	1336	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.400	1.33	mg/kg	1	MAR102	02/27/10	0800	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8359
Sample ID: 246443003
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 6.85%

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 21.1C	H	6.68	0.010	0.100	SU	1	EXF1	02/08/10	1204	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.4	244	ug/kg	1	AXC2	02/16/10	1337	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.322	1.07	mg/kg	1	MAR1	02/27/10	0829	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8358
Sample ID: 246443004
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 16.5%

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 21.1C	H	6.48	0.010	0.100	SU	1	EXF1	02/08/10	1206	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	81.4	299	ug/kg	1	AXC2	02/16/10	1337	950200	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.359	1.20	mg/kg	1	MAR102/27/10	0858	955348		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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 5, 2010

Client SDG: 10-1624

Client Sample ID: RE15-10-8360
Sample ID: 246443005
Matrix: R
Collect Date: 03-FEB-10 12:00
Receive Date: 06-FEB-10
Collector: Client
Moisture: 27.4%

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 21.3C	H	7.07	0.010	0.100	SU	1	EXF1	02/08/10	1208	950208	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	93.7	344	ug/kg	1	AXC2	02/17/10	1039	950203	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.413	1.38	mg/kg	1	MAR1	02/27/10	0927	955348	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	02/26/10	1330	955347
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/16/10	1522	950201

The following Analytical Methods were performed

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

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: March 5, 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: 246443

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Electrode Analysis											
Batch	950208										
QC1202036080	246437012	DUP									
pH		H	7.94	H	7.96	SU	0.252	(0%-10%)	EXF1	02/08/10	11:35
QC1202036081	LCS										
pH	7.00				6.94	SU		99.1	(95%-105%)		02/08/10 11:30
Flow Injection Analysis											
Batch	950200										
QC1202036037	246338001	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/16/10	13:09
QC1202036038	246338002	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/16/10	13:12
QC1202036043	LCS										
Cyanide, Total	67900				76800	ug/kg		113	(32%-157%)		02/16/10 13:03
QC1202036036	MB										
Cyanide, Total				U	250	ug/kg				02/16/10	13:03
QC1202036039	246338001	MS									
Cyanide, Total	4740	U	ND		5170	ug/kg		109	(26%-158%)		02/16/10 13:10
QC1202036040	246338002	MS									
Cyanide, Total	5510	U	ND		5900	ug/kg		107	(26%-158%)		02/16/10 13:13
QC1202036041	246338001	MSD									
Cyanide, Total	5020	U	ND		5370	ug/kg	3.76	107	(0%-30%)		02/16/10 13:11
QC1202036042	246338002	MSD									
Cyanide, Total	5400	U	ND		5620	ug/kg	4.82	104	(0%-30%)		02/16/10 13:14
Batch	950203										
QC1202036045	246443005	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/17/10	10:40
QC1202036046	246477002	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/17/10	10:44
QC1202036051	LCS										
Cyanide, Total	67900				74300	ug/kg		109	(32%-157%)		02/17/10 10:26
QC1202036044	MB										
Cyanide, Total				U	250	ug/kg				02/17/10	10:25
QC1202036047	246443005	MS									
Cyanide, Total	6890	U	ND		7090	ug/kg		103	(26%-158%)		02/17/10 10:41
QC1202036048	246477002	MS									
Cyanide, Total	5410	U	ND		5200	ug/kg		95.7	(26%-158%)		02/17/10 10:45
QC1202036049	246443005	MSD									
Cyanide, Total	6260	U	ND		6160	ug/kg	14.1	98.4	(0%-30%)		02/17/10 10:42
QC1202036050	246477002	MSD									
Cyanide, Total	5310	U	ND		4880	ug/kg	6.23	91.6	(0%-30%)		02/17/10 10:46
Ion Chromatography											
Batch	955348										
QC1202048234	246443001	DUP									

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QC Summary

Workorder: 246443

Page 2 of 3

Parname	NOM	Sample	Qual	QC	Units	RPD %	REC %	Range	Anlst	Date	Time
Ion Chromatography											
Batch	955348										
Nitrate-N		U	ND	U	ND	mg/kg	N/A		MAR1	02/27/10	06:33
QC1202048235	246566011	DUP									
Nitrate-N			40.8		40.8	mg/kg	0.0507	(0%-20%)		02/27/10	17:09
QC1202048240	LCS										
Nitrate-N	50.0				49.1	mg/kg	98.3	(90%-110%)		02/27/10	05:35
QC1202048233	MB										
Nitrate-N			U		1.00	mg/kg				02/27/10	05:06
QC1202048236	246443001	MS									
Nitrate-N	61.0	U	ND		57.9	mg/kg	95	(90%-110%)		02/27/10	07:02
QC1202048237	246566011	MS									
Nitrate-N	51.7		40.8		73.2	mg/kg	62.6 *	(90%-110%)		02/27/10	18:36
QC1202048238	246443001	MSD									
Nitrate-N	61.0	U	ND		57.8	mg/kg	94.8 *	(0%-20%)		02/27/10	07:31
QC1202048239	246566011	MSD									
Nitrate-N	51.7		40.8		73.7	mg/kg	0.717	63.6 *	(0%-20%)	02/27/10	19:05

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%

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QC Summary

Workorder: 246443

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
UI	Gamma Spectroscopy--Uncertain identification										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 05-MAR-2010 16:08

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1624

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	16-FEB-2010 12:25:43	OM_2-16-2010_12-15-14	161	150	107	(90%-110%)	Yes
CCV	16-FEB-2010 12:52:26	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:04:50	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:17:21	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:29:49	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:42:15	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
ICV	17-FEB-2010 10:20:19	OM_2-17-2010_10-09-49	162	150	108	(90%-110%)	Yes
CCV	17-FEB-2010 10:34:36	OM_2-17-2010_10-09-49	101	100	101	(90%-110%)	Yes
CCV	17-FEB-2010 10:47:02	OM_2-17-2010_10-09-49	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	16-FEB-2010 12:27:34	OM_2-16-2010_12-15-14	-1.46	10	Yes
CCB	16-FEB-2010 12:54:16	OM_2-16-2010_12-15-14	-1.95	10	Yes
CCB	16-FEB-2010 13:06:40	OM_2-16-2010_12-15-14	-1.46	10	Yes
CCB	16-FEB-2010 13:19:11	OM_2-16-2010_12-15-14	-2.06	10	Yes
CCB	16-FEB-2010 13:31:39	OM_2-16-2010_12-15-14	-1.73	10	Yes
CCB	16-FEB-2010 13:44:05	OM_2-16-2010_12-15-14	-1.62	10	Yes
ICB	17-FEB-2010 10:22:09	OM_2-17-2010_10-09-49	-1.26	10	Yes
CCB	17-FEB-2010 10:36:26	OM_2-17-2010_10-09-49	-1.1	10	Yes
CCB	17-FEB-2010 10:48:52	OM_2-17-2010_10-09-49	-1.04	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 05-MAR-2010 16:08

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1624

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	26-FEB-2010 17:33:00	100226	4.7766	5	95.5	(90%-110%)	Yes
CCV	27-FEB-2010 04:09:00	100226	4.8108	5	96.2	(90%-110%)	Yes
CCV	27-FEB-2010 09:55:00	100226	7.4798	7.5	99.7	(90%-110%)	Yes
CCV	27-FEB-2010 15:42:00	100226	4.8239	5	96.5	(90%-110%)	Yes
CCV	27-FEB-2010 19:34:00	100226	7.5249	7.5	100	(90%-110%)	Yes
ICV	01-MAR-2010 15:29:00	100301	4.7756	5	95.5	(90%-110%)	Yes
CCV	01-MAR-2010 21:16:00	100301	7.3633	7.5	98.2	(90%-110%)	Yes
CCV	02-MAR-2010 00:10:00	100301	4.7388	5	94.8	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	26-FEB-2010 18:02:00	100226	0	0.1	Yes
CCB	27-FEB-2010 04:37:00	100226	0	0.1	Yes
CCB	27-FEB-2010 10:24:00	100226	0	0.1	Yes
CCB	27-FEB-2010 16:11:00	100226	0	0.1	Yes
CCB	27-FEB-2010 20:03:00	100226	0	0.1	Yes
ICB	01-MAR-2010 15:58:00	100301	0	0.1	Yes
CCB	01-MAR-2010 21:45:00	100301	0	0.1	Yes
CCB	02-MAR-2010 00:39:00	100301	0	0.1	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5
 Batch: 950199
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202036036		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50		SOIL
LCS	1202036043		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.25 g	25 mL	100	.25	SOIL
SAMPLE	246338001		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	.025	SOIL
DUP	1202036037	246338001	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	.025	SOIL
MS	1202036039	246338001	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455	.025	SOIL
MSD	1202036041	246338001	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692	.025	SOIL
SAMPLE	246338002		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961		SOIL
DUP	1202036038	246338002	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.54 g	25 mL	46.2963		SOIL
MS	1202036040	246338002	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50		SOIL
MSD	1202036042	246338002	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961		SOIL
SAMPLE	246437001		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961		SOIL
SAMPLE	246437002		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961		SOIL
SAMPLE	246437003		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50		SOIL
SAMPLE	246437004		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692		SOIL
SAMPLE	246437005		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286		SOIL
SAMPLE	246437006		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455		SOIL
SAMPLE	246437007		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692		SOIL
SAMPLE	246437008		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455		SOIL
SAMPLE	246437009		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692		SOIL
SAMPLE	246437010		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286		SOIL
SAMPLE	246437011		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.53 g	25 mL	47.16981		SOIL
SAMPLE	246437012		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286		SOIL
SAMPLE	246437013		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286		SOIL
SAMPLE	246437014		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.54 g	25 mL	46.2963		SOIL
SAMPLE	246443001		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286		SOIL
SAMPLE	246443002		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.57 g	25 mL	43.85965		SOIL
SAMPLE	246443003		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961		SOIL
SAMPLE	246443004		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455		SOIL
SAMPLE	246443004		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50		SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
100210-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100215-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

Prep LogBook

Analyst: AXS5
 Batch: 950201
 Lab SOP: GL-GC-E-067 REV# 13

Verified by:

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202036051	URF1200957-01	.25	g
MS	1202036047	URF1269274-02	.025	mL
MS	1202036048	URF1269274-02	.025	mL
MSD	1202036049	URF1269274-02	.025	mL
MSD	1202036050	URF1269274-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202036044		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.5 g	25 mL	50	SOIL
LCS	1202036051		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.25 g	25 mL	100	SOIL
SAMPLE	246432001		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246432002		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246432003		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246432004		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246432005		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246432006		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	246432007		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	246432008		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	246432009		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246432010		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246443005		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.5 g	25 mL	50	SOIL
DUP	1202036045	246443005	SW846 9010B Prep	16-FEB-2010 15:22	>12	0.54 g	25 mL	46.2963	SOIL
MS	1202036047	246443005	SW846 9010B Prep	16-FEB-2010 15:22	>12	0.5 g	25 mL	50	SOIL
MSD	1202036049	246443005	SW846 9010B Prep	16-FEB-2010 15:22	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	246477002		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.56 g	25 mL	44.64286	SOIL
DUP	1202036046	246477002	SW846 9010B Prep	16-FEB-2010 15:22	>12	0.51 g	25 mL	49.01961	SOIL
MS	1202036048	246477002	SW846 9010B Prep	16-FEB-2010 15:22	>12	0.53 g	25 mL	47.16981	SOIL
MSD	1202036050	246477002	SW846 9010B Prep	16-FEB-2010 15:22	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246754005		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	246754006		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246754007		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246754008		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246754009		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246754010		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	246754011		SW846 9010B Prep	16-FEB-2010 15:22	>12	0.53 g	25 mL	47.16981	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
100210-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100216-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1270663-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1270669-C	1 mL	51% MgCl2 Soln	
1270661-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/16/2010 12:18:34	OM_2-16-2010_12-15-14
150 ppb		1	axc2	2/16/2010 12:19:26	OM_2-16-2010_12-15-14
100 ppb		1	axc2	2/16/2010 12:20:19	OM_2-16-2010_12-15-14
50 ppb		1	axc2	2/16/2010 12:21:11	OM_2-16-2010_12-15-14
10 ppb		1	axc2	2/16/2010 12:22:05	OM_2-16-2010_12-15-14
CRDL 5.0 ppb		1	axc2	2/16/2010 12:22:59	OM_2-16-2010_12-15-14
ICAL-00		1	axc2	2/16/2010 12:23:53	OM_2-16-2010_12-15-14
ICV		1	axc2	2/16/2010 12:25:43	OM_2-16-2010_12-15-14
ICB		1	axc2	2/16/2010 12:27:34	OM_2-16-2010_12-15-14
		1	axc2	2/16/2010 12:29:23	OM_2-16-2010_12-15-14
1202040227	951948	1	axc2	2/16/2010 12:31:13	OM_2-16-2010_12-15-14
1202040234	951948	25	axc2	2/16/2010 12:32:06	OM_2-16-2010_12-15-14
246554005	951948	1	axc2	2/16/2010 12:32:59	OM_2-16-2010_12-15-14
1202040228	951948	1	axc2	2/16/2010 12:33:52	OM_2-16-2010_12-15-14
1202040230	951948	1	axc2	2/16/2010 12:34:45	OM_2-16-2010_12-15-14
1202040232	951948	1	axc2	2/16/2010 12:35:38	OM_2-16-2010_12-15-14
246554006	951948	1	axc2	2/16/2010 12:36:31	OM_2-16-2010_12-15-14
1202040229	951948	1	axc2	2/16/2010 12:37:24	OM_2-16-2010_12-15-14
1202040231	951948	1	axc2	2/16/2010 12:38:16	OM_2-16-2010_12-15-14
1202040233	951948	1	axc2	2/16/2010 12:39:08	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 12:40:00	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 12:41:51	OM_2-16-2010_12-15-14
246575003	951948	1	axc2	2/16/2010 12:43:40	OM_2-16-2010_12-15-14
246575004	951948	1	axc2	2/16/2010 12:44:31	OM_2-16-2010_12-15-14
246688002	951948	1	axc2	2/16/2010 12:45:23	OM_2-16-2010_12-15-14
246688008	951948	1	axc2	2/16/2010 12:46:14	OM_2-16-2010_12-15-14
246719001	951948	1	axc2	2/16/2010 12:47:06	OM_2-16-2010_12-15-14
246719002	951948	1	axc2	2/16/2010 12:48:00	OM_2-16-2010_12-15-14
246719003	951948	1	axc2	2/16/2010 12:48:53	OM_2-16-2010_12-15-14
246719004	951948	1	axc2	2/16/2010 12:49:47	OM_2-16-2010_12-15-14
246719005	951948	1	axc2	2/16/2010 12:50:40	OM_2-16-2010_12-15-14
246719006	951948	1	axc2	2/16/2010 12:51:33	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 12:52:26	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 12:54:16	OM_2-16-2010_12-15-14
246719007	951948	1	axc2	2/16/2010 12:56:06	OM_2-16-2010_12-15-14
246719008	951948	1	axc2	2/16/2010 12:56:59	OM_2-16-2010_12-15-14
246736001	951948	1	axc2	2/16/2010 12:57:52	OM_2-16-2010_12-15-14
246736002	951948	1	axc2	2/16/2010 12:58:45	OM_2-16-2010_12-15-14
246738001	951948	1	axc2	2/16/2010 12:59:37	OM_2-16-2010_12-15-14
246738002	951948	1	axc2	2/16/2010 13:00:29	OM_2-16-2010_12-15-14
246738003	951948	1	axc2	2/16/2010 13:01:21	OM_2-16-2010_12-15-14
246738004	951948	1	axc2	2/16/2010 13:02:13	OM_2-16-2010_12-15-14
1202036036	950200	1	axc2	2/16/2010 13:03:05	OM_2-16-2010_12-15-14
1202036043	950200	25	axc2	2/16/2010 13:03:57	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 13:04:50	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 13:06:40	OM_2-16-2010_12-15-14
246338001	950200	1	axc2	2/16/2010 13:08:30	OM_2-16-2010_12-15-14
1202036037	950200	1	axc2	2/16/2010 13:09:23	OM_2-16-2010_12-15-14
1202036039	950200	1	axc2	2/16/2010 13:10:17	OM_2-16-2010_12-15-14
1202036041	950200	1	axc2	2/16/2010 13:11:11	OM_2-16-2010_12-15-14
246338002	950200	1	axc2	2/16/2010 13:12:03	OM_2-16-2010_12-15-14
1202036038	950200	1	axc2	2/16/2010 13:12:57	OM_2-16-2010_12-15-14
1202036040	950200	1	axc2	2/16/2010 13:13:50	OM_2-16-2010_12-15-14
1202036042	950200	1	axc2	2/16/2010 13:14:43	OM_2-16-2010_12-15-14
246437001	950200	1	axc2	2/16/2010 13:15:35	OM_2-16-2010_12-15-14
246437002	950200	1	axc2	2/16/2010 13:16:28	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 13:17:21	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 13:19:11	OM_2-16-2010_12-15-14

246437003	950200	1	axc2	2/16/2010	13:20:59	OM_2-16-2010_12-15-14
246437004	950200	1	axc2	2/16/2010	13:21:52	OM_2-16-2010_12-15-14
246437005	950200	1	axc2	2/16/2010	13:22:44	OM_2-16-2010_12-15-14
246437006	950200	1	axc2	2/16/2010	13:23:36	OM_2-16-2010_12-15-14
246437007	950200	1	axc2	2/16/2010	13:24:28	OM_2-16-2010_12-15-14
246437008	950200	1	axc2	2/16/2010	13:25:22	OM_2-16-2010_12-15-14
246437009	950200	1	axc2	2/16/2010	13:26:16	OM_2-16-2010_12-15-14
246437010	950200	1	axc2	2/16/2010	13:27:10	OM_2-16-2010_12-15-14
246437011	950200	1	axc2	2/16/2010	13:28:04	OM_2-16-2010_12-15-14
246437012	950200	1	axc2	2/16/2010	13:28:58	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010	13:29:49	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010	13:31:39	OM_2-16-2010_12-15-14
246437013	950200	1	axc2	2/16/2010	13:33:29	OM_2-16-2010_12-15-14
246437014	950200	1	axc2	2/16/2010	13:34:22	OM_2-16-2010_12-15-14
246443001	950200	1	axc2	2/16/2010	13:35:15	OM_2-16-2010_12-15-14
246443002	950200	1	axc2	2/16/2010	13:36:09	OM_2-16-2010_12-15-14
246443003	950200	1	axc2	2/16/2010	13:37:01	OM_2-16-2010_12-15-14
246443004	950200	1	axc2	2/16/2010	13:37:53	OM_2-16-2010_12-15-14
1202034316	949506	1	axc2	2/16/2010	13:38:46	OM_2-16-2010_12-15-14
1202034318	949506	250	axc2	2/16/2010	13:39:38	OM_2-16-2010_12-15-14
246086001	949506	1	axc2	2/16/2010	13:40:31	OM_2-16-2010_12-15-14
1202034317	949506	1	axc2	2/16/2010	13:41:23	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010	13:42:15	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010	13:44:05	OM_2-16-2010_12-15-14

Author: axc2

Date : 2/16/2010

Original Run Filename: OM_2-16-2010_12-15-14.OMN created 2/16/2010 12:15:14
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-16-2010_12-15-14.OMN last modified 2/16/2010 13:45:12
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100216-01	1	S1	200	9.83	2/16/2010@12:18:34			200 ppb
WCN100216-02	1	S2	150	7.35	2/16/2010@12:19:26			150 ppb
WCN100216-03	1	S3	100	4.91	2/16/2010@12:20:19			100 ppb
WCN100216-04	1	S4	50.0	2.60	2/16/2010@12:21:11			50 ppb
WCN100216-05	1	S5	10.0	0.637	2/16/2010@12:22:05			10 ppb
WCN100216-06	1	S6	5.00	0.369	2/16/2010@12:22:59			CRDL 5.0 ppb
WCN100216-08	1	S7	0.00	0.0164	2/16/2010@12:23:53			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100216-07	1	S8	161	7.92	2/16/2010@12:25:43			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			7.4 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.4 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100216-08	1	S7	-1.46	0.0326	2/16/2010@12:27:34			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.46 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.46 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100216-06	1	S6	5.56	0.373	2/16/2010@12:29:23			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.56 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.56 > 2.50					
Message			Pass					
Action			None					
1202040227|951948|MB	1	1	-1.54	0.0290	2/16/2010@12:31:13			
1202040234||LCS	1	2	26.2	1.38	2/16/2010@12:32:06		25.00	
246554005	1	3	-1.08	0.0513	2/16/2010@12:32:59			
1202040228||DUP	1	4	-1.63	0.0243	2/16/2010@12:33:52			
1202040230||MS	1	5	108	5.35	2/16/2010@12:34:45			
1202040232||MSD	1	6	102	5.06	2/16/2010@12:35:38			
246554006	1	7	-1.16	0.0471	2/16/2010@12:36:31			
1202040229||DUP	1	8	-1.45	0.0333	2/16/2010@12:37:24			
1202040231||MS	1	9	112	5.54	2/16/2010@12:38:16			
1202040233||MSD	1	10	112	5.54	2/16/2010@12:39:08			
WCN100216-03	1	S3	109	5.38	2/16/2010@12:40:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			8.9 < 10.0					

Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			8.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100216-08	1	S7	-2.13	2.62e-4	2/16/2010@12:41:51			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.13 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.13 > -5.00					
Message			CCB Passed					
Action			Continue					
246575003	1	11	-0.699	0.0696	2/16/2010@12:43:40			
246575004	1	12	-1.59	0.0264	2/16/2010@12:44:31			
246688002	1	13	-1.31	0.0399	2/16/2010@12:45:23			
246688008	1	14	-2.08	0.00243	2/16/2010@12:46:14			
246719001	1	15	-1.59	0.0264	2/16/2010@12:47:06			
246719002	1	16	-1.69	0.0215	2/16/2010@12:48:00			
246719003	1	17	-2.02	0.00544	2/16/2010@12:48:53			
246719004	1	18	-1.70	0.0209	2/16/2010@12:49:47			
246719005	1	19	-1.72	0.0203	2/16/2010@12:50:40			
246719006	1	20	-2.13	1.55e-4	2/16/2010@12:51:33			
WCN100216-03	1	S3	105	5.18	2/16/2010@12:52:26			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			4.6 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100216-08	1	S7	-1.95	0.00902	2/16/2010@12:54:16			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.95 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.95 > -5.00					
Message			CCB Passed					
Action			Continue					
246719007	1	21	-1.60	0.0260	2/16/2010@12:56:06			
246719008	1	22	-1.73	0.0195	2/16/2010@12:56:59			
246736001	1	23	10.9	0.631	2/16/2010@12:57:52			
246736002	1	24	4.59	0.326	2/16/2010@12:58:45			
246738001	1	25	0.262	0.116	2/16/2010@12:59:37			
246738002	1	26	0.241	0.115	2/16/2010@13:00:29			
246738003	1	27	0.0963	0.108	2/16/2010@13:01:21			
246738004	1	28	1.55	0.179	2/16/2010@13:02:13			
1202036036|950200|MB	1	29	-2.13	1.91e-4	2/16/2010@13:03:05			
1202036043||LCS	1	30	30.7	1.59	2/16/2010@13:03:57		25.00	
WCN100216-03	1	S3	105	5.21	2/16/2010@13:04:50			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100216-08	1	S7	-1.46	0.0329	2/16/2010@13:06:40			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit							
Result:		-1.46 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.46 > -5.00					
Message		CCB Passed					
Action		Continue					
246338001	1	31	-2.34	-0.00999	2/16/2010@13:08:30		
1202036037	DUP	1	32	-2.09	0.00198	2/16/2010@13:09:23	
1202036039	MS	1	33	109	5.38	2/16/2010@13:10:17	
1202036041	MSD	1	34	107	5.27	2/16/2010@13:11:11	
246338002		1	35	-0.243	0.0918	2/16/2010@13:12:03	
1202036038	DUP	1	36	-2.13	2.67e-4	2/16/2010@13:12:57	
1202036040	MS	1	37	107	5.29	2/16/2010@13:13:50	
1202036042	MSD	1	38	104	5.16	2/16/2010@13:14:43	
246437001		1	39	-0.864	0.0616	2/16/2010@13:15:35	
246437002		1	40	-1.07	0.0516	2/16/2010@13:16:28	
WCN100216-03		1	S3	105	5.18	2/16/2010@13:17:21	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					
WCN100216-08	1	S7	-2.06	0.00359	2/16/2010@13:19:11		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-2.06 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-2.06 > -5.00					
Message		CCB Passed					
Action		Continue					
246437003	1	41	-1.25	0.0427	2/16/2010@13:20:59		
246437004	1	42	-1.62	0.0250	2/16/2010@13:21:52		
246437005	1	43	-0.818	0.0638	2/16/2010@13:22:44		
246437006	1	44	-1.64	0.0239	2/16/2010@13:23:36		
246437007	1	45	-1.23	0.0439	2/16/2010@13:24:28		
246437008	1	46	-1.14	0.0483	2/16/2010@13:25:22		
246437009	1	47	-1.40	0.0359	2/16/2010@13:26:16		
246437010	1	48	-1.59	0.0265	2/16/2010@13:27:10		
246437011	1	49	-1.44	0.0338	2/16/2010@13:28:04		
246437012	1	50	-1.60	0.0258	2/16/2010@13:28:58		
WCN100216-03	1	S3	105	5.20	2/16/2010@13:29:49		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		5.0 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		5.0 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100216-08	1	S7	-1.73	0.0198	2/16/2010@13:31:39		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.73 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.73 > -5.00					
Message		CCB Passed					
Action		Continue					

246437013	1	51	-0.931	0.0584	2/16/2010@13:33:29			
246437014	1	52	-2.13	0.00	2/16/2010@13:34:22			
246443001	1	53	0.408	0.123	2/16/2010@13:35:15			
246443002	1	54	-1.89	0.0120	2/16/2010@13:36:09			
246443003	1	55	-1.47	0.0320	2/16/2010@13:37:01			
246443004	1	56	-1.18	0.0462	2/16/2010@13:37:53			
1202034316|949506|MB	1	57	-0.669	0.0711	2/16/2010@13:38:46			
1202034318|LCS	1	58	150	7.38	2/16/2010@13:39:38	250.00		
246086001	1	59	-1.22	0.0444	2/16/2010@13:40:31			
1202034317|DUP	1	60	-1.98	0.00761	2/16/2010@13:41:23			
WCN100216-03	1	S3	105	5.19	2/16/2010@13:42:15			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			4.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100216-08	1	S7	-1.62	0.0250	2/16/2010@13:44:05			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.62 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.62 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_2-16-2010_12-15-14.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

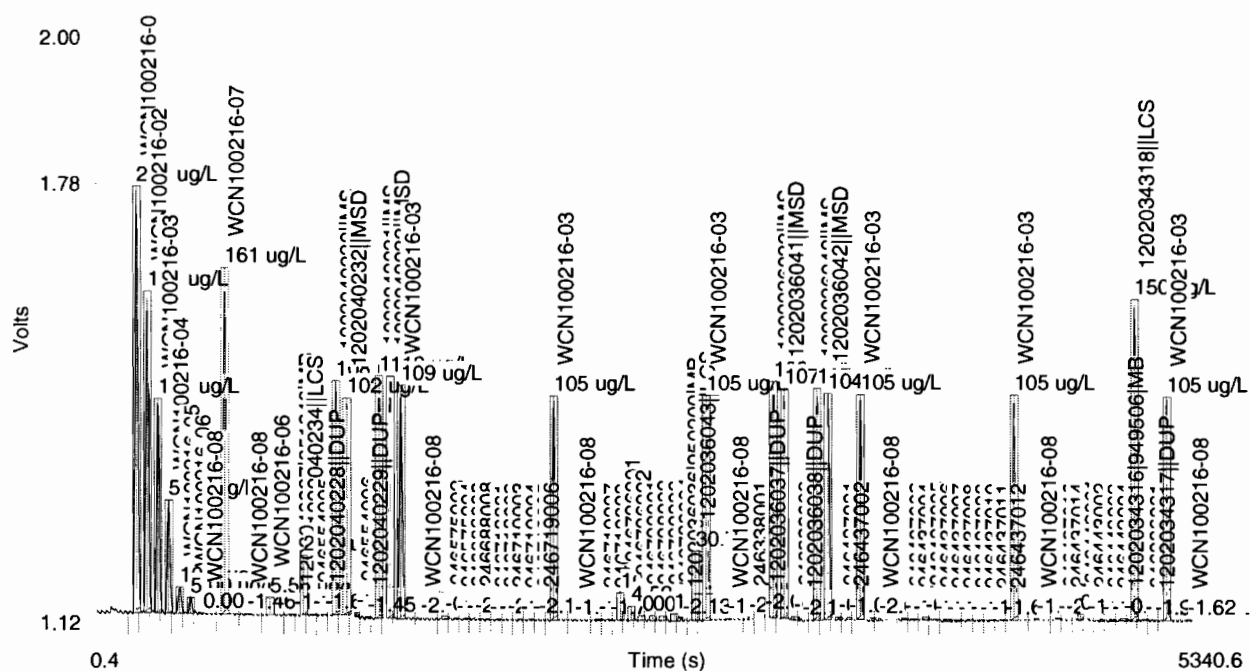
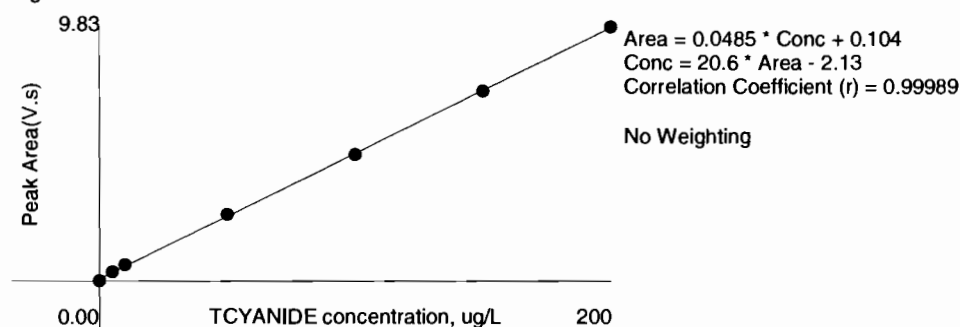


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.83	0.635	-0.3	2/16/2010	12:19:37
2	150	1	7.35	0.478	0.4	2/16/2010	12:20:29
3	100	1	4.91	0.319	0.9	2/16/2010	12:21:21
4	50.0	1	2.60	0.168	-2.7	2/16/2010	12:22:14
5	10.0	1	0.637	0.0389	-8.1	2/16/2010	12:23:08
6	5.00	1	0.369	0.0232	-6.4	2/16/2010	12:24:02
7	0.00	1	0.0164	0.00106		2/16/2010	12:24:56

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/17/2010 10:13:10	OM_2-17-2010_10-09-49
150 ppb		1	axc2	2/17/2010 10:14:02	OM_2-17-2010_10-09-49
100 ppb		1	axc2	2/17/2010 10:14:54	OM_2-17-2010_10-09-49
50 ppb		1	axc2	2/17/2010 10:15:47	OM_2-17-2010_10-09-49
10 ppb		1	axc2	2/17/2010 10:16:40	OM_2-17-2010_10-09-49
CRDL 5.0 ppb		1	axc2	2/17/2010 10:17:34	OM_2-17-2010_10-09-49
ICAL-00		1	axc2	2/17/2010 10:18:29	OM_2-17-2010_10-09-49
ICV		1	axc2	2/17/2010 10:20:19	OM_2-17-2010_10-09-49
ICB		1	axc2	2/17/2010 10:22:09	OM_2-17-2010_10-09-49
		1	axc2	2/17/2010 10:23:59	OM_2-17-2010_10-09-49
1202036044	950203	1	axc2	2/17/2010 10:25:48	OM_2-17-2010_10-09-49
1202036051	950203	25	axc2	2/17/2010 10:26:42	OM_2-17-2010_10-09-49
246432001	950203	1	axc2	2/17/2010 10:27:35	OM_2-17-2010_10-09-49
246432002	950203	1	axc2	2/17/2010 10:28:28	OM_2-17-2010_10-09-49
246432003	950203	1	axc2	2/17/2010 10:29:21	OM_2-17-2010_10-09-49
246432004	950203	1	axc2	2/17/2010 10:30:14	OM_2-17-2010_10-09-49
246432005	950203	1	axc2	2/17/2010 10:31:07	OM_2-17-2010_10-09-49
246432006	950203	1	axc2	2/17/2010 10:31:59	OM_2-17-2010_10-09-49
246432007	950203	1	axc2	2/17/2010 10:32:51	OM_2-17-2010_10-09-49
246432008	950203	1	axc2	2/17/2010 10:33:44	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 10:34:36	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 10:36:26	OM_2-17-2010_10-09-49
246432009	950203	1	axc2	2/17/2010 10:38:15	OM_2-17-2010_10-09-49
246432010	950203	1	axc2	2/17/2010 10:39:07	OM_2-17-2010_10-09-49
246443005	950203	1	axc2	2/17/2010 10:39:59	OM_2-17-2010_10-09-49
1202036045	950203	1	axc2	2/17/2010 10:40:50	OM_2-17-2010_10-09-49
1202036047	950203	1	axc2	2/17/2010 10:41:41	OM_2-17-2010_10-09-49
1202036049	950203	1	axc2	2/17/2010 10:42:36	OM_2-17-2010_10-09-49
246477002	950203	1	axc2	2/17/2010 10:43:29	OM_2-17-2010_10-09-49
1202036046	950203	1	axc2	2/17/2010 10:44:22	OM_2-17-2010_10-09-49
1202036048	950203	1	axc2	2/17/2010 10:45:16	OM_2-17-2010_10-09-49
1202036050	950203	1	axc2	2/17/2010 10:46:09	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 10:47:02	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 10:48:52	OM_2-17-2010_10-09-49
246754005	950203	1	axc2	2/17/2010 10:50:42	OM_2-17-2010_10-09-49
246754006	950203	1	axc2	2/17/2010 10:51:34	OM_2-17-2010_10-09-49
246754007	950203	1	axc2	2/17/2010 10:52:27	OM_2-17-2010_10-09-49
246754008	950203	1	axc2	2/17/2010 10:53:19	OM_2-17-2010_10-09-49
246754009	950203	1	axc2	2/17/2010 10:54:13	OM_2-17-2010_10-09-49
246754010	950203	1	axc2	2/17/2010 10:55:04	OM_2-17-2010_10-09-49
246754011	950203	1	axc2	2/17/2010 10:55:57	OM_2-17-2010_10-09-49
1202042861	953089	1	axc2	2/17/2010 10:56:49	OM_2-17-2010_10-09-49
1202042868	953089	1	axc2	2/17/2010 10:57:40	OM_2-17-2010_10-09-49
246531002	953089	1	axc2	2/17/2010 10:58:33	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 10:59:25	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 11:01:15	OM_2-17-2010_10-09-49
246755001	953089	1	axc2	2/17/2010 11:03:05	OM_2-17-2010_10-09-49
246755002	953089	1	axc2	2/17/2010 11:03:58	OM_2-17-2010_10-09-49
246838001	953089	1	axc2	2/17/2010 11:04:52	OM_2-17-2010_10-09-49
246842001	953089	1	axc2	2/17/2010 11:05:45	OM_2-17-2010_10-09-49
1202042862	953089	1	axc2	2/17/2010 11:06:39	OM_2-17-2010_10-09-49
1202042864	953089	1	axc2	2/17/2010 11:07:32	OM_2-17-2010_10-09-49
1202042866	953089	1	axc2	2/17/2010 11:08:26	OM_2-17-2010_10-09-49
246844001	953089	1	axc2	2/17/2010 11:09:18	OM_2-17-2010_10-09-49
246853001	953089	1	axc2	2/17/2010 11:10:11	OM_2-17-2010_10-09-49
246871001	953089	1	axc2	2/17/2010 11:11:04	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 11:11:56	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 11:13:46	OM_2-17-2010_10-09-49

247024001	953089	1	axc2	2/17/2010	11:15:35	OM_2-17-2010_10-09-49
246878001	953089	1	axc2	2/17/2010	11:16:27	OM_2-17-2010_10-09-49
1202042863	953089	1	axc2	2/17/2010	11:17:19	OM_2-17-2010_10-09-49
1202042865	953089	1	axc2	2/17/2010	11:18:12	OM_2-17-2010_10-09-49
1202042867	953089	1	axc2	2/17/2010	11:19:03	OM_2-17-2010_10-09-49
246882001	953089	1	axc2	2/17/2010	11:19:56	OM_2-17-2010_10-09-49
246882002	953089	1	axc2	2/17/2010	11:20:50	OM_2-17-2010_10-09-49
246883001	953089	1	axc2	2/17/2010	11:21:44	OM_2-17-2010_10-09-49
246883002	953089	1	axc2	2/17/2010	11:22:39	OM_2-17-2010_10-09-49
246883003	953089	1	axc2	2/17/2010	11:23:31	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	11:24:24	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	11:26:15	OM_2-17-2010_10-09-49
246883004	953089	1	axc2	2/17/2010	11:28:04	OM_2-17-2010_10-09-49
246894001	953089	1	axc2	2/17/2010	11:28:57	OM_2-17-2010_10-09-49
246923002	953089	1	axc2	2/17/2010	11:29:51	OM_2-17-2010_10-09-49
246924002	953089	1	axc2	2/17/2010	11:30:44	OM_2-17-2010_10-09-49
246937002	953089	1	axc2	2/17/2010	11:31:37	OM_2-17-2010_10-09-49
247024001	953089	2	axc2	2/17/2010	11:32:29	OM_2-17-2010_10-09-49
1202040269	951961	1	axc2	2/17/2010	11:33:22	OM_2-17-2010_10-09-49
1202040276	951961	1	axc2	2/17/2010	11:34:15	OM_2-17-2010_10-09-49
246530001	951961	1	axc2	2/17/2010	11:35:07	OM_2-17-2010_10-09-49
246530002	951961	1	axc2	2/17/2010	11:36:00	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	11:36:52	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	11:38:42	OM_2-17-2010_10-09-49
246555001	951961	1	axc2	2/17/2010	11:40:30	OM_2-17-2010_10-09-49
246560001	951961	1	axc2	2/17/2010	11:41:24	OM_2-17-2010_10-09-49
246560002	951961	1	axc2	2/17/2010	11:42:19	OM_2-17-2010_10-09-49
246571001	951961	1	axc2	2/17/2010	11:43:12	OM_2-17-2010_10-09-49
246571002	951961	1	axc2	2/17/2010	11:44:06	OM_2-17-2010_10-09-49
246574001	951961	1	axc2	2/17/2010	11:45:00	OM_2-17-2010_10-09-49
1202040271	951961	1	axc2	2/17/2010	11:45:53	OM_2-17-2010_10-09-49
1202040273	951961	1	axc2	2/17/2010	11:46:47	OM_2-17-2010_10-09-49
1202040275	951961	1	axc2	2/17/2010	11:47:40	OM_2-17-2010_10-09-49
246590001	951961	1	axc2	2/17/2010	11:48:33	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	11:49:25	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	11:51:16	OM_2-17-2010_10-09-49
1202040270	951961	1	axc2	2/17/2010	11:53:04	OM_2-17-2010_10-09-49
1202040272	951961	1	axc2	2/17/2010	11:53:58	OM_2-17-2010_10-09-49
1202040274	951961	1	axc2	2/17/2010	11:54:49	OM_2-17-2010_10-09-49
246591001	951961	1	axc2	2/17/2010	11:55:42	OM_2-17-2010_10-09-49
246606001	951961	1	axc2	2/17/2010	11:56:34	OM_2-17-2010_10-09-49
246613001	951961	1	axc2	2/17/2010	11:57:27	OM_2-17-2010_10-09-49
246710001	951961	1	axc2	2/17/2010	11:58:22	OM_2-17-2010_10-09-49
246714002	951961	1	axc2	2/17/2010	11:59:16	OM_2-17-2010_10-09-49
246724001	951961	1	axc2	2/17/2010	12:00:10	OM_2-17-2010_10-09-49
246724002	951961	1	axc2	2/17/2010	12:01:04	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	12:01:56	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	12:03:47	OM_2-17-2010_10-09-49
246742001	951961	1	axc2	2/17/2010	12:05:37	OM_2-17-2010_10-09-49
246742002	951961	1	axc2	2/17/2010	12:06:30	OM_2-17-2010_10-09-49
246753001	951961	1	axc2	2/17/2010	12:07:23	OM_2-17-2010_10-09-49
246766001	951961	1	axc2	2/17/2010	12:08:17	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	12:09:10	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	12:11:00	OM_2-17-2010_10-09-49

Original Run Filename: OM_2-17-2010_10-09-49.OMN created 2/17/2010 10:09:49
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-17-2010_10-09-49.OMN last modified 2/17/2010 12:12:05
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100217-01	1	S1	200	9.92	2/17/2010@10:13:10			200 ppb
WCN100217-02	1	S2	150	7.45	2/17/2010@10:14:02			150 ppb
WCN100217-03	1	S3	100	4.78	2/17/2010@10:14:54			100 ppb
WCN100217-04	1	S4	50.0	2.59	2/17/2010@10:15:47			50 ppb
WCN100217-05	1	S5	10.0	0.647	2/17/2010@10:16:40			10 ppb
WCN100217-06	1	S6	5.00	0.374	2/17/2010@10:17:34			CRDL 5.0 ppb
WCN100217-08	1	S7	0.00	0.0267	2/17/2010@10:18:29			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99970 > 0.99500					
Message			Pass					
Action			Continue					
WCN100217-07	1	S8	162	7.99	2/17/2010@10:20:19			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			7.7 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.7 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100217-08	1	S7	-1.26	0.0231	2/17/2010@10:22:09			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.26 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.26 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100217-06	1	S6	6.01	0.379	2/17/2010@10:23:59			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.01 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.01 > 2.50					
Message			Pass					
Action			None					
1202036044|950203|MB	1	1	-1.71	0.00125	2/17/2010@10:25:48			
1202036051||LCS	1	2	29.7	1.54	2/17/2010@10:26:42		25.00	
246432001	1	3	-0.857	0.0429	2/17/2010@10:27:35			
246432002	1	4	-1.21	0.0258	2/17/2010@10:28:28			
246432003	1	5	-1.10	0.0307	2/17/2010@10:29:21			
246432004	1	6	-1.20	0.0260	2/17/2010@10:30:14			
246432005	1	7	-1.72	4.79e-4	2/17/2010@10:31:07			
246432006	1	8	1.78	0.172	2/17/2010@10:31:59			
246432007	1	9	-0.828	0.0443	2/17/2010@10:32:51			
246432008	1	10	-0.968	0.0374	2/17/2010@10:33:44			
WCN100217-03	1	S3	101	5.01	2/17/2010@10:34:36			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			0.8 < 10.0					

			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	0.8 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100217-08	1	S7		-1.10	0.0308	2/17/2010@10:36:26			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.10 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.10 > -5.00					
			Message	CCB Passed					
			Action	Continue					
246432009	1	11		-0.127	0.0786	2/17/2010@10:38:15			
246432010	1	12		-1.04	0.0339	2/17/2010@10:39:07			
246443005	1	13		-0.966	0.0376	2/17/2010@10:39:59			
1202036045	1	14	DUP	-0.853	0.0430	2/17/2010@10:40:50			
1202036047	1	15	MS	103	5.11	2/17/2010@10:41:41			
1202036049	1	16	MSD	98.4	4.90	2/17/2010@10:42:36			
246477002	1	17		0.420	0.105	2/17/2010@10:43:29			
1202036046	1	18	DUP	0.202	0.0947	2/17/2010@10:44:22			
1202036048	1	19	MS	96.1	4.79	2/17/2010@10:45:16			
1202036050	1	20	MSD	92.0	4.59	2/17/2010@10:46:09			
WCN100217-03	1	S3		102	5.05	2/17/2010@10:47:02			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	1.5 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	1.5 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100217-08	1	S7		-1.04	0.0339	2/17/2010@10:48:52			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.04 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.04 > -5.00					
			Message	CCB Passed					
			Action	Continue					
246754005	1	21		-0.582	0.0563	2/17/2010@10:50:42			
246754006	1	22		-0.462	0.0622	2/17/2010@10:51:34			
246754007	1	23		2.95	0.229	2/17/2010@10:52:27			
246754008	1	24		-0.140	0.0779	2/17/2010@10:53:19			
246754009	1	25		-0.622	0.0544	2/17/2010@10:54:13			
246754010	1	26		-0.857	0.0429	2/17/2010@10:55:04			
246754011	1	27		-1.43	0.0147	2/17/2010@10:55:57			
1202042861	1	28	953089|MB	-1.74	-2.03e-4	2/17/2010@10:56:49			
1202042868	1	29	LCS	53.6	2.71	2/17/2010@10:57:40			
246531002	1	30		-0.820	0.0447	2/17/2010@10:58:33			
WCN100217-03	1	S3		101	5.02	2/17/2010@10:59:25			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	0.9 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	0.9 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100217-08	1	S7		-1.09	0.0315	2/17/2010@11:01:15			CCB
			Known Conc:	0.00					

DQM Test: > + Concentration Limit						
Result:		-1.09 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.09 > -5.00				
Message		CCB Passed				
Action		Continue				
246755001	1	31	-1.29	0.0217	2/17/2010@11:03:05	
246755002	1	32	-1.44	0.0142	2/17/2010@11:03:58	
246838001	1	33	-1.88	-0.00736	2/17/2010@11:04:52	
246842001	1	34	-1.60	0.00632	2/17/2010@11:05:45	
1202042862||DUP	1	35	-1.47	0.0130	2/17/2010@11:06:39	
1202042864||MS	1	36	109	5.40	2/17/2010@11:07:32	
1202042866||MSD	1	37	109	5.41	2/17/2010@11:08:26	
246844001	1	38	-1.05	0.0336	2/17/2010@11:09:18	
246853001	1	39	-0.789	0.0462	2/17/2010@11:10:11	
246871001	1	40	-1.72	4.87e-4	2/17/2010@11:11:04	
WCN100217-03	1	S3	102	5.09	2/17/2010@11:11:56	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		2.3 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		2.3 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100217-08	1	S7	-1.37	0.0175	2/17/2010@11:13:46	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.37 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.37 > -5.00				
Message		CCB Passed				
Action		Continue				
247024001	1	55	275	13.5	2/17/2010@11:15:35	
246878001	1	41	0.661	0.117	2/17/2010@11:16:27	
1202042863||DUP	1	42	2.26	0.196	2/17/2010@11:17:19	
1202042865||MS	1	43	94.4	4.70	2/17/2010@11:18:12	
1202042867||MSD	1	44	112	5.55	2/17/2010@11:19:03	
246882001	1	45	-1.23	0.0244	2/17/2010@11:19:56	
246882002	1	46	-0.923	0.0397	2/17/2010@11:20:50	
246883001	1	47	-1.07	0.0323	2/17/2010@11:21:44	
246883002	1	48	-1.04	0.0339	2/17/2010@11:22:39	
246883003	1	49	-1.71	0.00134	2/17/2010@11:23:31	
WCN100217-03	1	S3	102	5.07	2/17/2010@11:24:24	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		2.0 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		2.0 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100217-08	1	S7	-1.32	0.0204	2/17/2010@11:26:15	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.32 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.32 > -5.00				
Message		CCB Passed				
Action		Continue				

246883004	1	50	-1.17	0.0275	2/17/2010@11:28:04			
246894001	1	51	6.46	0.401	2/17/2010@11:28:57			
246923002	1	52	0.530	0.111	2/17/2010@11:29:51			
246924002	1	53	0.751	0.122	2/17/2010@11:30:44			
246937002	1	54	21.6	1.14	2/17/2010@11:31:37			
247024001	1	55	109	5.44	2/17/2010@11:32:29		2.00	
1202040269|951961|MB	1	56	-1.06	0.0328	2/17/2010@11:33:22			
1202040276|LCS	1	57	47.2	2.39	2/17/2010@11:34:15			
246530001	1	58	-1.73	3.57e-4	2/17/2010@11:35:07			
246530002	1	59	-1.73	1.71e-4	2/17/2010@11:36:00			
WCN100217-03	1	S3	102	5.07	2/17/2010@11:36:52			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100217-08	1	S7	-1.32	0.0204	2/17/2010@11:38:42			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.32 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.32 > -5.00					
Message			CCB Passed					
Action			Continue					
246555001	1	60	-1.26	0.0234	2/17/2010@11:40:30			
246560001	1	61	-2.04	-0.0150	2/17/2010@11:41:24			
246560002	1	62	-0.699	0.0506	2/17/2010@11:42:19			
246571001	1	63	-1.74	-1.65e-4	2/17/2010@11:43:12			
246571002	1	64	-1.89	-0.00753	2/17/2010@11:44:06			
246574001	1	65	1.51	0.159	2/17/2010@11:45:00			
1202040271|DUP	1	66	1.22	0.145	2/17/2010@11:45:53			
1202040273|MS	1	67	107	5.30	2/17/2010@11:46:47			
1202040275|MSD	1	68	112	5.54	2/17/2010@11:47:40			
246590001	1	69	-1.19	0.0264	2/17/2010@11:48:33			
WCN100217-03	1	S3	102	5.05	2/17/2010@11:49:25			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.6 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100217-08	1	S7	-1.67	0.00297	2/17/2010@11:51:16			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.67 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.67 > -5.00					
Message			CCB Passed					
Action			Continue					
1202040270|DUP	1	70	-1.23	0.0246	2/17/2010@11:53:04			
1202040272|MS	1	71	109	5.40	2/17/2010@11:53:58			
1202040274|MSD	1	72	101	5.03	2/17/2010@11:54:49			
246591001	1	73	-1.34	0.0195	2/17/2010@11:55:42			
246606001	1	74	-1.56	0.00833	2/17/2010@11:56:34			
246613001	1	75	-1.37	0.0180	2/17/2010@11:57:27			
246710001	1	76	-1.59	0.00682	2/17/2010@11:58:22			
246714002	1	77	19.8	1.05	2/17/2010@11:59:16			

246724001	1	78	-1.32	0.0204	2/17/2010@12:00:10			
246724002	1	79	-1.37	0.0180	2/17/2010@12:01:04			
WCN100217-03	1	S3	103	5.11	2/17/2010@12:01:56			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			2.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			2.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100217-08	1	S7	-1.03	0.0346	2/17/2010@12:03:47			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					
246742001	1	80	-1.63	0.00514	2/17/2010@12:05:37			
246742002	1	81	-1.73	3.14e-4	2/17/2010@12:06:30			
246753001	1	82	-1.60	0.00637	2/17/2010@12:07:23			
246766001	1	83	-1.39	0.0169	2/17/2010@12:08:17			
WCN100217-03	1	S3	103	5.13	2/17/2010@12:09:10			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					
WCN100217-08	1	S7	-1.74	-1.58e-4	2/17/2010@12:11:00			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.74 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.74 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_2-17-2010_10-09-49.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

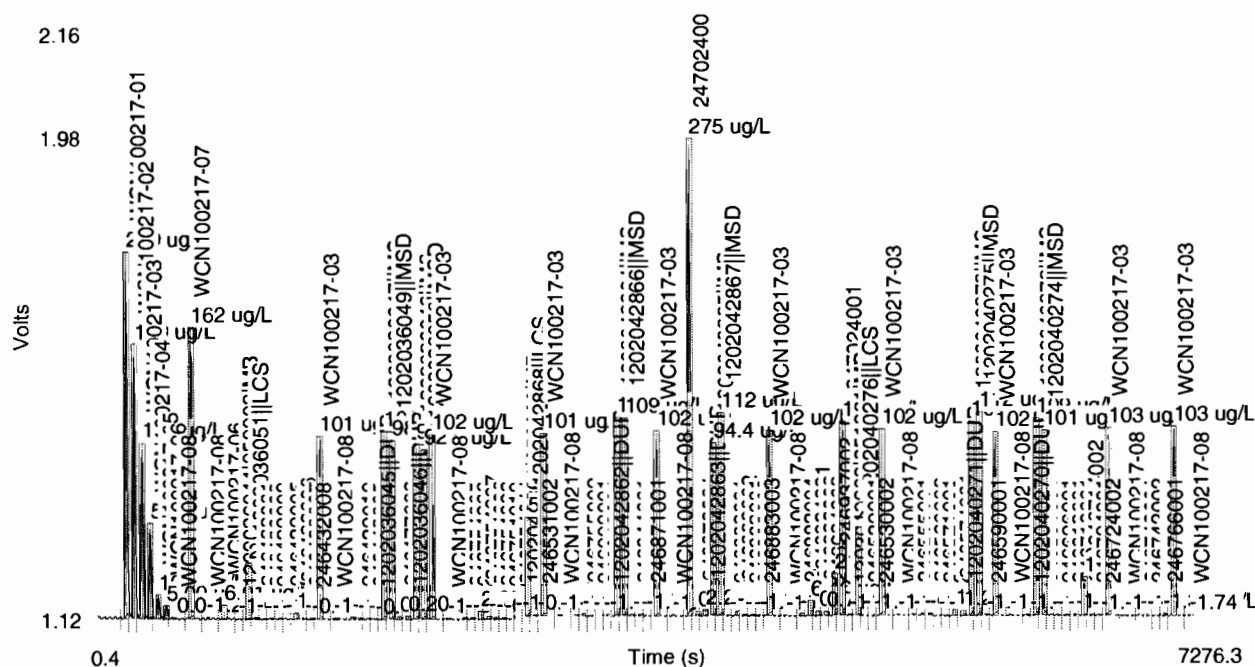
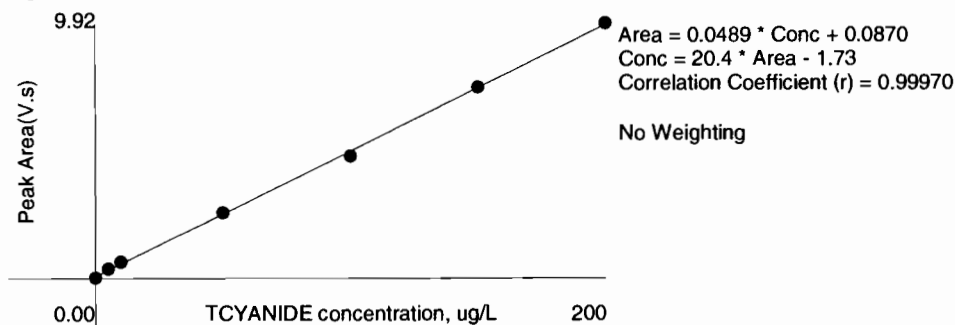


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.92	0.646	-0.6	2/17/2010	10:14:13
2	150	1	7.45	0.484	-0.3	2/17/2010	10:15:05
3	100	1	4.78	0.310	3.9	2/17/2010	10:15:57
4	50.0	1	2.59	0.169	-2.1	2/17/2010	10:16:50
5	10.0	1	0.647	0.0416	-12.4	2/17/2010	10:17:43
6	5.00	1	0.374	0.0226	-13.0	2/17/2010	10:18:37
7	0.00	1	0.0267	0.00251		2/17/2010	10:19:31

Figure 1: TCYANIDE



Ion Chromatography

Prep LogBook

Analyst: MARI
 Batch: 955347
 Lab SOP: GL-GC-E-086 REV# 17

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202048240	UIC100224SPK	.8	mL
MS	1202048236	UIC100224SPK	.8	mL
MS	1202048237	UIC100224SPK	.8	mL
MSD	1202048238	UIC100224SPK	.8	mL
MSD	1202048239	UIC100224SPK	.8	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202048233		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
MB	1202048233		EPA 300.0 PREP	01-MAR-2010 13:00	4 g	40 mL	10	SOIL
LCS	1202048240		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
LCS	1202048240		EPA 300.0 PREP	01-MAR-2010 13:00	4 g	40 mL	10	SOIL
SAMPLE	246443001		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
DUP	1202048234	246443001	EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
MS	1202048236	246443001	EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
MS	1202048236	246443001	EPA 300.0 PREP	01-MAR-2010 13:00	4 g	40 mL	10	SOIL
MSD	1202048238	246443001	EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
MSD	1202048238	246443001	EPA 300.0 PREP	01-MAR-2010 13:00	4 g	40 mL	10	SOIL
SAMPLE	246443002		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246443003		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246443004		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246443005		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566001		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566002		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566003		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566004		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566005		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566006		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566007		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566008		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566009		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566010		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
SAMPLE	246566011		EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
DUP	1202048235	246566011	EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
MS	1202048237	246566011	EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL
MSD	1202048239	246566011	EPA 300.0 PREP	26-FEB-2010 13:30	4 g	40 mL	10	SOIL

Prep LogBook

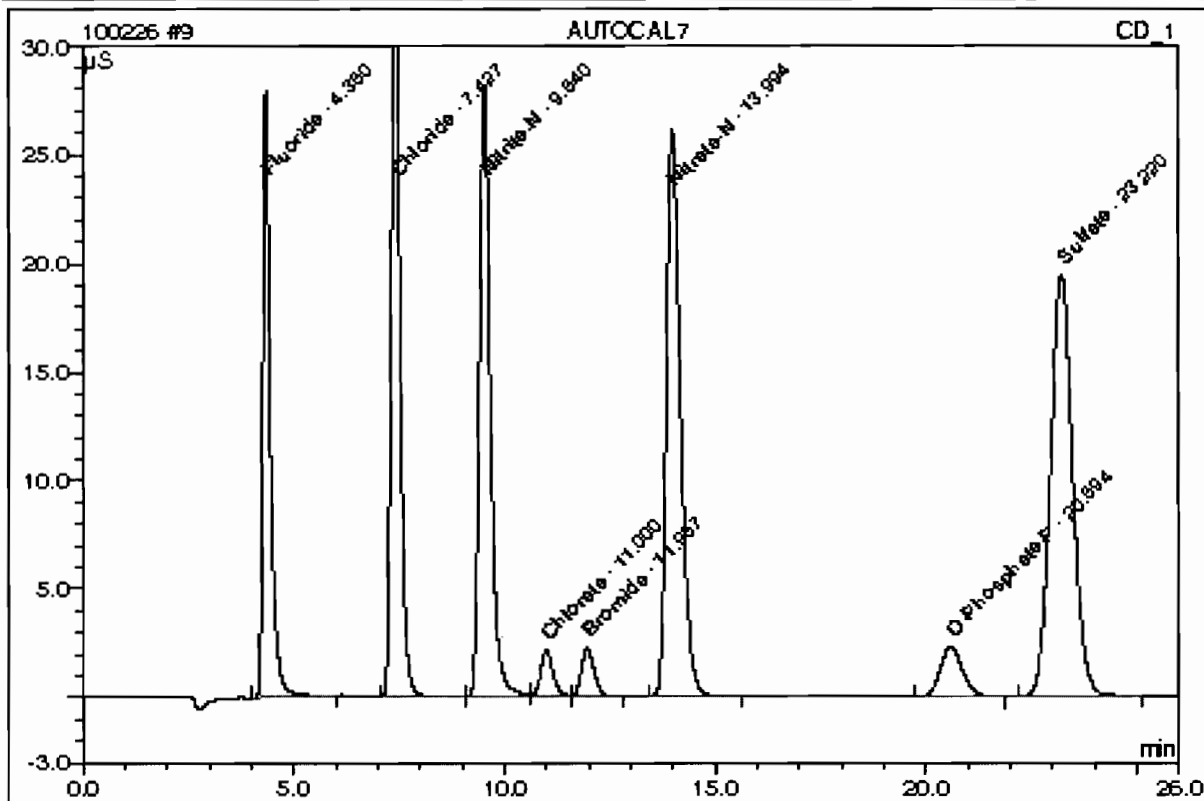
Comments

This is runlog for Sequence 100303.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	02/26/10 14:11		1	100303	MAR1
ICAL-06	02/26/10 14:40		1	100303	MAR1
ICAL-05	02/26/10 15:09		1	100303	MAR1
ICAL-04	02/26/10 15:38		1	100303	MAR1
ICAL-03	02/26/10 16:07		1	100303	MAR1
ICAL-02	02/26/10 16:36		1	100303	MAR1
ICAL-01	02/26/10 17:04		1	100303	MAR1

9 AUTOCAL7

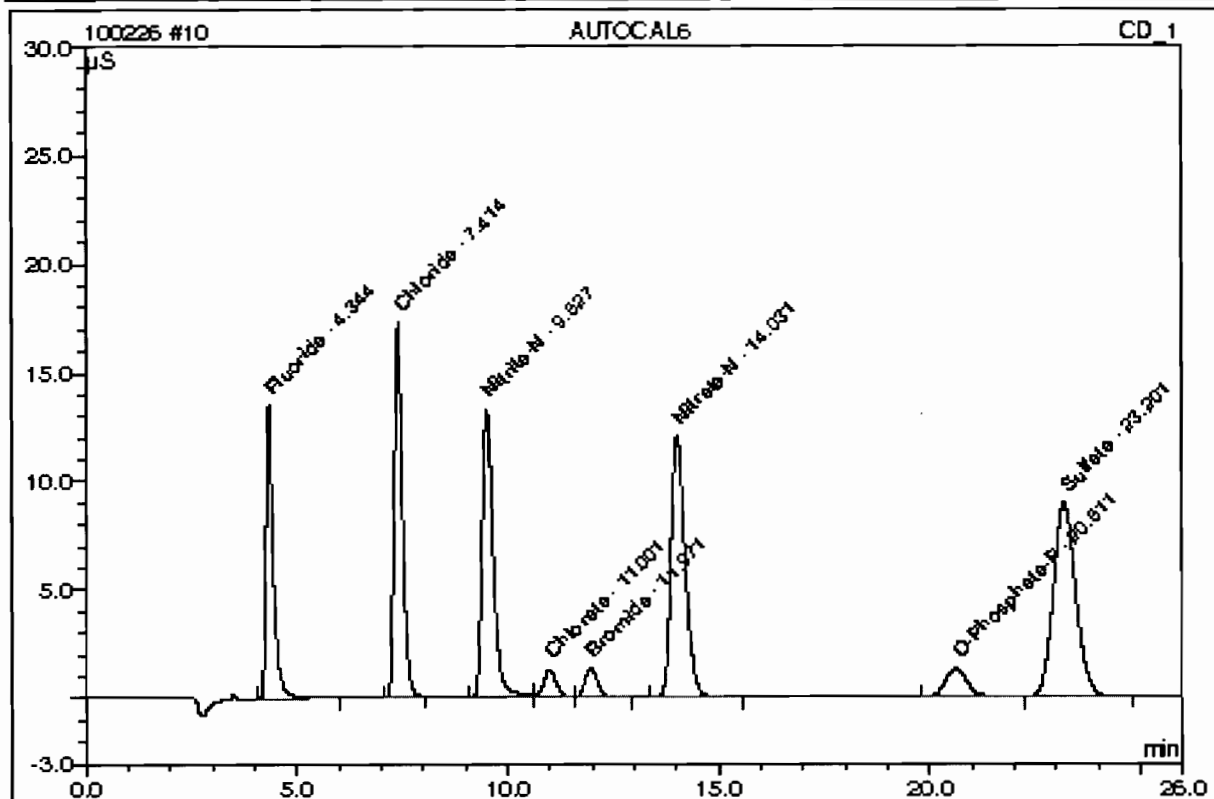
Sample Name:	AUTOCAL7	Injection Volume:	1.0
Vial Number:	3	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 14:11	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	10.0000	10.0855		5.77442	12.08
2	7.43	Chloride	20.0000	20.3596		8.66452	18.13
3	9.54	Nitrite-N	10.0000	10.0634		8.38589	17.54
4	11.00	Chlorate	5.0000	5.0096		0.72891	1.52
5	11.97	Bromide	5.0000	4.9733		0.76589	1.60
6	13.99	Nitrate-N	10.0000	10.1518		10.17864	21.30
7	20.59	O-Phosphate-P	5.0000	5.0713		1.40399	2.94
8	23.22	Sulfate	40.0000	40.4933		11.89615	24.89
Total:				106.2078	0.000	47.798	100.00

10 AUTOCAL6

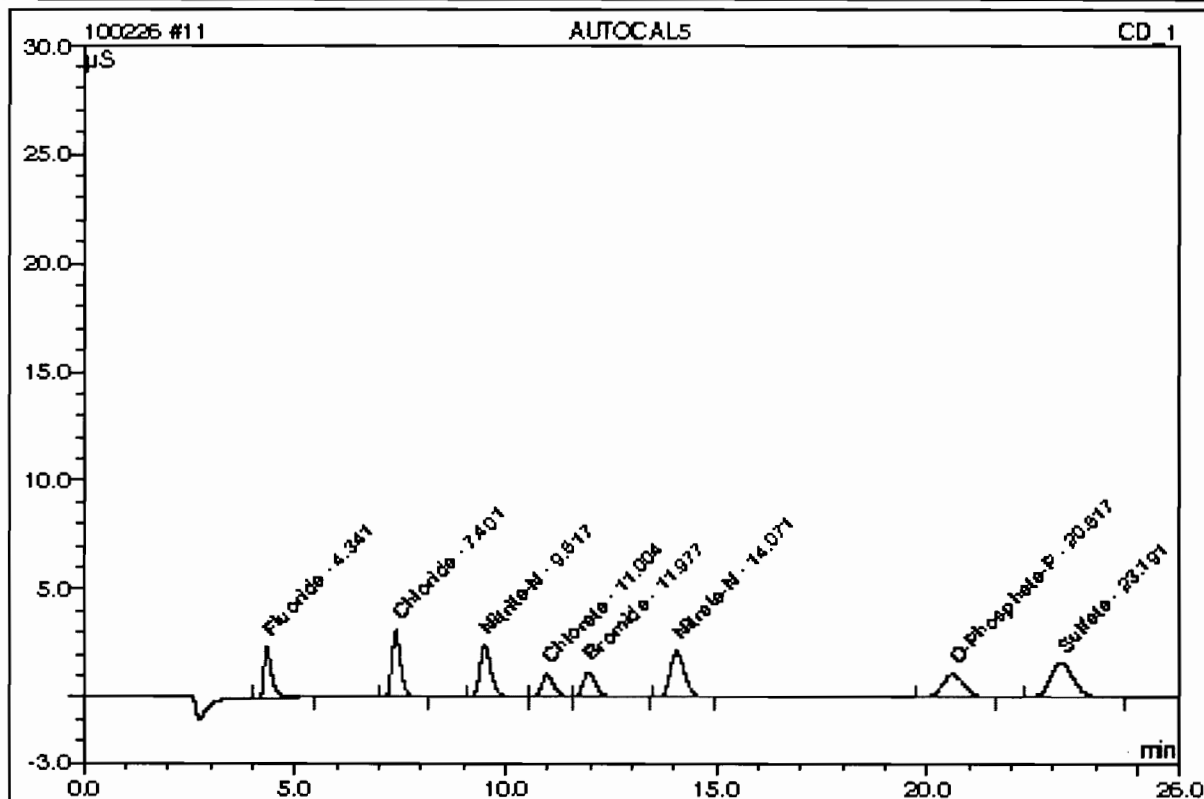
Sample Name:	AUTOCAL6	Injection Volume:	1.0
Vial Number:	4	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 14:40	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	5.0000	4.8384		2.75186	12.16
2	7.41	Chloride	10.0000	9.2955		3.91334	17.29
3	9.53	Nitrite-N	5.0000	4.8861		4.04396	17.86
4	11.00	Chlorate	3.0000	3.0997		0.44848	1.98
5	11.97	Bromide	3.0000	2.9841		0.45913	2.03
6	14.03	Nitrate-N	5.0000	4.7080		4.67150	20.63
7	20.61	O-Phosphate-P	3.0000	2.9561		0.80102	3.54
8	23.20	Sulfate	20.0000	19.0431		5.55000	24.51
Total:				51.8110	0.000	22.639	100.00

11 AUTOCAL5

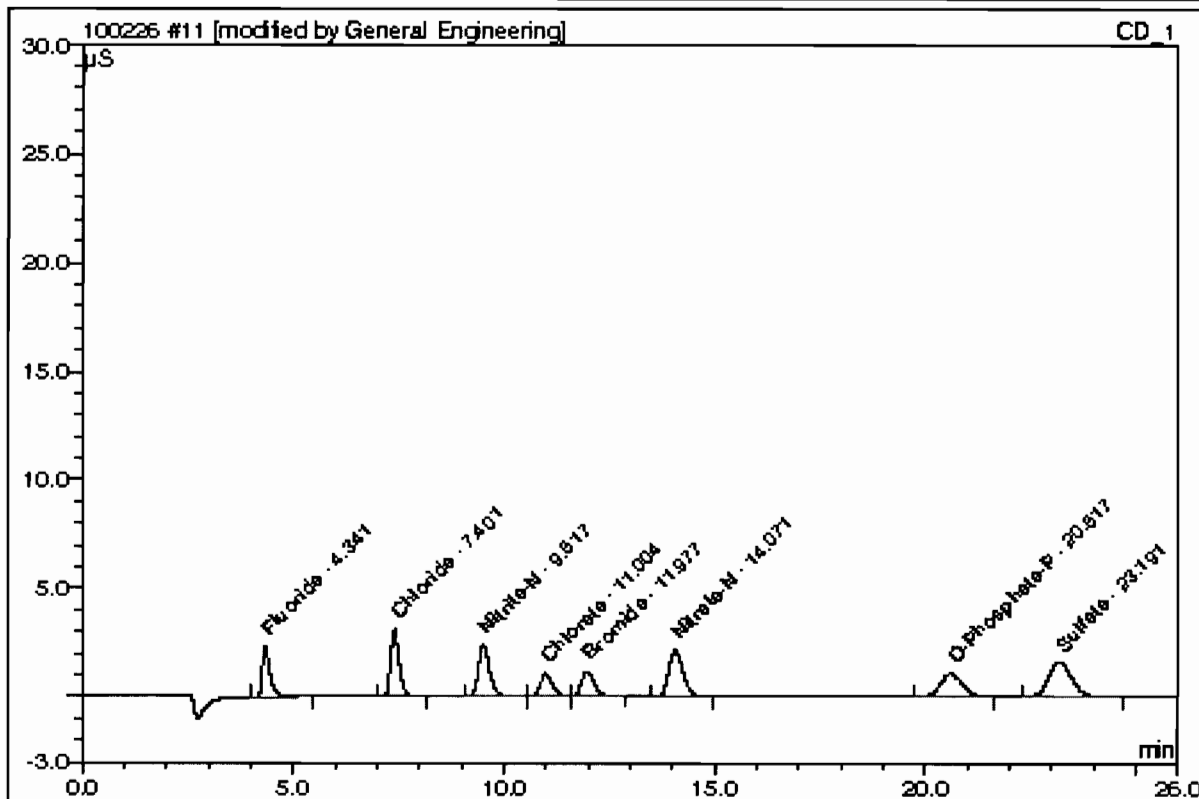
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;Ø056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	1.0000	0.9456		0.50946	9.66
2	7.40	Chloride	2.0000	1.8831		0.73030	13.85
3	9.52	Nitrate-N	1.0000	0.9352		0.73136	13.87
4	11.00	Chlorate	2.5000	2.4073		0.34799	6.60
5	11.98	Bromide	2.5000	2.6793		0.41530	7.88
6	14.07	Nitrate-N	1.0000	0.9238		0.84323	15.99
7	20.62	O-Phosphate-P	2.5000	2.4544		0.65802	12.48
8	23.19	Sulfate	4.0000	3.7873		1.03648	19.66
Total:				16.0159	0.000	5.272	100.00

11 AUTOCAL5

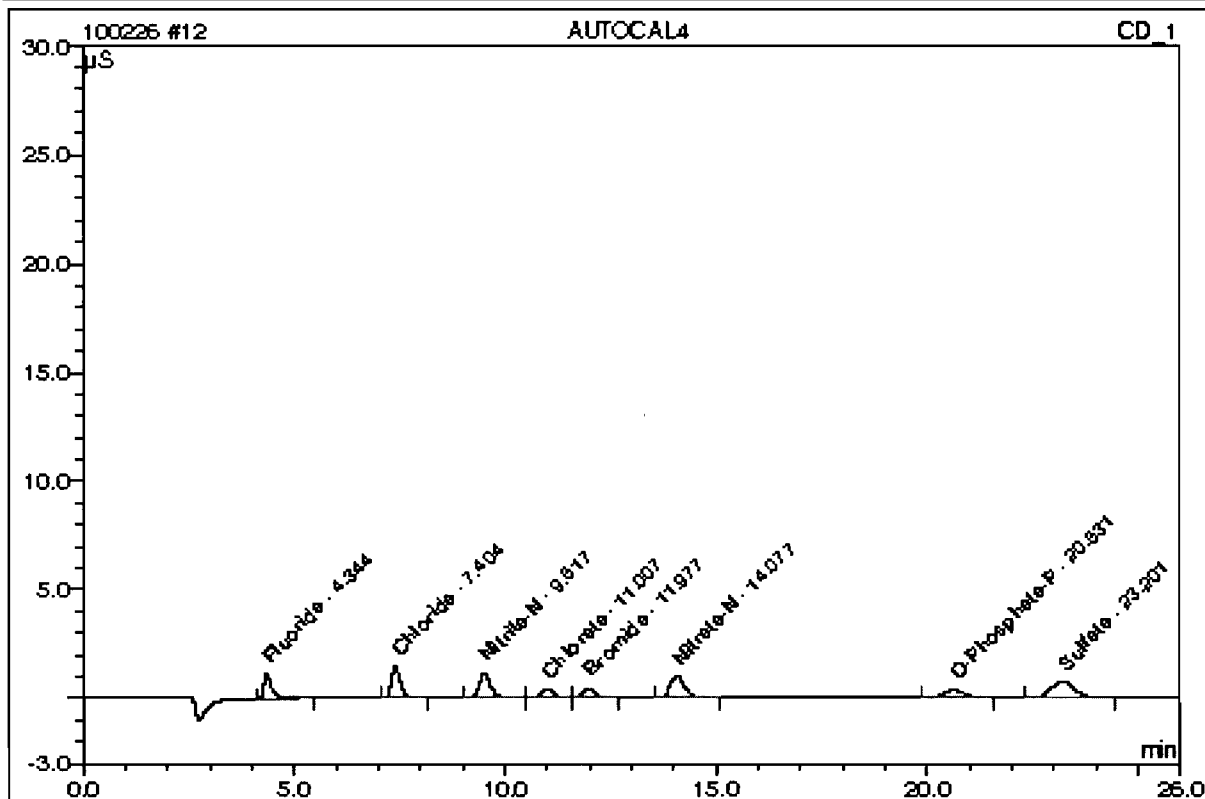
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.34	Fluoride	1.0000	0.9456		0.50946	9.72
2	7.40	Chloride	2.0000	1.8831		0.73030	13.93
3	9.52	Nitrate-N	1.0000	0.9315		0.72762	13.88
4	11.00	Chlorate	2.5000	2.3673		0.34093	6.50
5	11.98	Bromide	2.5000	2.5838		0.39739	7.58
6	14.07	Nitrate-N	1.0000	0.9238		0.84323	16.08
7	20.62	O-Phosphate-P	2.5000	2.4544		0.65802	12.55
8	23.19	Sulfate	4.0000	3.7873		1.03648	19.77
Total:				15.8767	0.000	5.243	100.00

12 AUTOCAL4

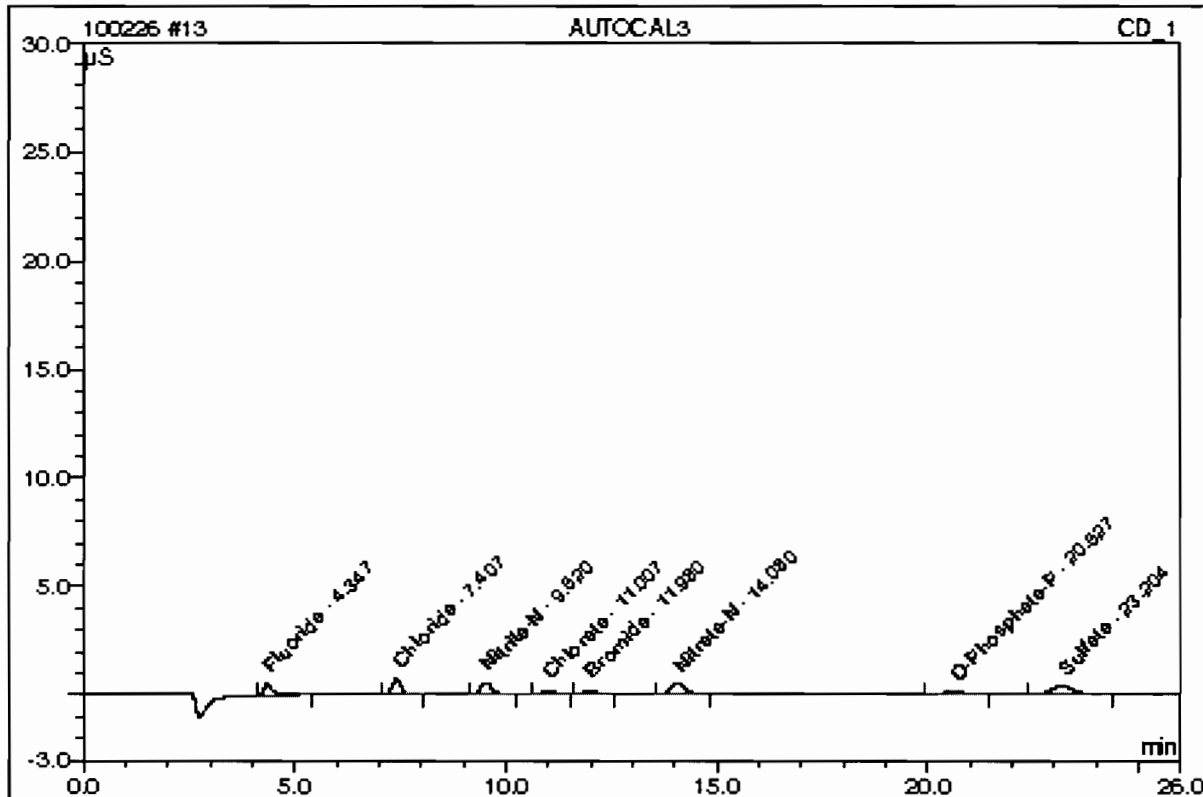
Sample Name:	AUTOCAL4	Injection Volume:	1.0
Vial Number:	6	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:38	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	0.5000	0.4893		0.24663	10.36
2	7.40	Chloride	1.0000	0.9971		0.34985	14.69
3	9.52	Nitrite-N	0.5000	0.4896		0.35700	14.99
4	11.01	Chlorate	1.0000	0.9843		0.13787	5.79
5	11.98	Bromide	1.0000	0.9852		0.15086	6.34
6	14.08	Nitrate-N	0.5000	0.4953		0.40975	17.21
7	20.63	O-Phosphate-P	1.0000	0.9197		0.22053	9.26
8	23.20	Sulfate	2.0000	2.0029		0.50858	21.36
Total:				7.3634	0.000	2.381	100.00

13 AUTOCAL3

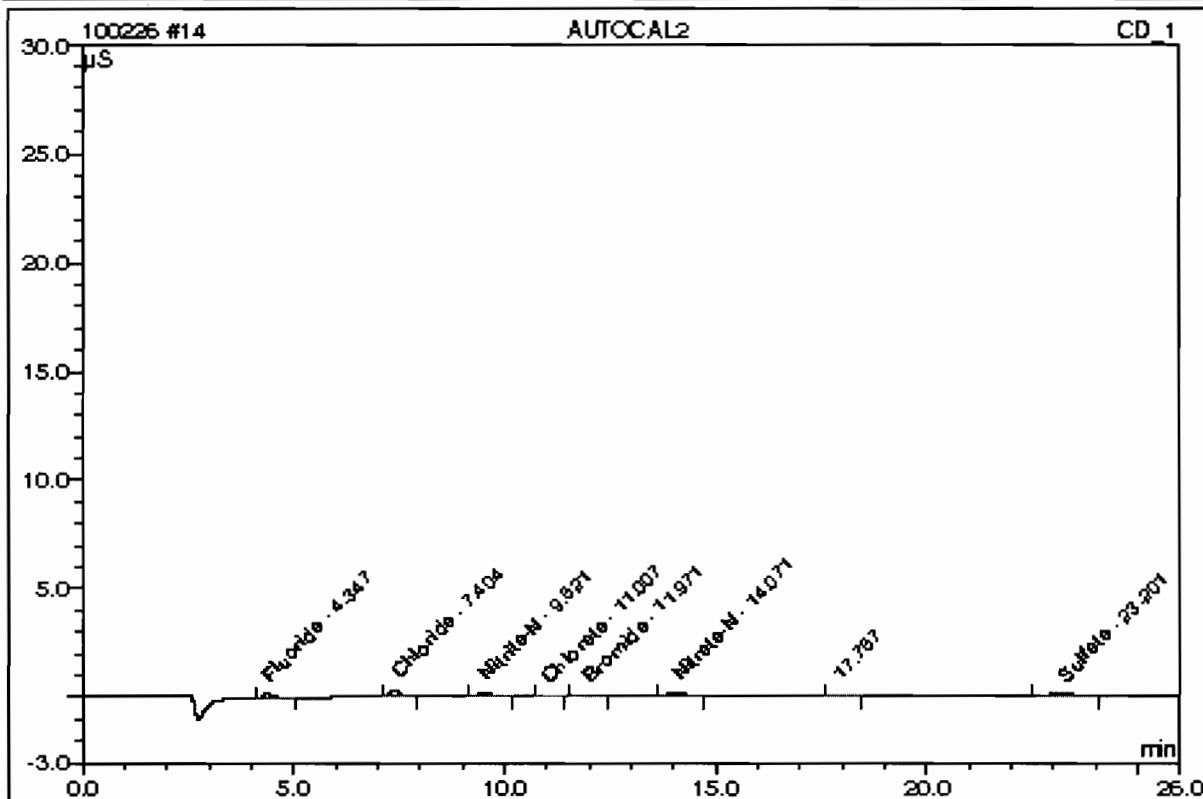
Sample Name:	AUTOCAL3	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:07	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	0.2500	0.2826		0.12755	10.86
2	7.41	Chloride	0.5000	0.6142		0.18541	15.79
3	9.52	Nitrite-N	0.2500	0.2703		0.17315	14.75
4	11.01	Chlorate	0.5000	0.5046		0.06743	5.74
5	11.98	Bromide	0.5000	0.4768		0.07246	6.17
6	14.08	Nitrate-N	0.2500	0.2969		0.20912	17.81
7	20.63	O-Phosphate-P	0.5000	0.4301		0.08097	6.90
8	23.20	Sulfate	1.0000	1.1562		0.25806	21.98
Total:				4.0318	0.000	1.174	100.00

14 AUTOCAL2

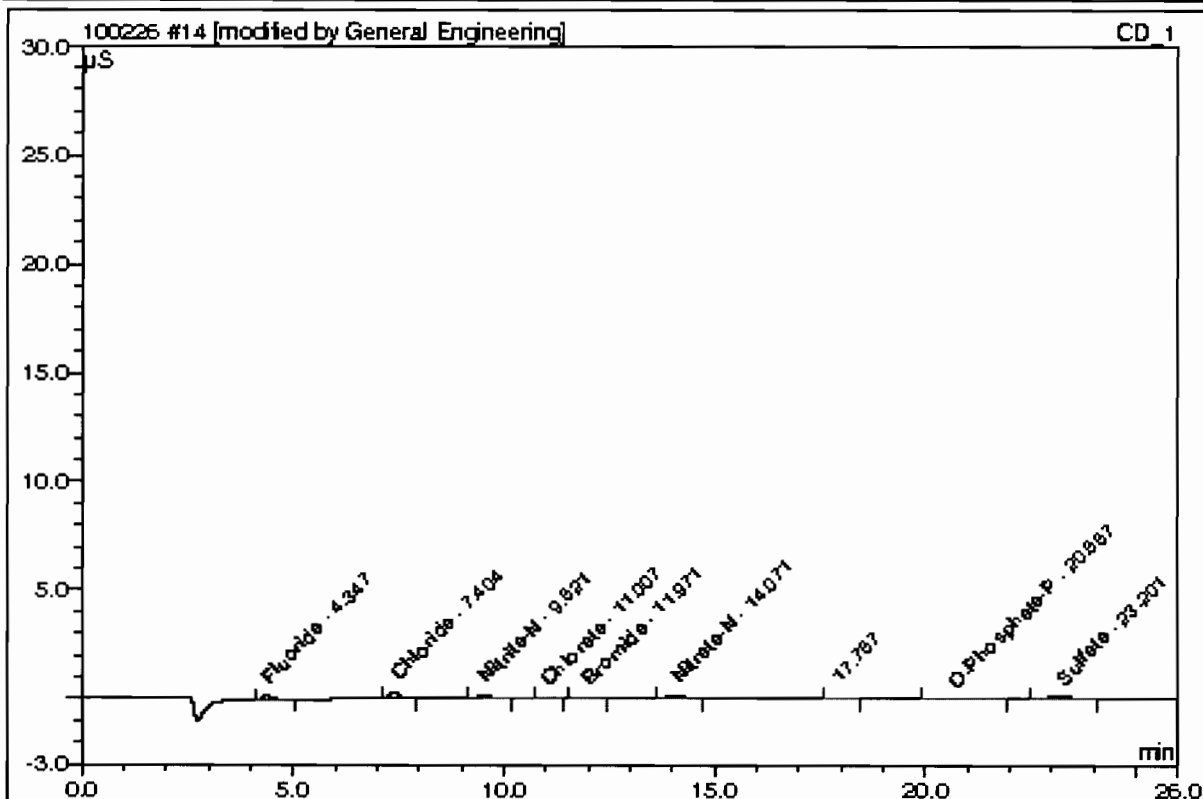
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:36	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	0.1000	0.1475		0.04972	10.74
2	7.40	Chloride	0.2000	0.3681		0.07973	17.22
3	9.52	Nitrite-N	0.1000	0.1444		0.06824	14.74
4	11.01	Chlorate	0.2000	0.1849		0.02108	4.55
5	11.97	Bromide	0.2000	0.1801		0.02821	6.10
6	14.07	Nitrate-N	0.1000	0.1840		0.09485	20.49
n.a.	n.a.	O-Phosphate-P	0.2000	n.a.	n.a.	n.a.	n.a.
8	23.20	Sulfate	0.4000	0.6333		0.10336	22.33
Total:				1.8423	0.000	0.445	96.18

14 AUTOCAL2

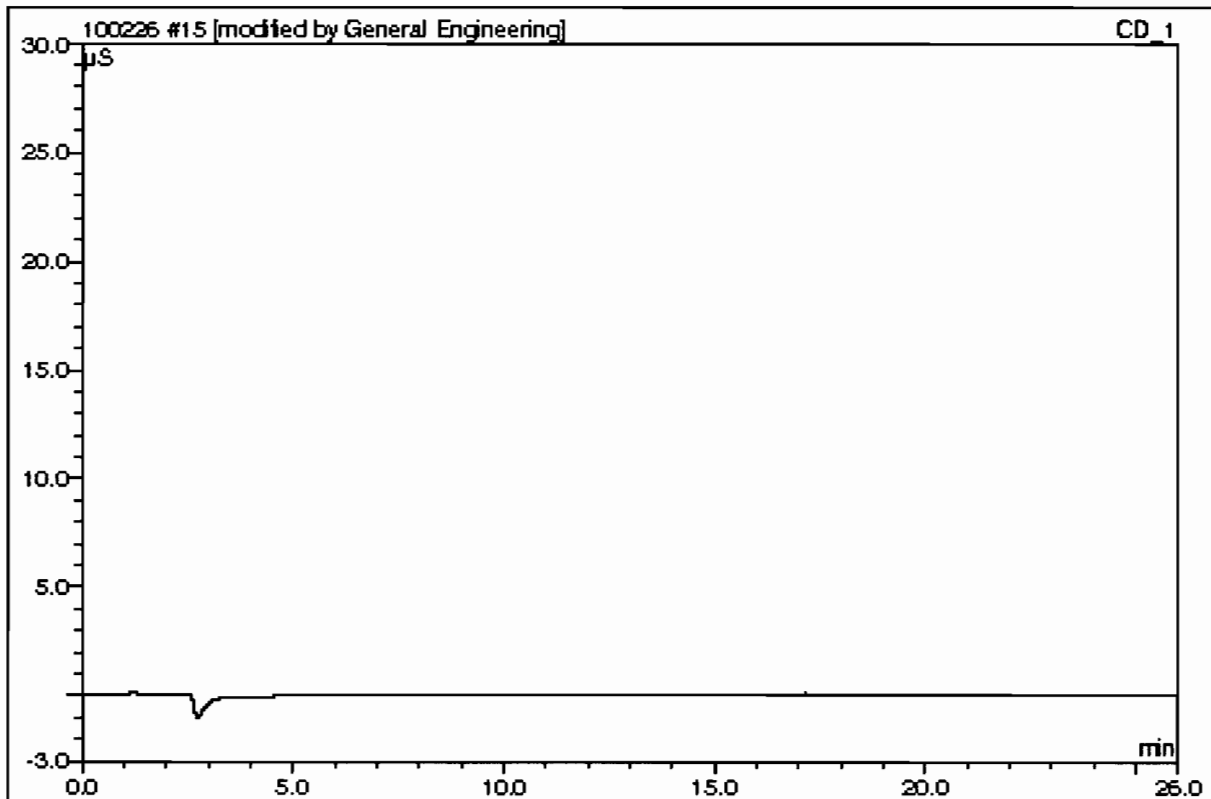
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:36	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	0.1000	0.1475		0.04972	10.26
2	7.40	Chloride	0.2000	0.3681		0.07973	16.45
3	9.52	Nitrate-N	0.1000	0.1452		0.06824	14.08
4	11.01	Chlorate	0.2000	0.1890		0.02108	4.35
5	11.97	Bromide	0.2000	0.1899		0.02821	5.82
6	14.07	Nitrate-N	0.1000	0.1840		0.09485	19.57
8	20.66	O-Phosphate-P	0.2000	0.2223		0.02173	4.48
9	23.20	Sulfate	0.4000	0.6333		0.10336	21.33
Total:				2.0793	0.000	0.467	96.35

15 AUTOCAL1

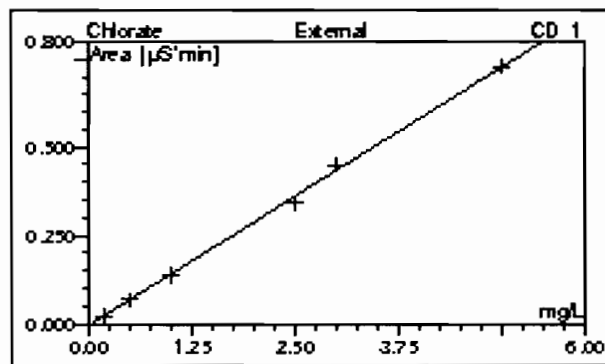
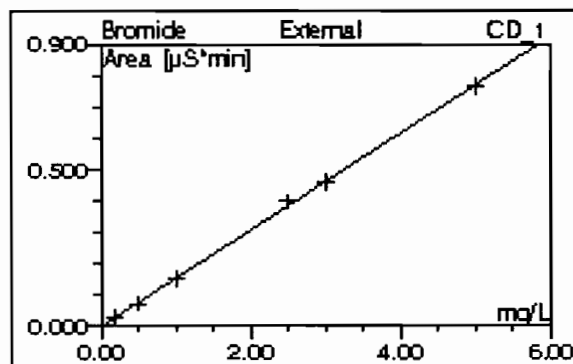
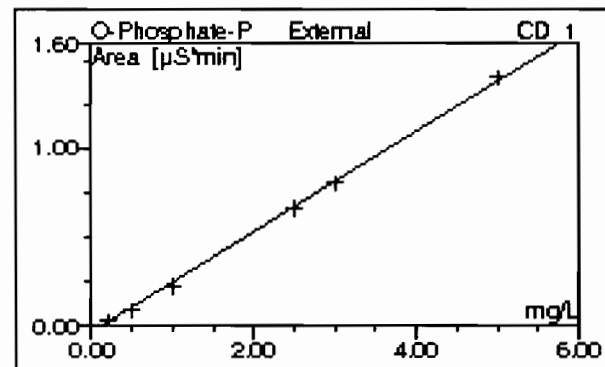
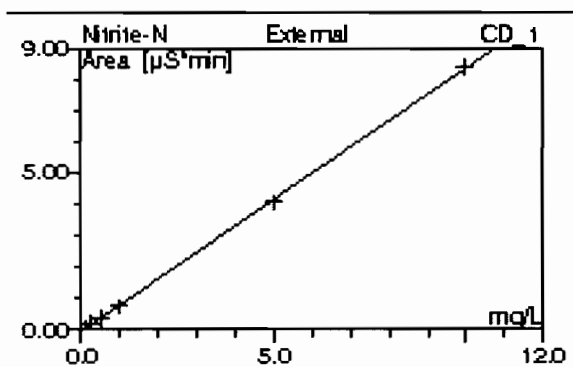
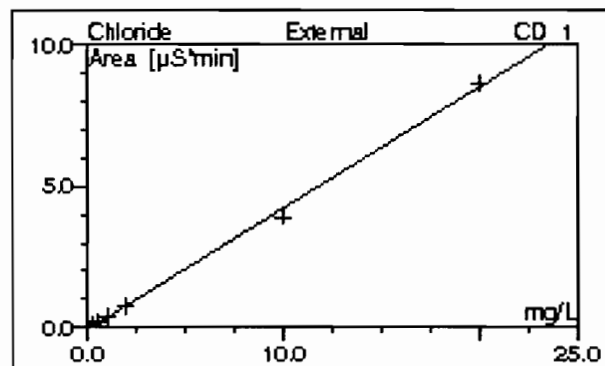
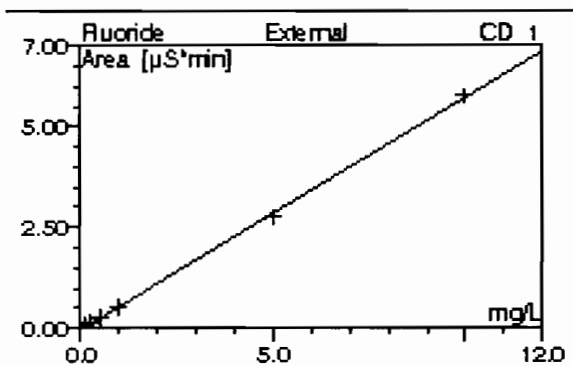
Sample Name:	AUTOCAL1	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 17:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056

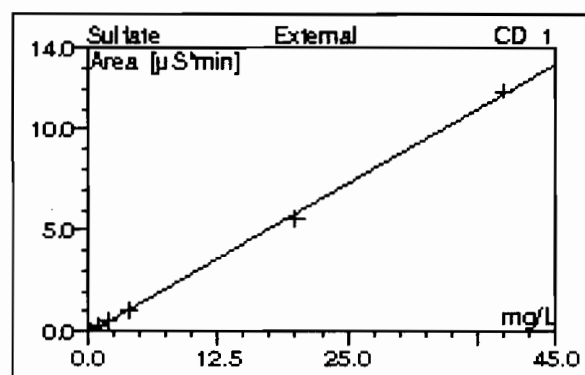
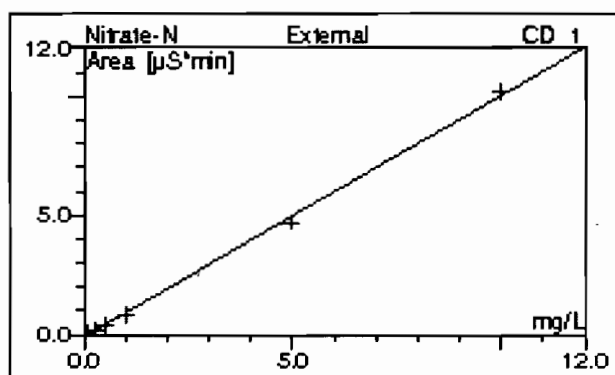


No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrile-N	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

15 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:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 17:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002712; GL GC E086;300;9056





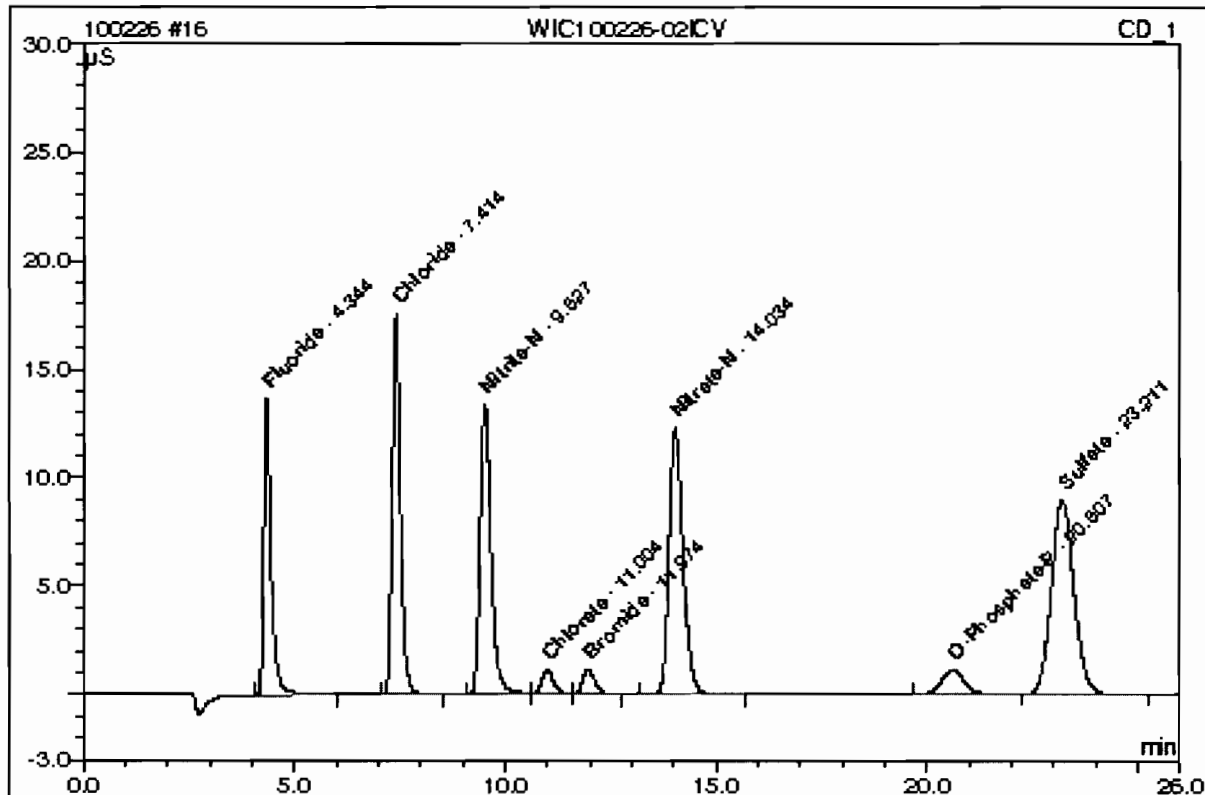
No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	OLO#	99.9498	-0.0352	0.5760	0.0000
n.a.	n.a.	Chloride	OLO#	99.7865	-0.0783	0.4294	0.0000
n.a.	n.a.	Nitrite-N	OLO#	99.9894	-0.0536	0.8386	0.0000
n.a.	n.a.	Chlorate	OLO#	99.8345	-0.0067	0.1468	0.0000
n.a.	n.a.	Bromide	OLO#	99.9472	-0.0011	0.1542	0.0000
n.a.	n.a.	Nitrate-N	OLO#	99.8450	-0.0913	1.0116	0.0000
n.a.	n.a.	O-Phosphate-P	OLO#	99.8794	-0.0416	0.2851	0.0000
n.a.	n.a.	Sulfate	OLO#	99.8991	-0.0840	0.2959	0.0000
Average:				99.8889	-0.0490	0.4672	0.0000

This is runlog for Sequence 100226.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	02/26/10 13:14		1	100226	MAR1
BLK	02/26/10 13:42		1	100226	MAR1
ICAL-07	02/26/10 14:11		1	100226	MAR1
ICAL-06	02/26/10 14:40		1	100226	MAR1
ICAL-05	02/26/10 15:09		1	100226	MAR1
ICAL-04	02/26/10 15:38		1	100226	MAR1
ICAL-03	02/26/10 16:07		1	100226	MAR1
ICAL-02	02/26/10 16:36		1	100226	MAR1
ICAL-01	02/26/10 17:04		1	100226	MAR1
ICV	02/26/10 17:33		1	100226	MAR1
ICB	02/26/10 18:02		1	100226	MAR1
1202055176	02/26/10 18:31	958323	1	100226	MAR1
1202055181	02/26/10 18:59	958323	1	100226	MAR1
248133001	02/26/10 19:28	958323	1	100226	MAR1
1202055177	02/26/10 19:57	958323	1	100226	MAR1
1202055179	02/26/10 20:26	958323	1	100226	MAR1
248133002	02/26/10 20:55	958323	1	100226	MAR1
248133003	02/26/10 21:24	958323	1	100226	MAR1
248133005	02/26/10 21:53	958323	1	100226	MAR1
248133006	02/26/10 22:22	958323	1	100226	MAR1
248133007	02/26/10 22:50	958323	1	100226	MAR1
CVH	02/26/10 23:19		1	100226	MAR1
CCB	02/26/10 23:48		1	100226	MAR1

16 WIC100226-02ICV

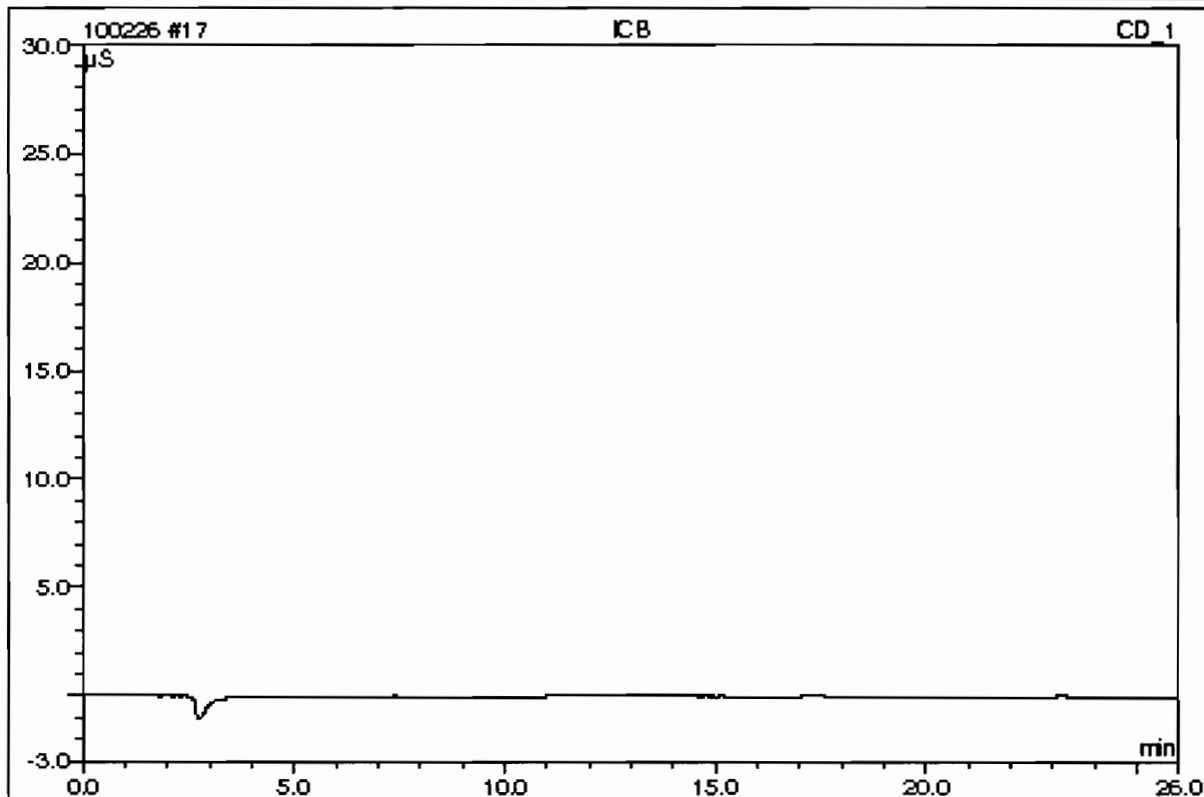
Sample Name:	WIC100226-02ICV	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 17:33	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	n.a.	4.8533		2.76044	12.27
2	7.41	Chloride	n.a.	9.4181		3.96602	17.63
3	9.53	Nitrite-N	n.a.	4.8245		3.99229	17.75
4	11.00	Chlorate	n.a.	2.4815		0.35771	1.59
5	11.97	Bromide	n.a.	2.4889		0.38276	1.70
6	14.03	Nitrate-N	n.a.	4.7766		4.74087	21.07
7	20.61	O-Phosphate-P	n.a.	2.7182		0.73321	3.26
8	23.21	Sulfate	n.a.	19.0842		5.56215	24.73
Total:				50.6453	0.000	22.495	100.00

17 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:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 18:02	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 %
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

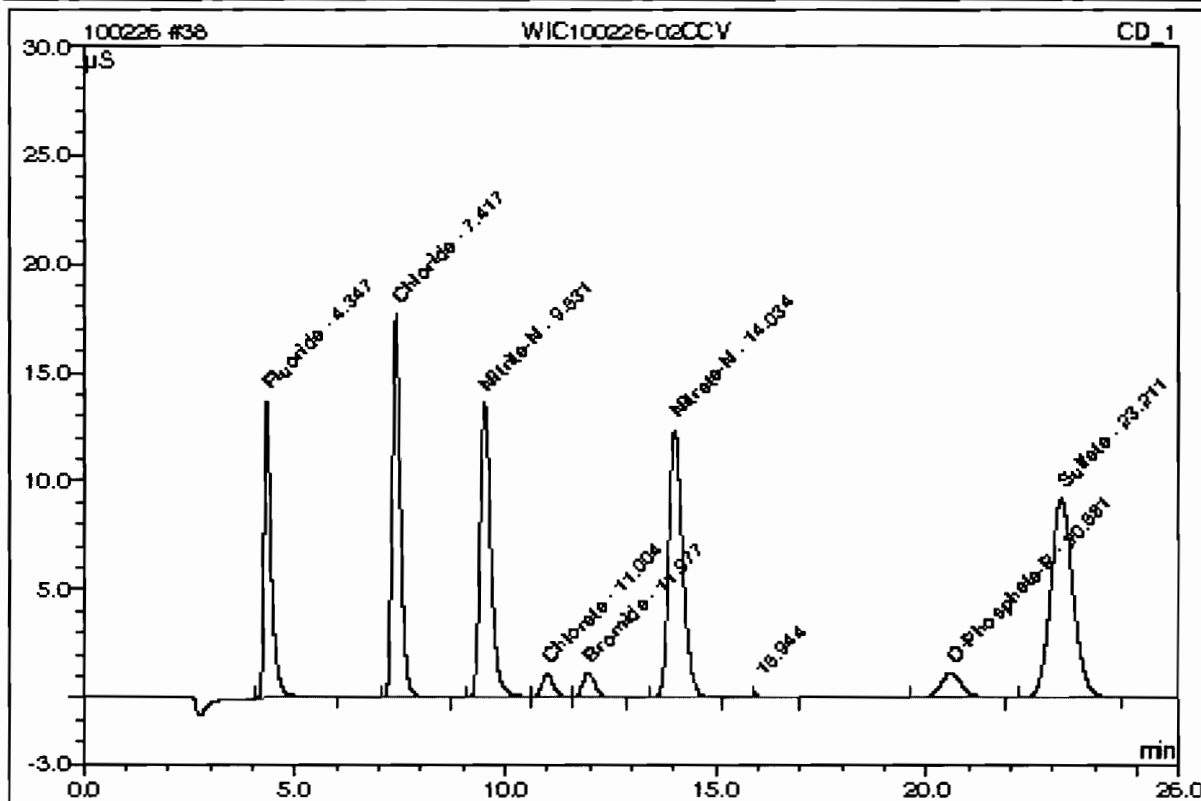
This is runlog for Sequence 100226.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
248157002	02/27/10 00:17	958323	1	100226	MAR1
1202055178	02/27/10 00:46	958323	1	100226	MAR1
1202055180	02/27/10 01:15	958323	1	100226	MAR1
248157003	02/27/10 01:44	958323	1	100226	MAR1
248157004	02/27/10 02:13	958323	1	100226	MAR1
248157005	02/27/10 02:42	958323	1	100226	MAR1
248157006	02/27/10 03:11	958323	1	100226	MAR1
248157007	02/27/10 03:40	958323	1	100226	MAR1
CCV	02/27/10 04:09		1	100226	MAR1
CCB	02/27/10 04:37		1	100226	MAR1
1202048233	02/27/10 05:06	955348	1	100226	MAR1
1202048240	02/27/10 05:35	955348	1	100226	MAR1
246443001	02/27/10 06:04	955348	1	100226	MAR1
1202048234	02/27/10 06:33	955348	1	100226	MAR1
1202048236	02/27/10 07:02	955348	1	100226	MAR1
1202048238	02/27/10 07:31	955348	1	100226	MAR1
246443002	02/27/10 08:00	955348	1	100226	MAR1
246443003	02/27/10 08:29	955348	1	100226	MAR1
246443004	02/27/10 08:58	955348	1	100226	MAR1
246443005	02/27/10 09:27	955348	1	100226	MAR1
CVH	02/27/10 09:55		1	100226	MAR1
CCB	02/27/10 10:24		1	100226	MAR1
246566001	02/27/10 10:53	955348	1	100226	MAR1
246566002	02/27/10 11:22	955348	1	100226	MAR1
246566003	02/27/10 11:51	955348	1	100226	MAR1
246566004	02/27/10 12:20	955348	1	100226	MAR1
246566005	02/27/10 12:49	955348	1	100226	MAR1
246566006	02/27/10 13:18	955348	1	100226	MAR1

246566007	02/27/10 13:47 955348 1	100226	MAR1
246566008	02/27/10 14:16 955348 1	100226	MAR1
246566009	02/27/10 14:45 955348 1	100226	MAR1
246566010	02/27/10 15:13 955348 1	100226	MAR1
CCV	02/27/10 15:42 1	100226	MAR1
CCB	02/27/10 16:11 1	100226	MAR1
246566011	02/27/10 16:40 955348 1	100226	MAR1
1202048235	02/27/10 17:09 955348 1	100226	MAR1
1202048237	02/27/10 18:36 955348 1	100226	MAR1
1202048239	02/27/10 19:05 955348 1	100226	MAR1
CVH	02/27/10 19:34 1	100226	MAR1
CCB	02/27/10 20:03 1	100226	MAR1
1202048453	02/27/10 20:32 955455 1	100226	MAR1
1202048460	02/27/10 21:00 955455 1	100226	MAR1
246719001	02/27/10 21:29 955455 1	100226	MAR1
1202048454	02/27/10 21:58 955455 1	100226	MAR1
1202048456	02/27/10 22:27 955455 1	100226	MAR1
1202048458	02/27/10 22:56 955455 1	100226	MAR1
246719002	02/27/10 23:25 955455 1	100226	MAR1
246719003	02/27/10 23:54 955455 1	100226	MAR1

38 WIC100226-02CCV

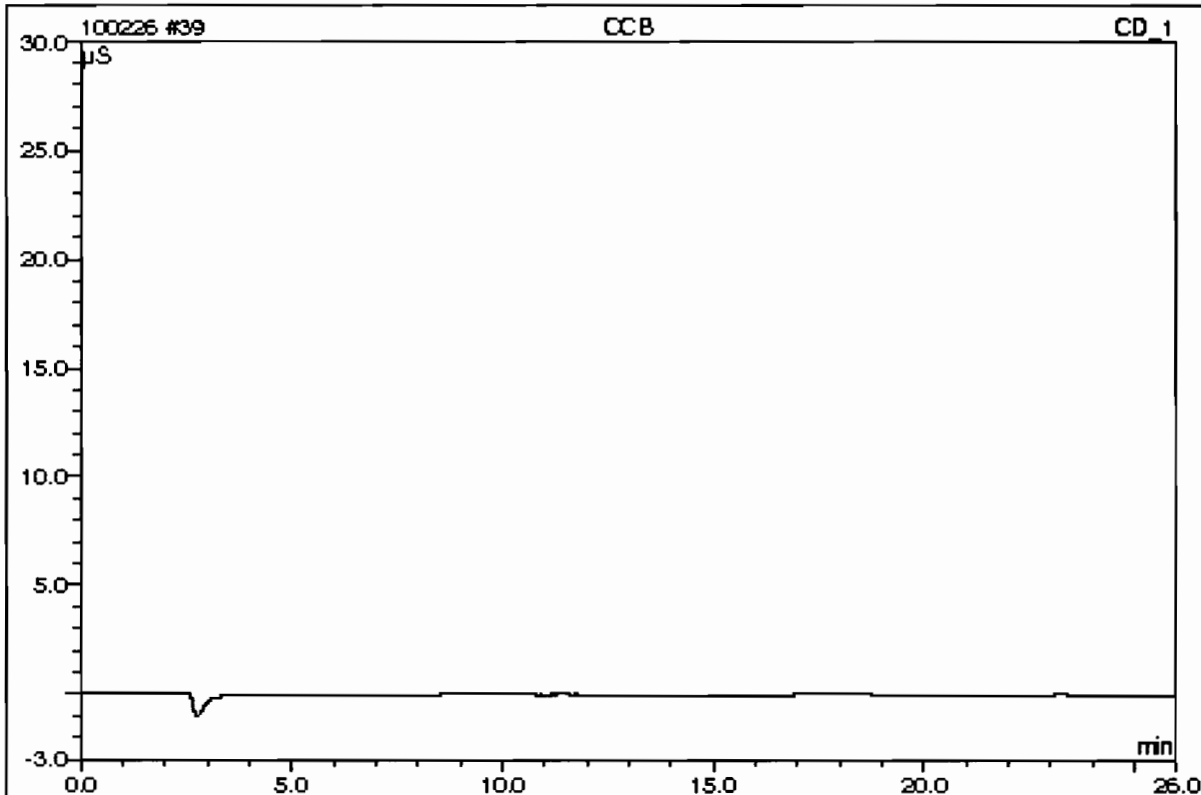
Sample Name:	WIC100226-02CCV	Injection Volume:	1.0
Vial Number:	32	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 4:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	n.a.	4.9246		2.80155	12.29
2	7.42	Chloride	n.a.	9.5606		4.02721	17.66
3	9.53	Nitrite-N	n.a.	4.9272		4.07842	17.89
4	11.00	Chlorate	n.a.	2.5146		0.36256	1.59
5	11.98	Bromide	n.a.	2.4941		0.38356	1.68
6	14.03	Nitrate-N	n.a.	4.8108		4.77550	20.94
8	20.58	O-Phosphate-P	n.a.	2.5307		0.67976	2.98
9	23.21	Sulfate	n.a.	19.4143		5.65983	24.82
Total:				51.1770	0.000	22.768	99.85

39 CCB

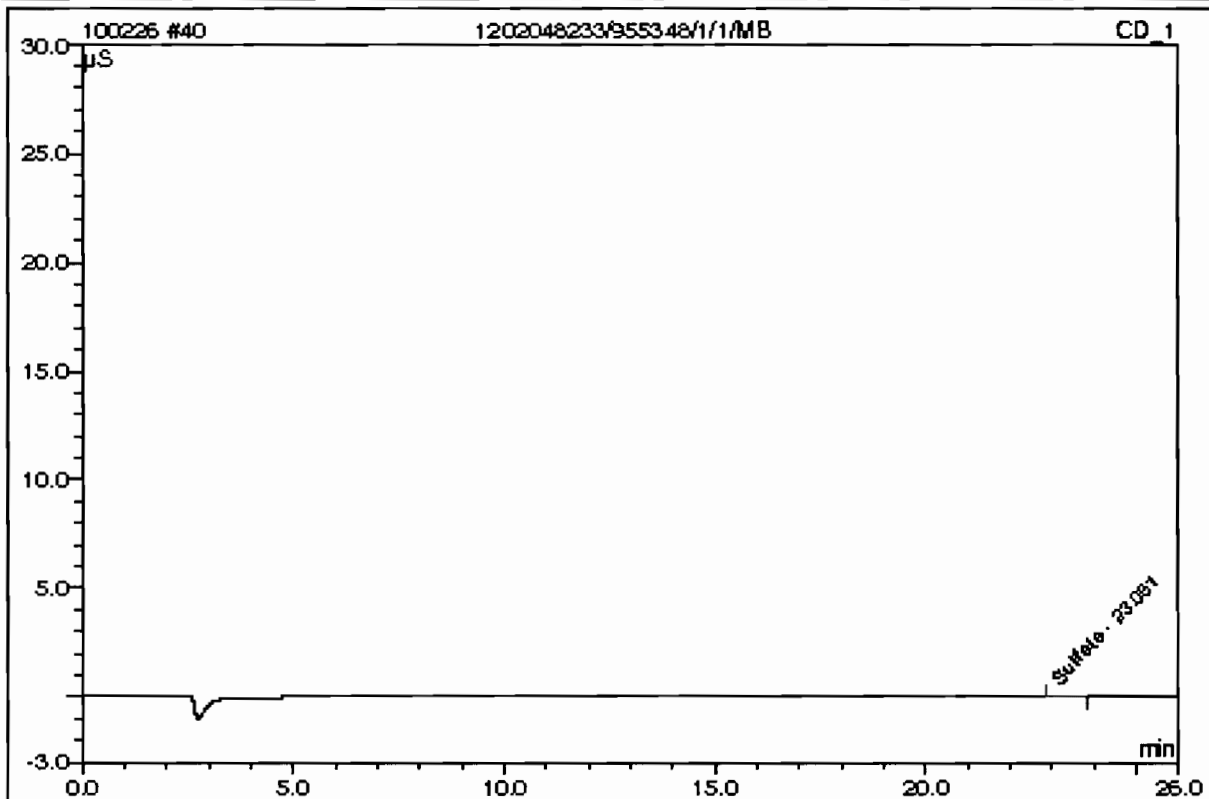
Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	33	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 4:37	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
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

40 1202048233/955348/1/1/MB

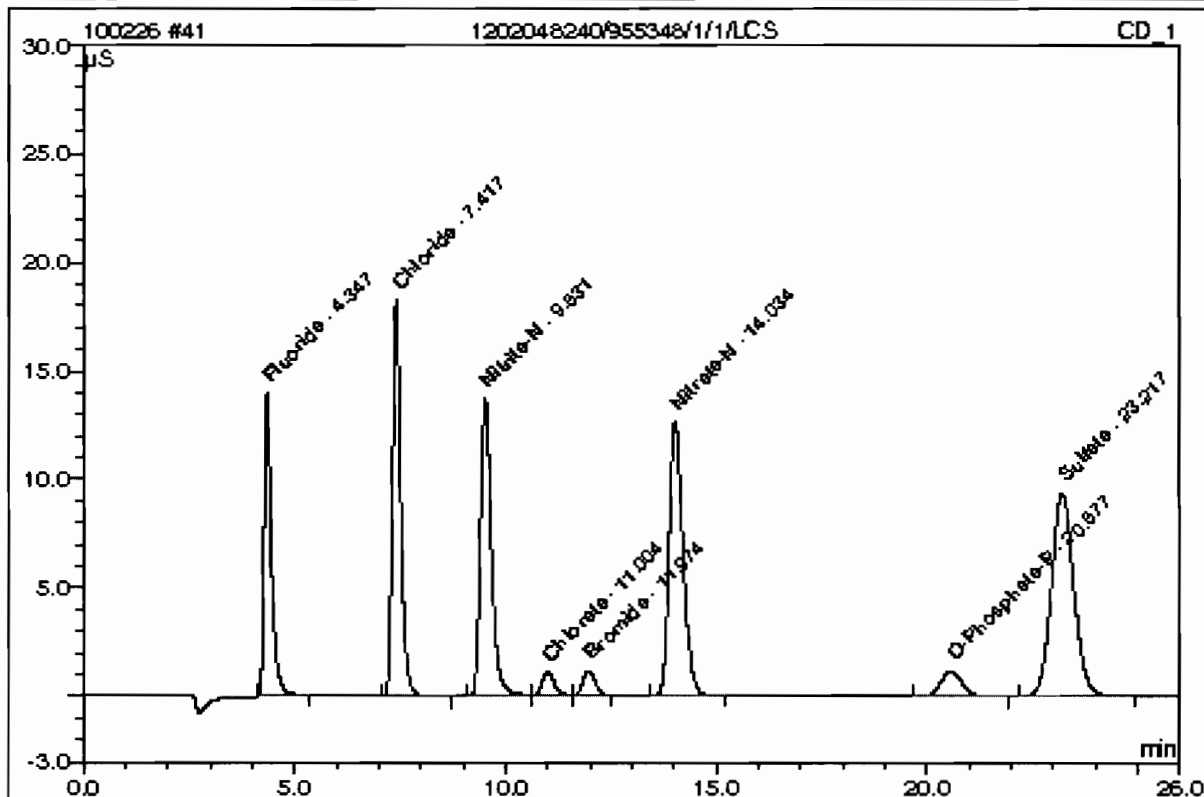
Sample Name:	1202048233/955348/1/1/MB	Injection Volume:	1.0
Vial Number:	34	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 5:06	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
1	23.06	Sulfate	n.a.	0.3640		0.02370	100.00
Total:				0.3640	0.000	0.024	100.00

41 1202048240/955348/1/1/LCS

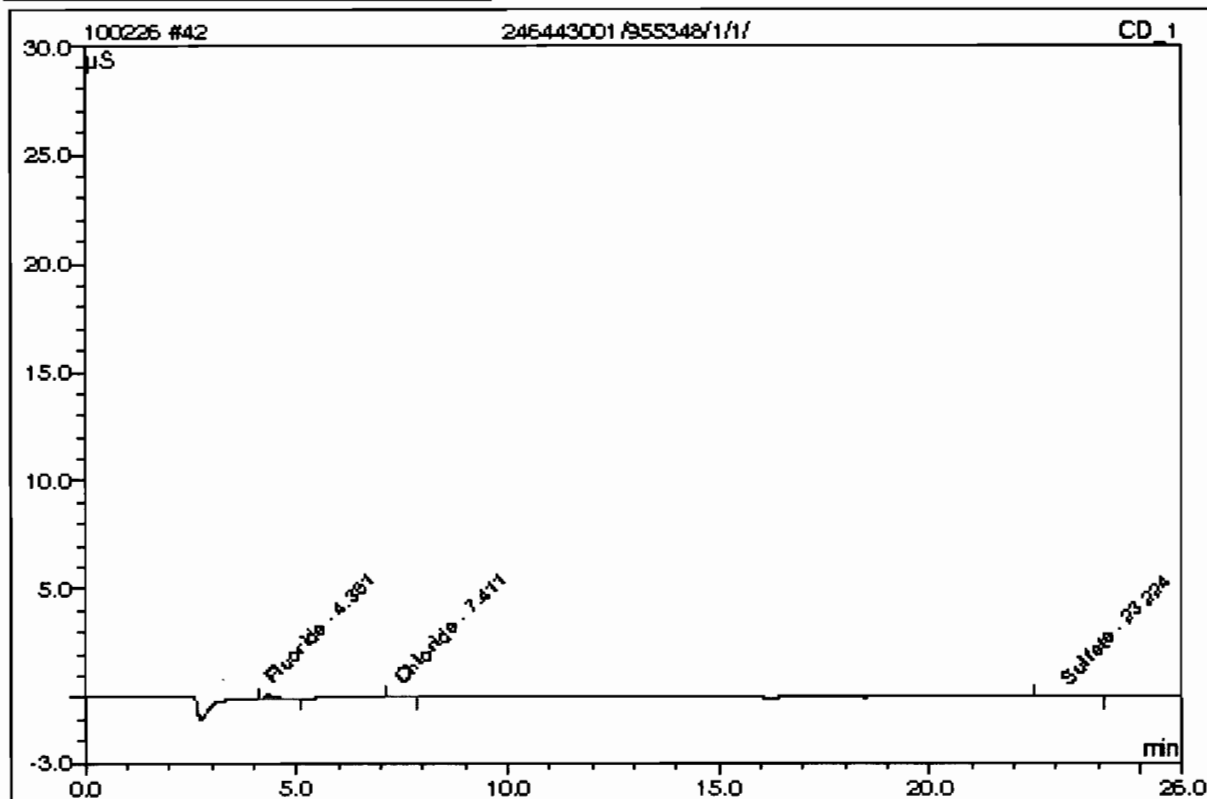
Sample Name:	1202048240/955348/1/1/LCS	Injection Volume:	1.0
Vial Number:	35	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 5:35	Analyst:	MAR1
Run Time (min):	26.00	Column:	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	4.35	Fluoride	n.a.	4.9626		2.82345	12.15
2	7.42	Chloride	n.a.	9.8662		4.15841	17.89
3	9.53	Nitrite-N	n.a.	4.9505		4.09799	17.63
4	11.00	Chlorate	n.a.	2.6031		0.37556	1.62
5	11.97	Bromide	n.a.	2.4947		0.38365	1.65
6	14.03	Nitrate-N	n.a.	4.9137		4.87954	21.00
7	20.58	O-Phosphate-P	n.a.	2.6074		0.70163	3.02
8	23.22	Sulfate	n.a.	19.9498		5.81824	25.04
Total:				52.3480	0.000	23.238	100.00

42 246443001/955348/1/1/

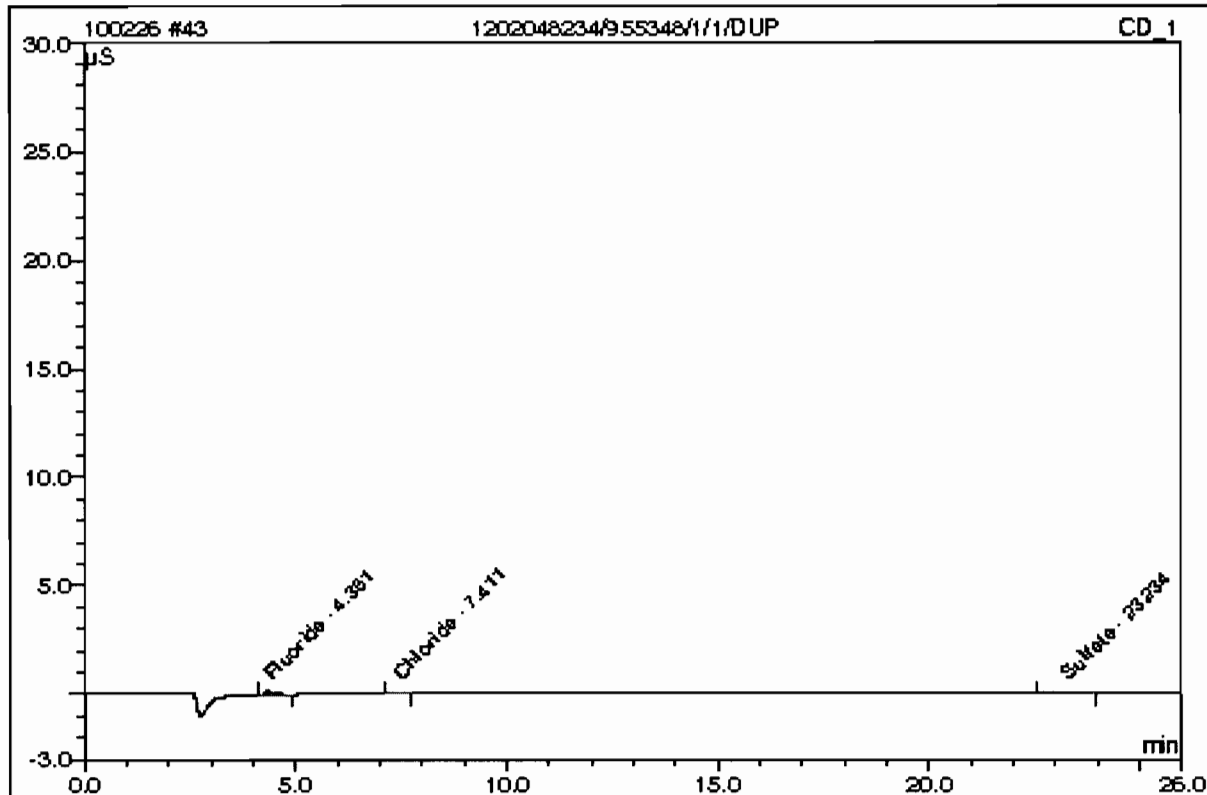
Sample Name:	246443001/955348/1/1/	Injection Volume:	1.0
Vial Number:	36	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 6:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	0.1215		0.03476	31.55
2	7.41	Chloride	n.a.	0.2355		0.02279	20.69
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	23.22	Sulfate	n.a.	0.4618		0.05263	47.76
Total:				0.8188	0.000	0.110	100.00

43 1202048234/955348/1/1/DUP

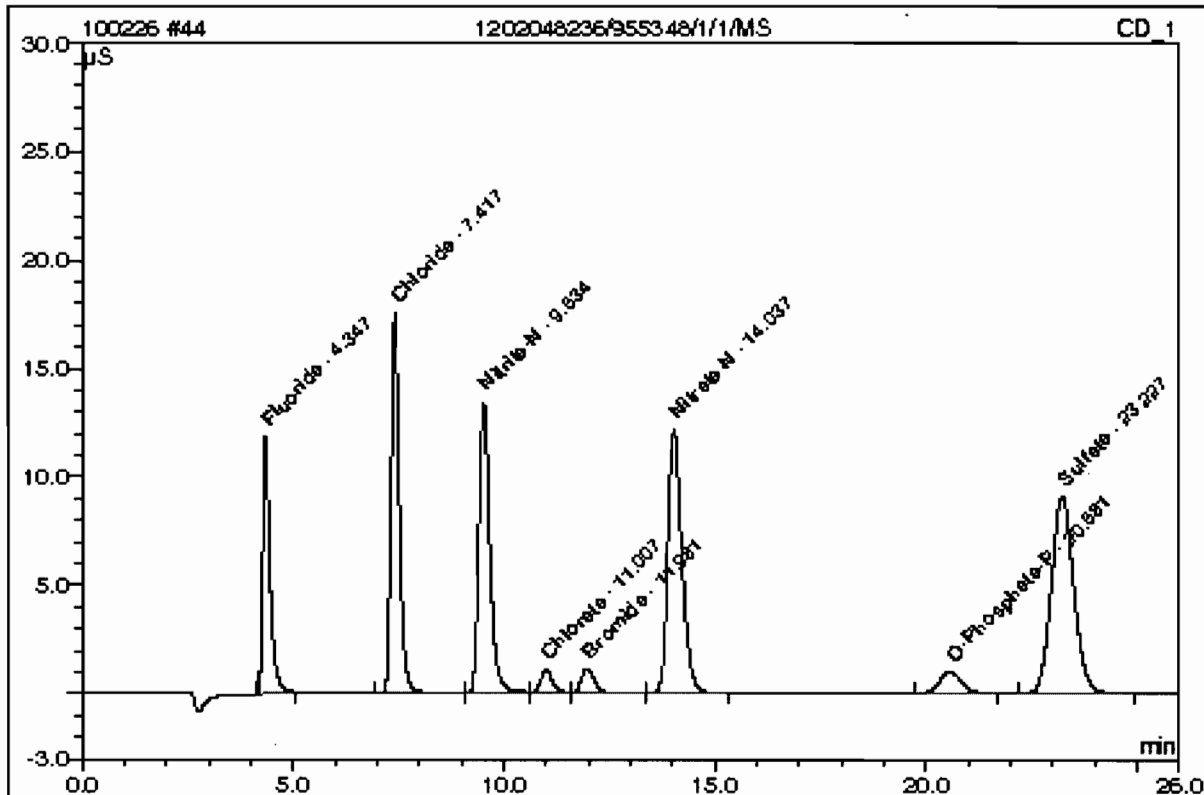
Sample Name:	1202048234/955348/1/1/DUP	Injection Volume:	1.0
Vial Number:	37	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 6:33	Analyst:	MAR1
Run Time (min):	26.00	Column:	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	4.35	Fluoride	n.a.	0.1209		0.03438	33.28
2	7.41	Chloride	n.a.	0.2332		0.02179	21.09
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	23.23	Sulfate	n.a.	0.4433		0.04714	45.63
Total:				0.7973	0.000	0.103	100.00

44 1202048236/955348/1/1/MS

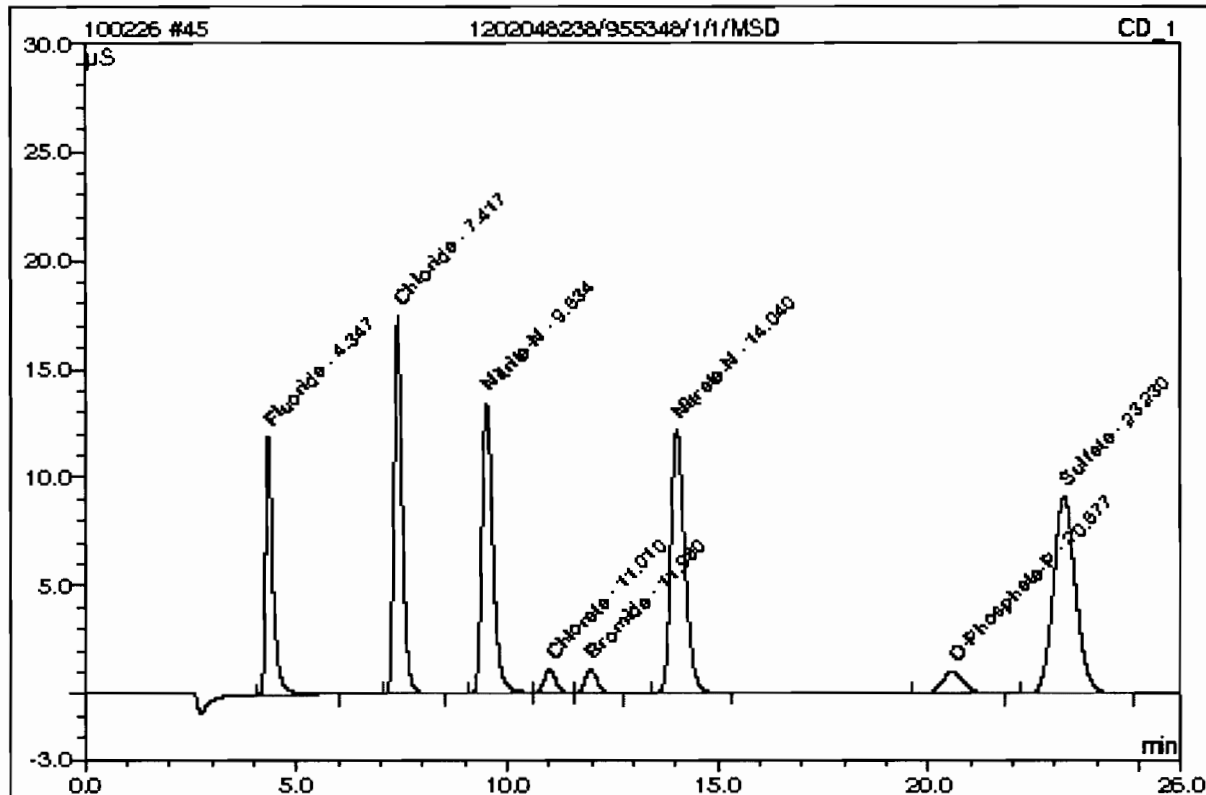
Sample Name:	1202048236/955348/1/1/MS	Injection Volume:	1.0
Vial Number:	38	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 7:02	Analyst:	MAR1
Run Time (min):	26.00	Column:	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	4.35	Fluoride	n.a.	4.1829		2.37431	10.69
2	7.42	Chloride	n.a.	9.5879		4.03893	18.19
3	9.53	Nitrite-N	n.a.	4.8813		4.03999	18.19
4	11.01	Chlorate	n.a.	2.5335		0.36533	1.64
5	11.98	Bromide	n.a.	2.6494		0.40751	1.83
6	14.04	Nitrate-N	n.a.	4.7478		4.71177	21.21
7	20.58	O-Phosphate-P	n.a.	2.2850		0.60972	2.75
8	23.23	Sulfate	n.a.	19.4237		5.66260	25.50
Total:				50.2916	0.000	22.210	100.00

45 1202048238/955348/1/1/MSD

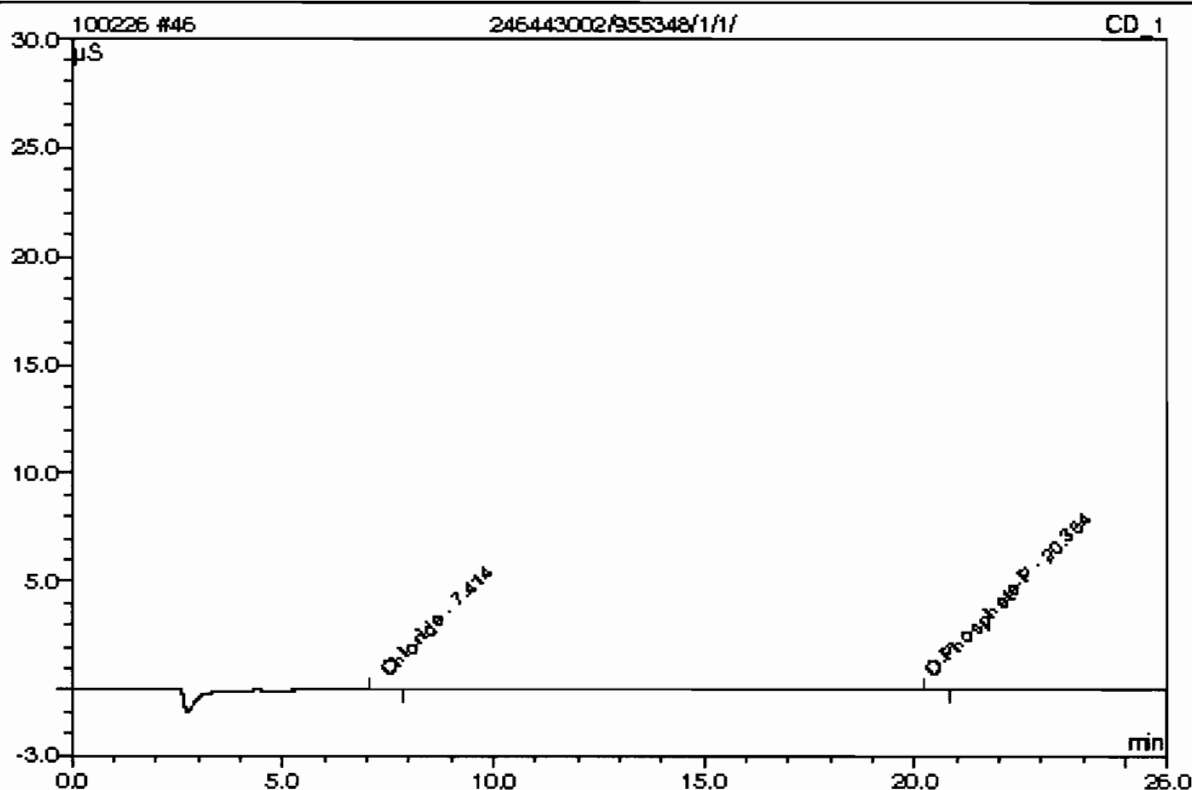
Sample Name:	1202048238/955348/1/1/MSD	Injection Volume:	1.0
Vial Number:	39	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 7:31	Analyst:	MAR1
Run Time (min):	26.00	Column:	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	4.35	Fluoride	n.a.	4.2938		2.43819	11.00
2	7.42	Chloride	n.a.	9.4503		3.97983	17.96
3	9.53	Nitrate-N	n.a.	4.8645		4.02589	18.16
4	11.01	Chlorate	n.a.	2.5774		0.37178	1.68
5	11.98	Bromide	n.a.	2.4928		0.38336	1.73
6	14.04	Nitrate-N	n.a.	4.7398		4.70370	21.22
7	20.58	O-Phosphate-P	n.a.	2.3088		0.61652	2.78
8	23.23	Sulfate	n.a.	19.3631		5.64466	25.47
Total:				50.0906	0.000	22.164	100.00

46 246443002/955348/1/1/

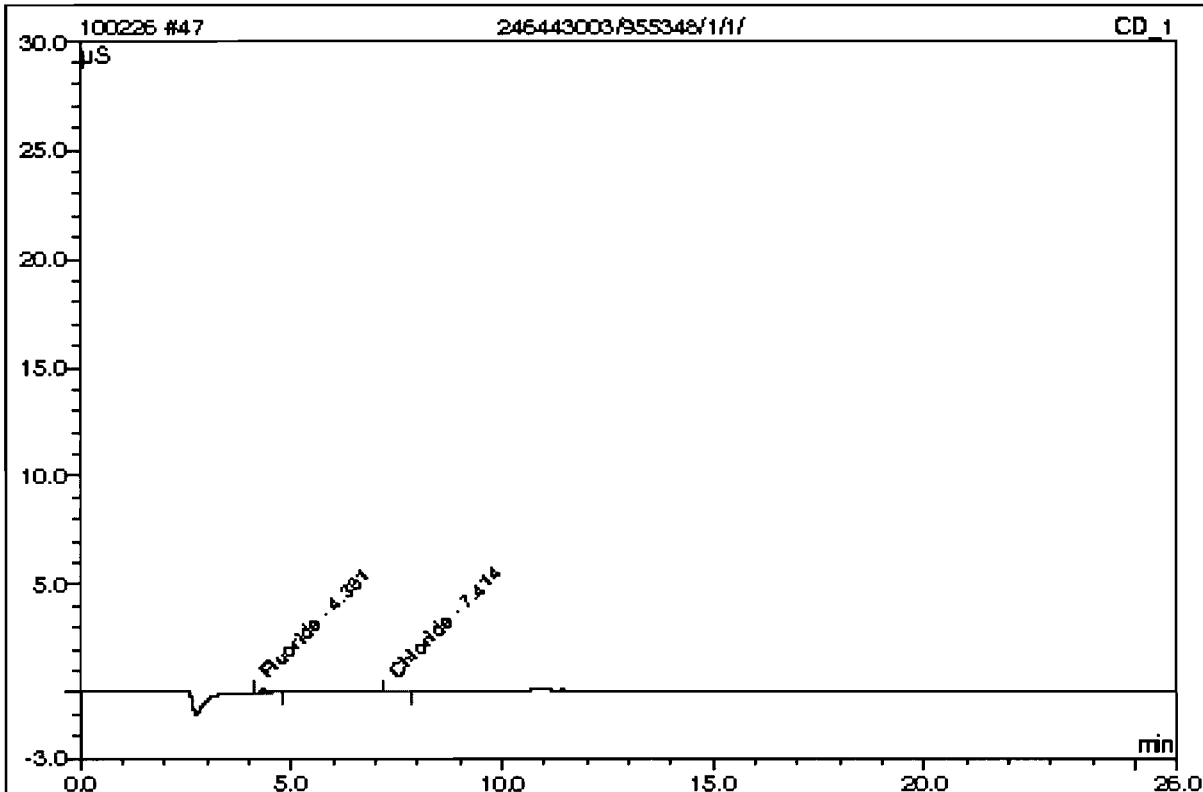
Sample Name:	246443002/955348/1/1/	Injection Volume:	1.0
Vial Number:	40	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 8:00	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.41	Chloride	n.a.	0.2260		0.01871	50.78
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.
2	20.35	O-Phosphate-P	n.a.	0.2097		0.01813	49.22
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.4357	0.000	0.037	100.00

47 246443003/955348/1/1/

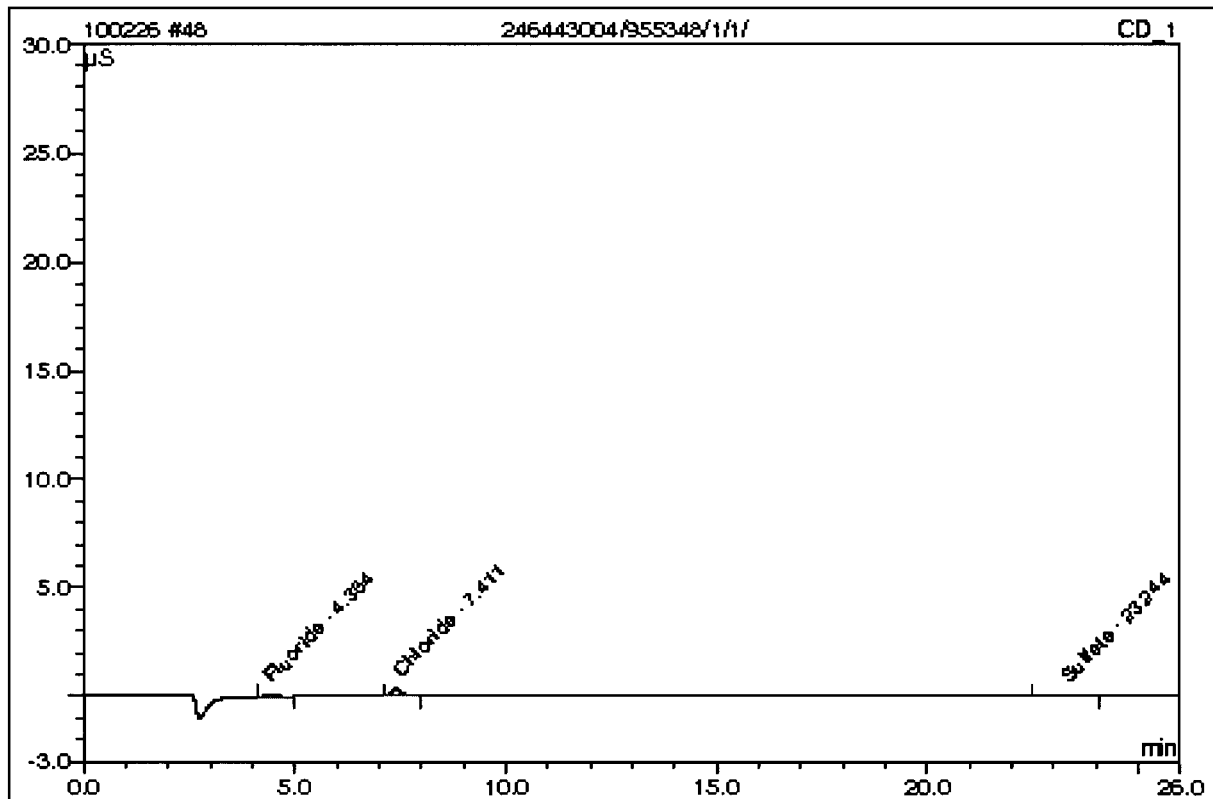
Sample Name:	246443003/955348/1/1/	Injection Volume:	1.0
Vial Number:	41	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 8:29	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	n.a.	0.1097		0.02797	59.01
2	7.41	Chloride	n.a.	0.2277		0.01943	40.99
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:				0.3374	0.000	0.047	100.00

48 246443004/955348/1/1/

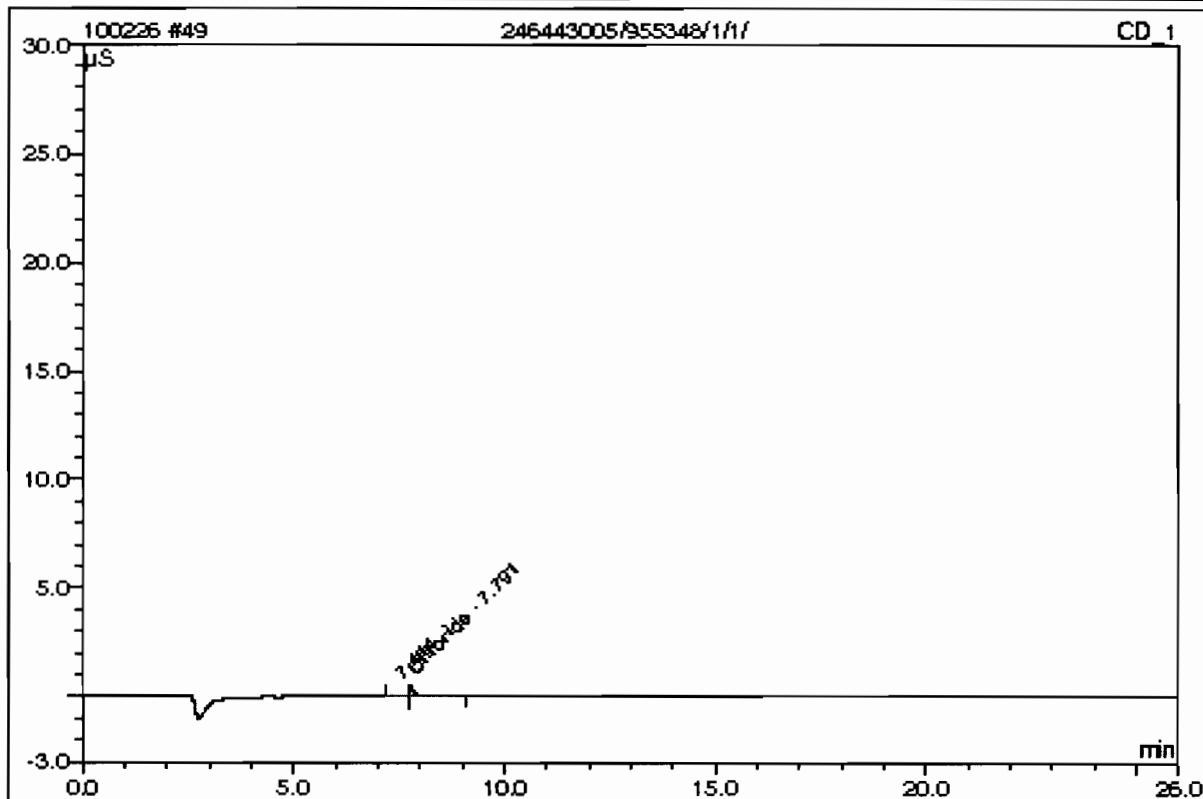
Sample Name:	246443004/955348/1/1/	Injection Volume:	1.0
Vial Number:	42	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 8:58	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	n.a.	0.1092		0.02768	16.52
2	7.41	Chloride	n.a.	0.3867		0.08770	52.36
n.a.	n.a.	Nitrile-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	23.24	Sulfate	n.a.	0.4601		0.05213	31.12
Total:				0.9560	0.000	0.168	100.00

49 246443005/955348/1/1/

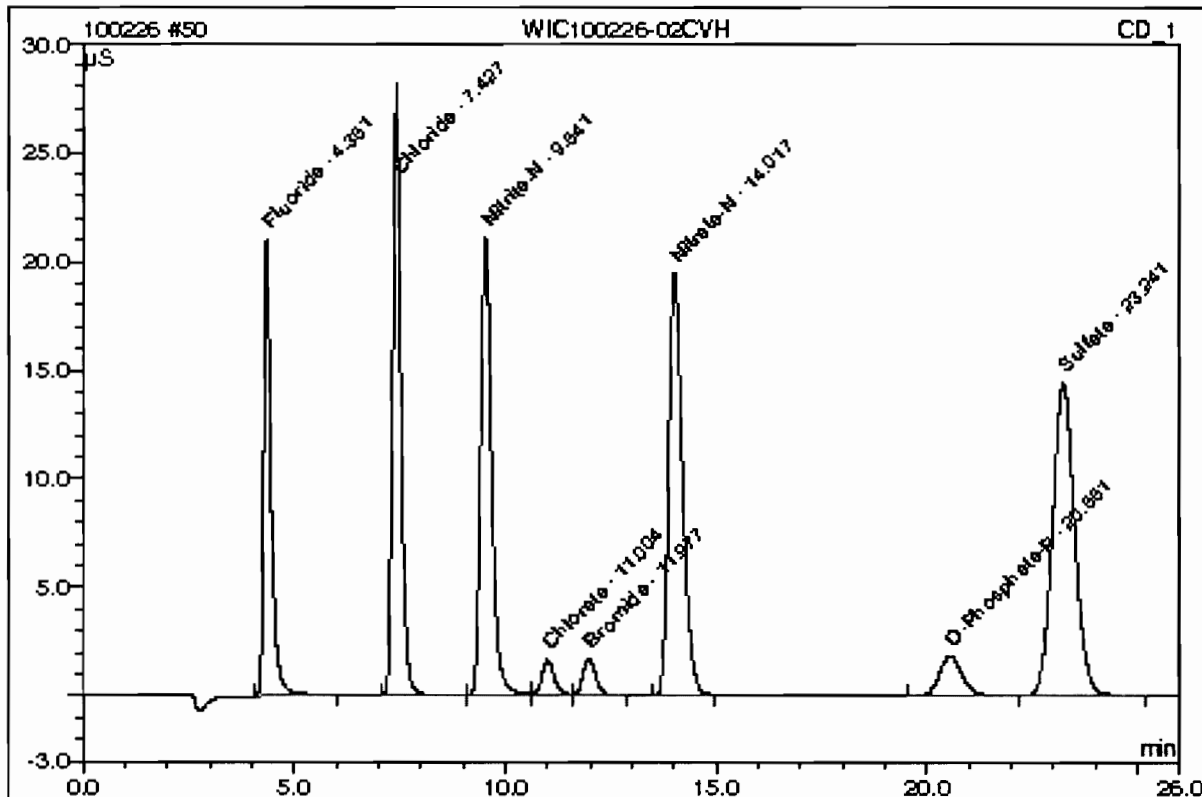
Sample Name:	246443005/955348/1/1/	Injection Volume:	1.0
Vial Number:	43	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 9:27	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
2	7.79	Chloride	n.a.	0.3606		0.07649	79.56
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:				0.3606	0.000	0.076	79.56

50 WIC100226-02CVH

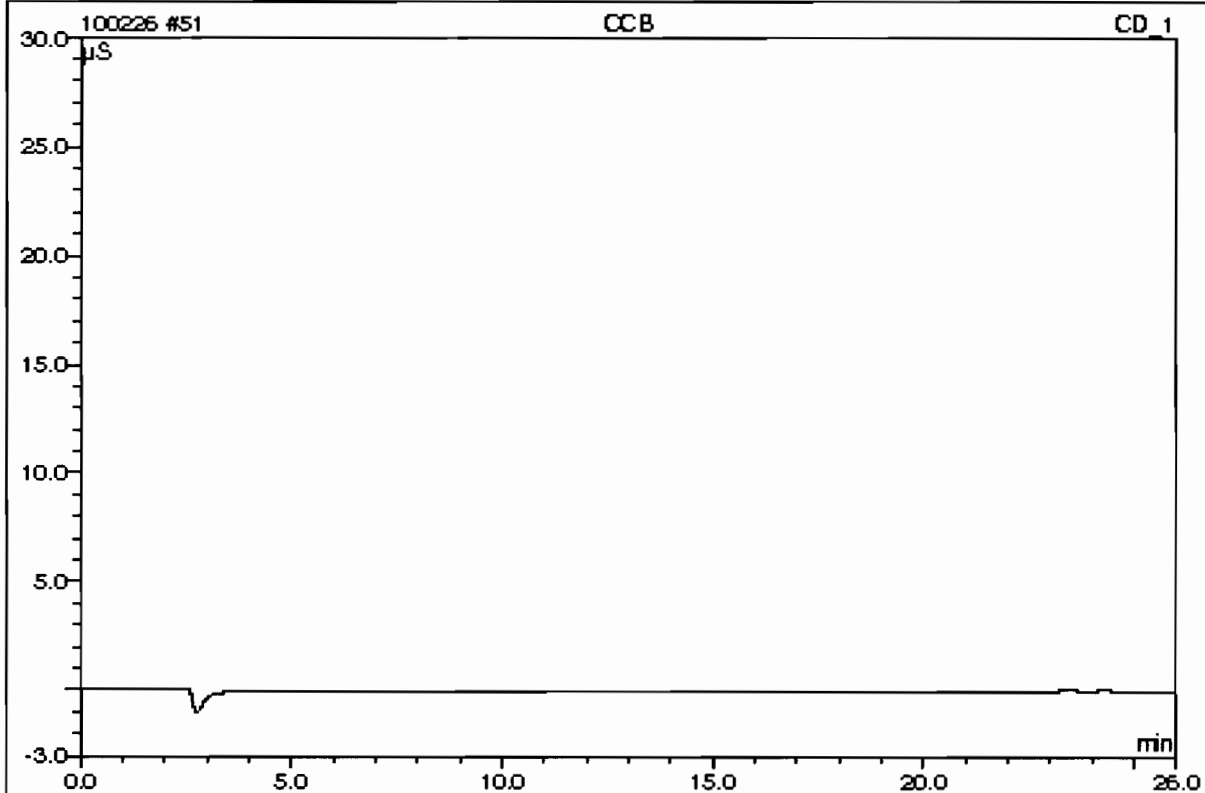
Sample Name:	WIC100226-02CVH	Injection Volume:	1.0
Vial Number:	44	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 9:55	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	7.5671		4.32372	12.15
2	7.43	Chloride	n.a.	15.0269		6.37456	17.91
3	9.54	Nitrite-N	n.a.	7.5807		6.30372	17.71
4	11.00	Chlorate	n.a.	3.8865		0.56400	1.58
5	11.98	Bromide	n.a.	3.8065		0.58595	1.65
6	14.02	Nitrate-N	n.a.	7.4798		7.47550	21.00
7	20.55	O-Phosphate-P	n.a.	4.1520		1.14194	3.21
8	23.24	Sulfate	n.a.	30.1230		8.82805	24.80
Total:				79.6226	0.000	35.597	100.00

51 CCB

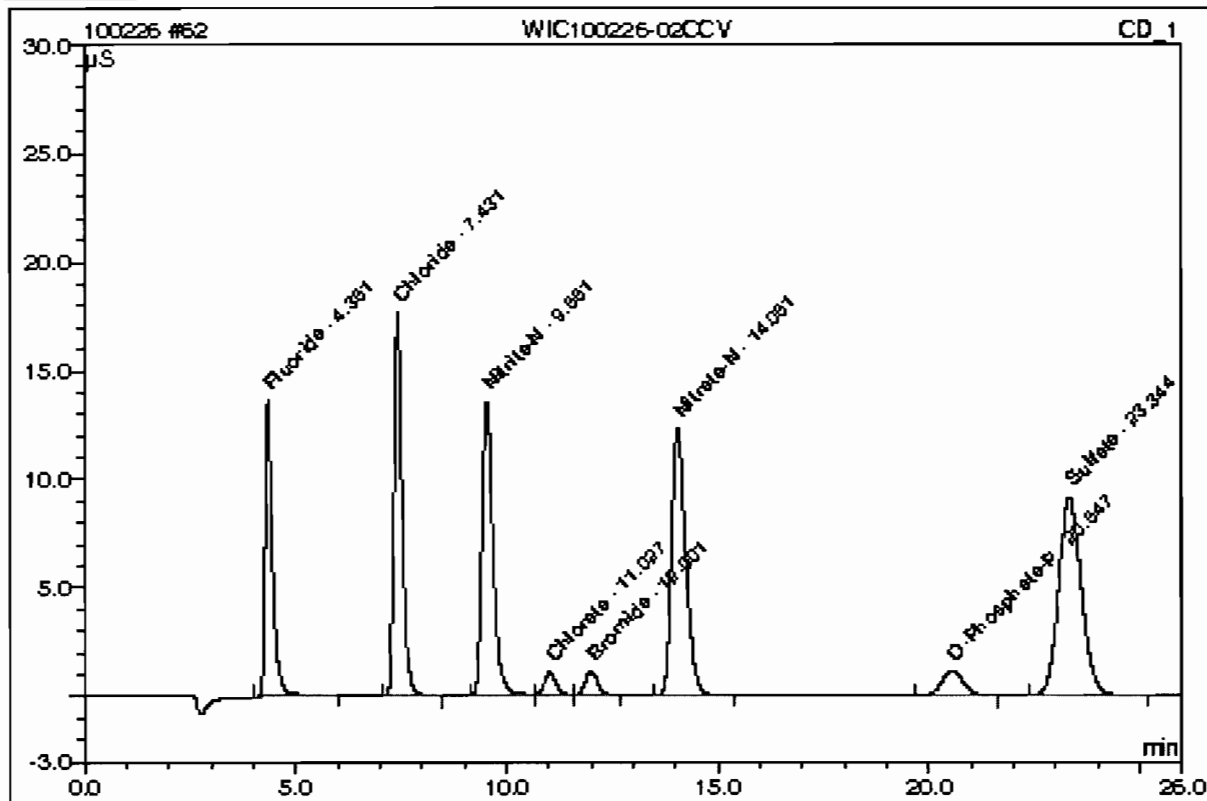
Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	45	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 10:24	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

62 WIC100226-02CCV

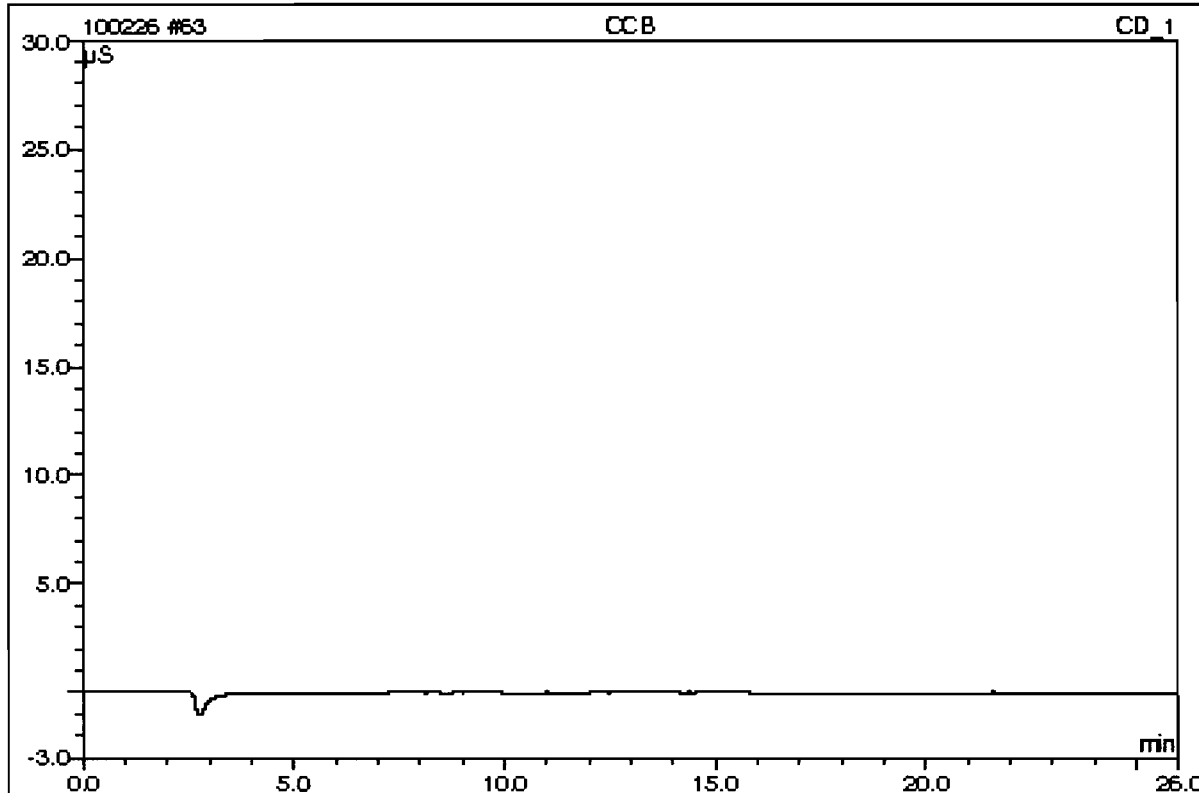
Sample Name:	WIC100226-02CCV	Injection Volume:	1.0
Vial Number:	6	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 15:42	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	4.9156		2.79635	12.27
2	7.43	Chloride	n.a.	9.5626		4.02807	17.67
3	9.55	Nitrite-N	n.a.	4.9078		4.06218	17.82
4	11.03	Chlorate	n.a.	2.4888		0.35877	1.57
5	12.00	Bromide	n.a.	2.4529		0.37720	1.66
6	14.06	Nitrate-N	n.a.	4.8239		4.78872	21.01
7	20.55	O-Phosphate-P	n.a.	2.5423		0.68306	3.00
8	23.34	Sulfate	n.a.	19.5398		5.69694	25.00
Total:				51.2336	0.000	22.791	100.00

63 CCB

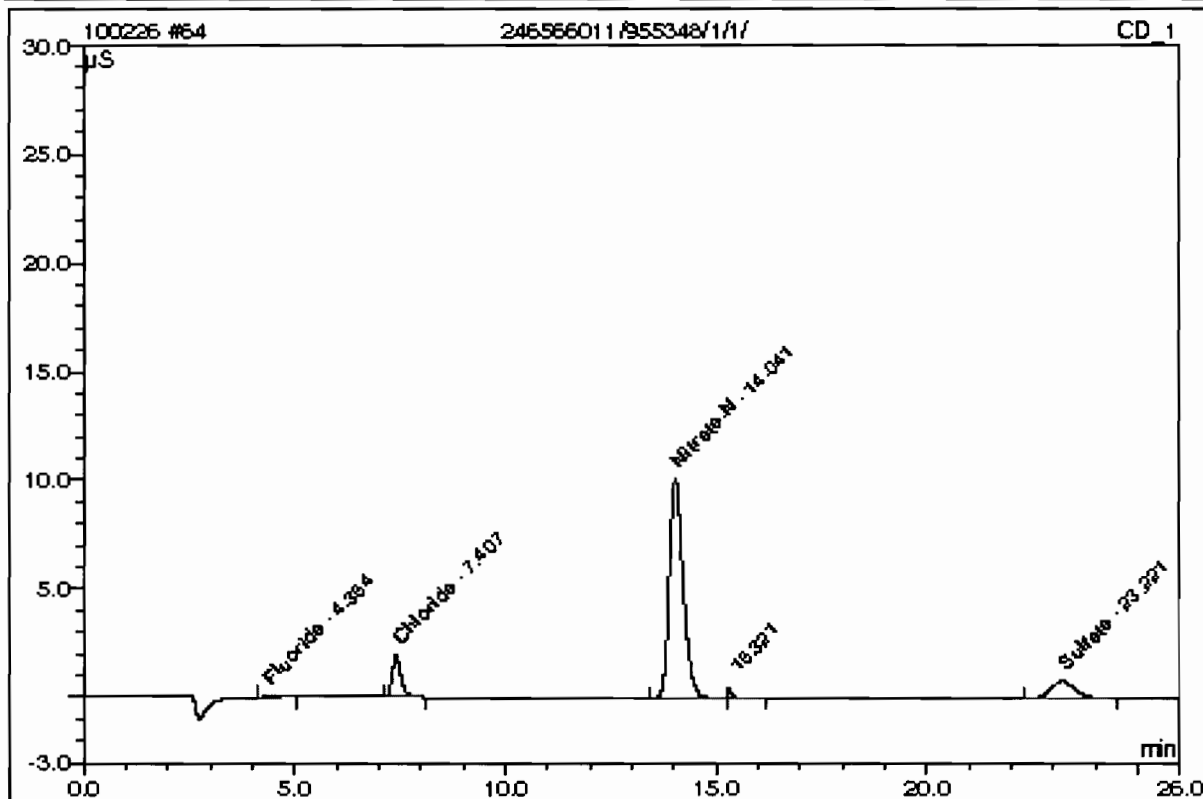
Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 16:11	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
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

64 246566011/955348/1/1/

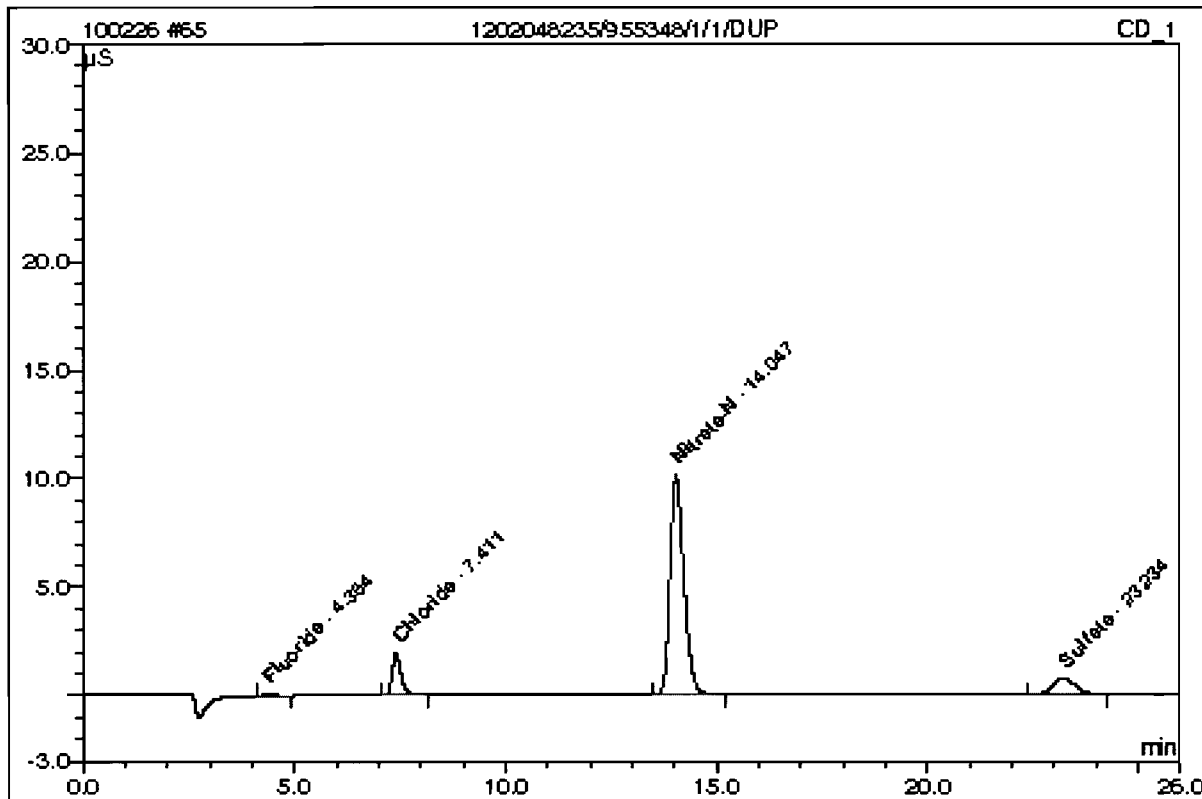
Sample Name:	246566011/955348/1/1/	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 16:40	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086,300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.35	Fluoride	n.a.	0.0925		0.01804	0.37
2	7.41	Chloride	n.a.	1.2429		0.45539	9.26
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	14.04	Nitrate-N	n.a.	3.9431		3.89772	79.27
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
5	23.22	Sulfate	n.a.	1.9832		0.50275	10.22
Total:				7.2617	0.000	4.874	99.12

65 1202048235/955348/1/1/DUP

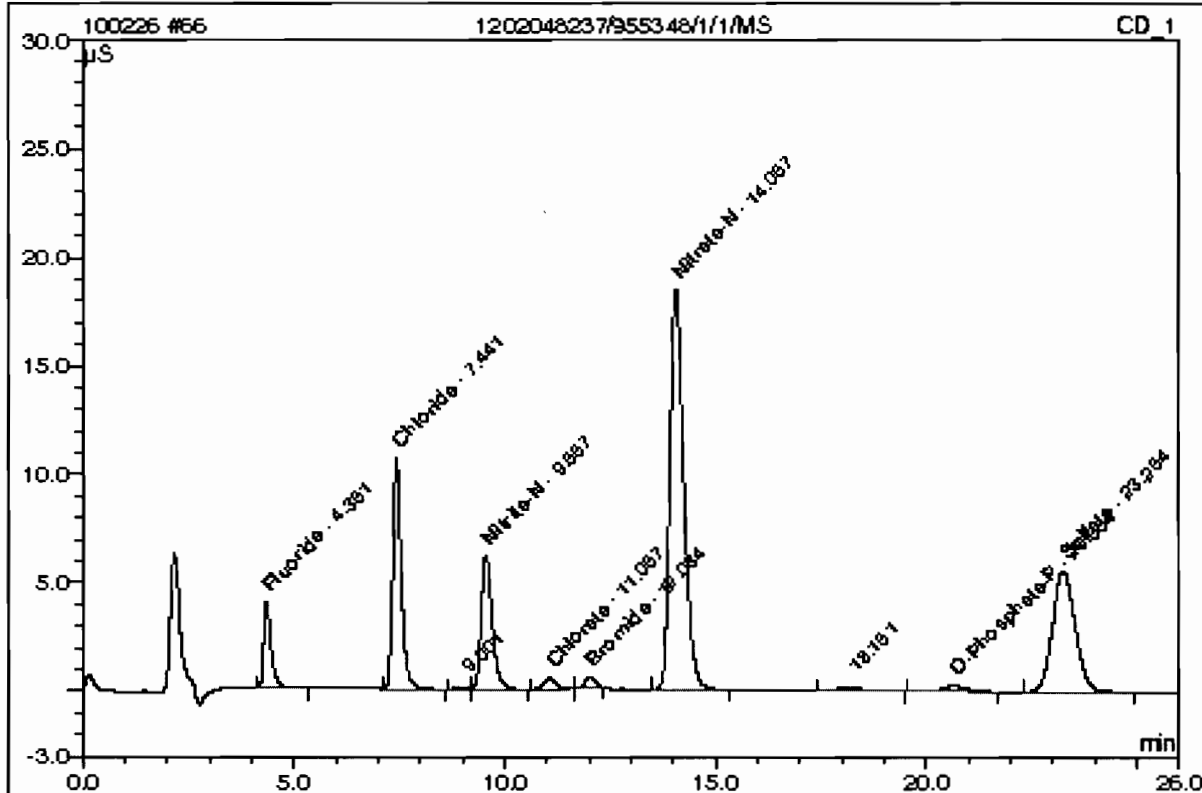
Sample Name:	1202048235/955348/1/1/DUP	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 17:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001526; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	0.0936		0.01865	0.38
2	7.41	Chloride	n.a.	1.2613		0.46329	9.52
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	14.05	Nitrate-N	n.a.	3.9411		3.89572	80.04
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	23.23	Sulfate	n.a.	1.9392		0.48972	10.06
Total:				7.2352	0.000	4.867	100.00

66 1202048237/955348/1/1/MS

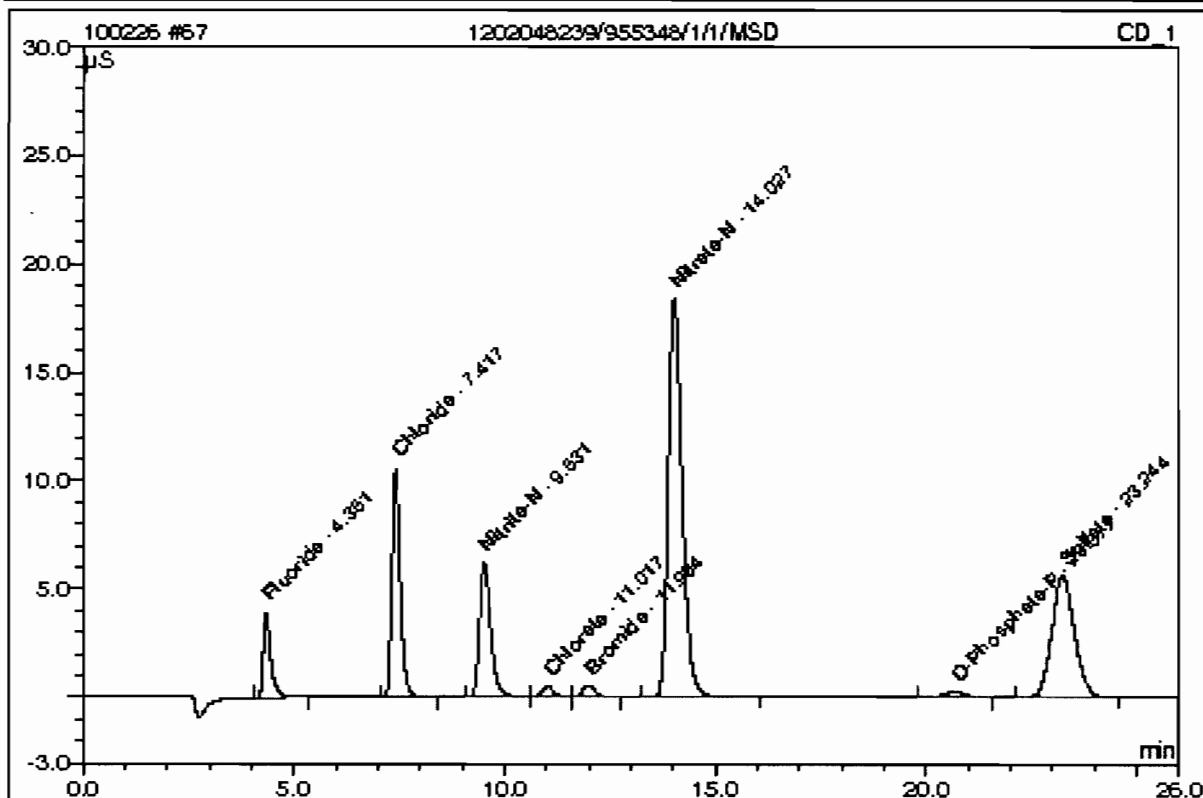
Sample Name:	1202048237/955348/1/1/MS	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 18:36	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel.Area %
1	4.35	Fluoride	n.a.	1.5053		0.83190	5.05
2	7.44	Chloride	n.a.	6.0676		2.52723	15.35
4	9.57	Nitrite-N	n.a.	2.2802		1.85864	11.29
5	11.07	Chlorate	n.a.	1.3413		0.19028	1.16
6	12.03	Bromide	n.a.	0.9177		0.14045	0.85
7	14.07	Nitrate-N	n.a.	7.0726		7.06358	42.89
9	20.66	O-Phosphate-P	n.a.	0.7850		0.18212	1.11
10	23.25	Sulfate	n.a.	12.1791		3.51926	21.37
Total:				32.1488	0.000	16.313	99.05

67 1202048239/955348/1/1/MSD

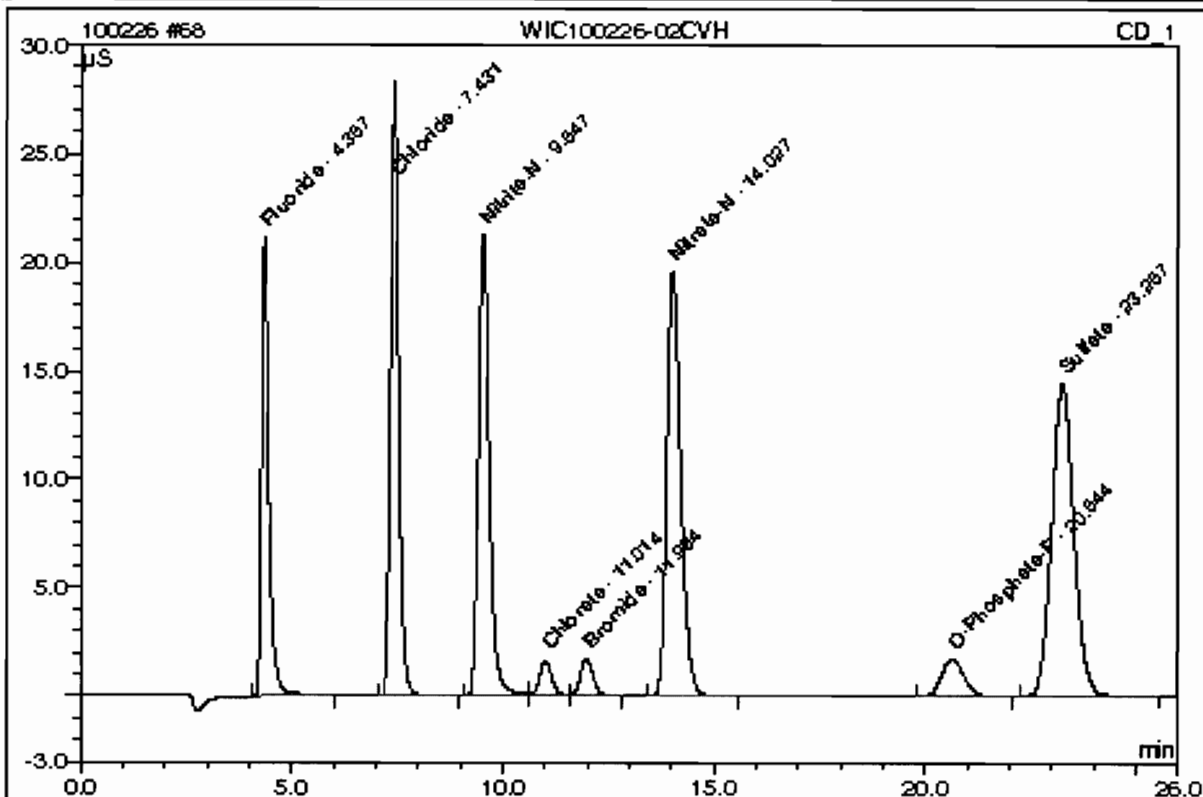
Sample Name:	1202048239/955348/1/1/MSD	Injection Volume:	1.0
Vial Number:	11	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 19:05	Analyst:	MAR1
Run Time (min):	26.00	Column:	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	4.35	Fluoride	n.a.	1.4967		0.82693	5.06
2	7.42	Chloride	n.a.	5.8626		2.43919	14.93
3	9.53	Nitrite-N	n.a.	2.3171		1.88957	11.57
4	11.02	Chlorate	n.a.	1.2461		0.17631	1.08
5	11.98	Bromide	n.a.	1.2395		0.19009	1.16
6	14.03	Nitrate-N	n.a.	7.1235		7.11507	43.55
7	20.68	O-Phosphate-P	n.a.	0.7061		0.15965	0.98
8	23.24	Sulfate	n.a.	12.2481		3.53966	21.67
Total:				32.2398	0.000	16.336	100.00

68 WIC100226-02CVH

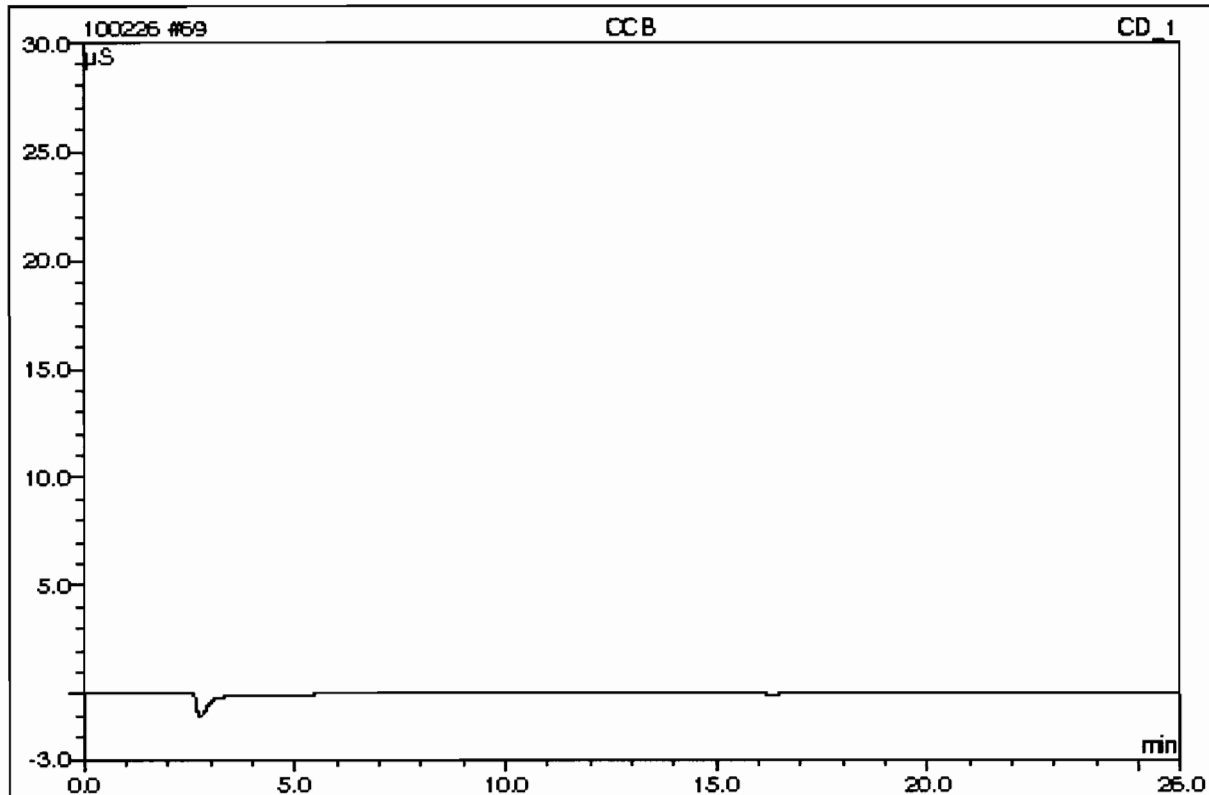
Sample Name:	WIC100226-02CVH	Injection Volume:	1.0
Vial Number:	12	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 19:34	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.36	Fluoride	n.a.	7.5346		4.30800	12.10
2	7.43	Chloride	n.a.	15.0170		6.37032	17.91
3	9.55	Nitrite-N	n.a.	7.5764		6.30008	17.71
4	11.01	Chlorate	n.a.	3.7739		0.54746	1.54
5	11.98	Bromide	n.a.	3.7730		0.58078	1.63
6	14.03	Nitrate-N	n.a.	7.5249		7.52110	21.15
7	20.64	O-Phosphate-P	n.a.	3.8619		1.05923	2.98
8	23.26	Sulfate	n.a.	30.3030		8.88129	24.97
Total:				79.3646	0.000	35.565	100.00

69 CCB

Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	13	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/27/2010 20:03	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



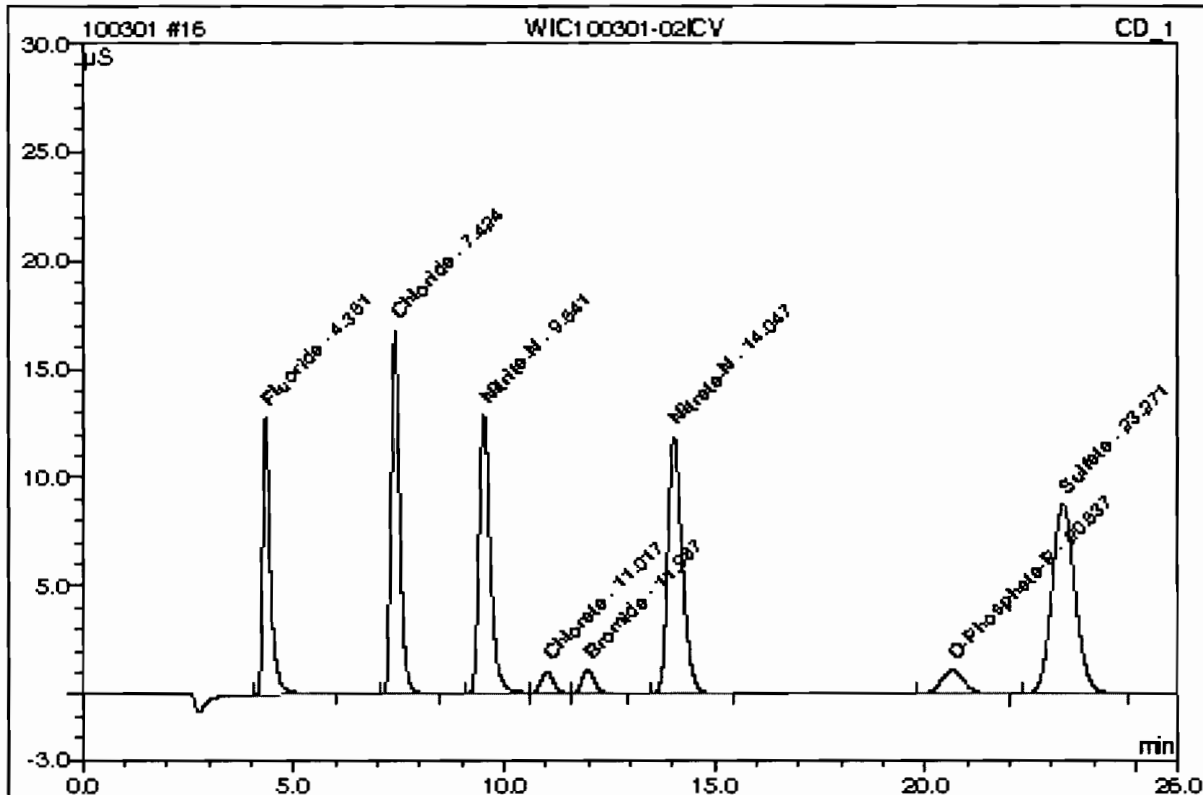
No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 100301.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/01/10 14:23		1	100301	MAR1
BLK	03/01/10 15:01		1	100301	MAR1
ICV	03/01/10 15:29		1	100301	MAR1
ICB	03/01/10 15:58		1	100301	MAR1
1202048453	03/01/10 16:27	955455	1	100301	MAR1
246719004	03/01/10 16:56	955455	1	100301	MAR1
246719005	03/01/10 17:25	955455	1	100301	MAR1
246719008	03/01/10 17:54	955455	1	100301	MAR1
246734001	03/01/10 18:23	955455	1	100301	MAR1
246736001	03/01/10 18:52	955455	1	100301	MAR1
1202048455	03/01/10 19:20	955455	1	100301	MAR1
1202048457	03/01/10 19:49	955455	1	100301	MAR1
1202048459	03/01/10 20:18	955455	1	100301	MAR1
246736002	03/01/10 20:47	955455	1	100301	MAR1
CVH	03/01/10 21:16		1	100301	MAR1
CCB	03/01/10 21:45		1	100301	MAR1
1202048233	03/01/10 22:14	955348	1	100301	MAR1
1202048240	03/01/10 22:43	955348	1	100301	MAR1
1202048236	03/01/10 23:12	955348	1	100301	MAR1
1202048238	03/01/10 23:41	955348	1	100301	MAR1

16 WIC100301-02ICV

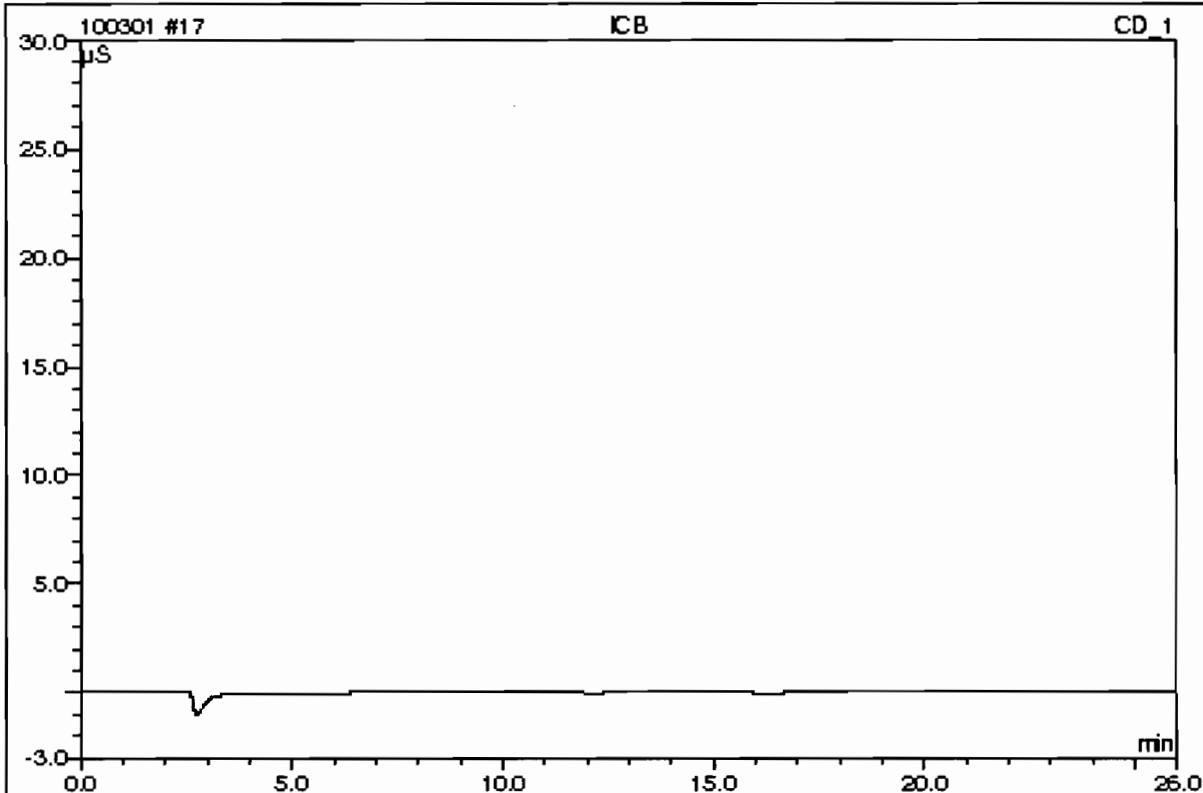
Sample Name:	WIC100301-02ICV	Injection Volume:	1.0
Vial Number:	3	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 15:29	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCED86;300;9058



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	4.8222		2.74257	12.22
2	7.42	Chloride	n.a.	9.4085		3.96187	17.66
3	9.54	Nitrite-N	n.a.	4.8188		3.98751	17.77
4	11.02	Chlorate	n.a.	2.4945		0.35961	1.60
5	11.99	Bromide	n.a.	2.5049		0.38522	1.72
6	14.05	Nitrate-N	n.a.	4.7756		4.73990	21.12
7	20.64	O-Phosphate-P	n.a.	2.5285		0.67915	3.03
8	23.27	Sulfate	n.a.	19.1533		5.58261	24.88
Total:				50.5063	0.000	22.438	100.00

17 ICB

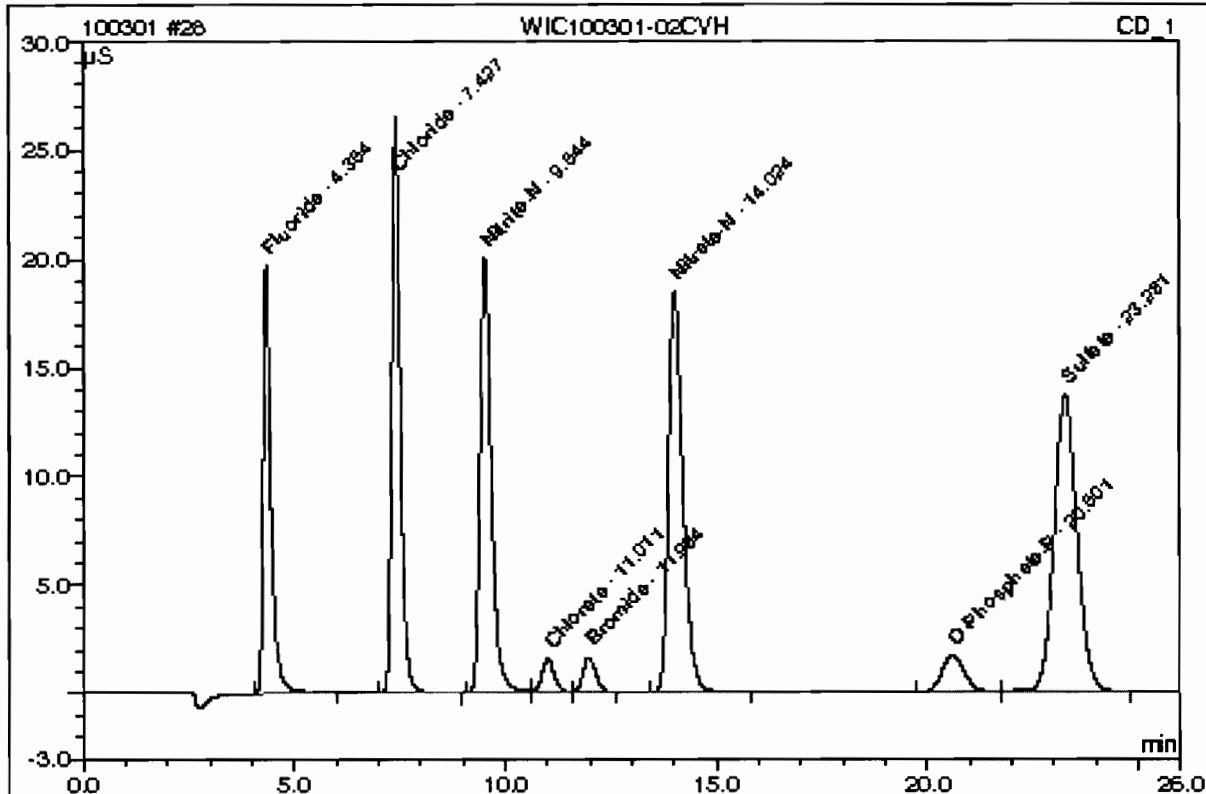
Sample Name:	ICB	Injection Volume:	1.0
Vial Number:	4	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 15:58	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
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

28 WIC100301-02CVH

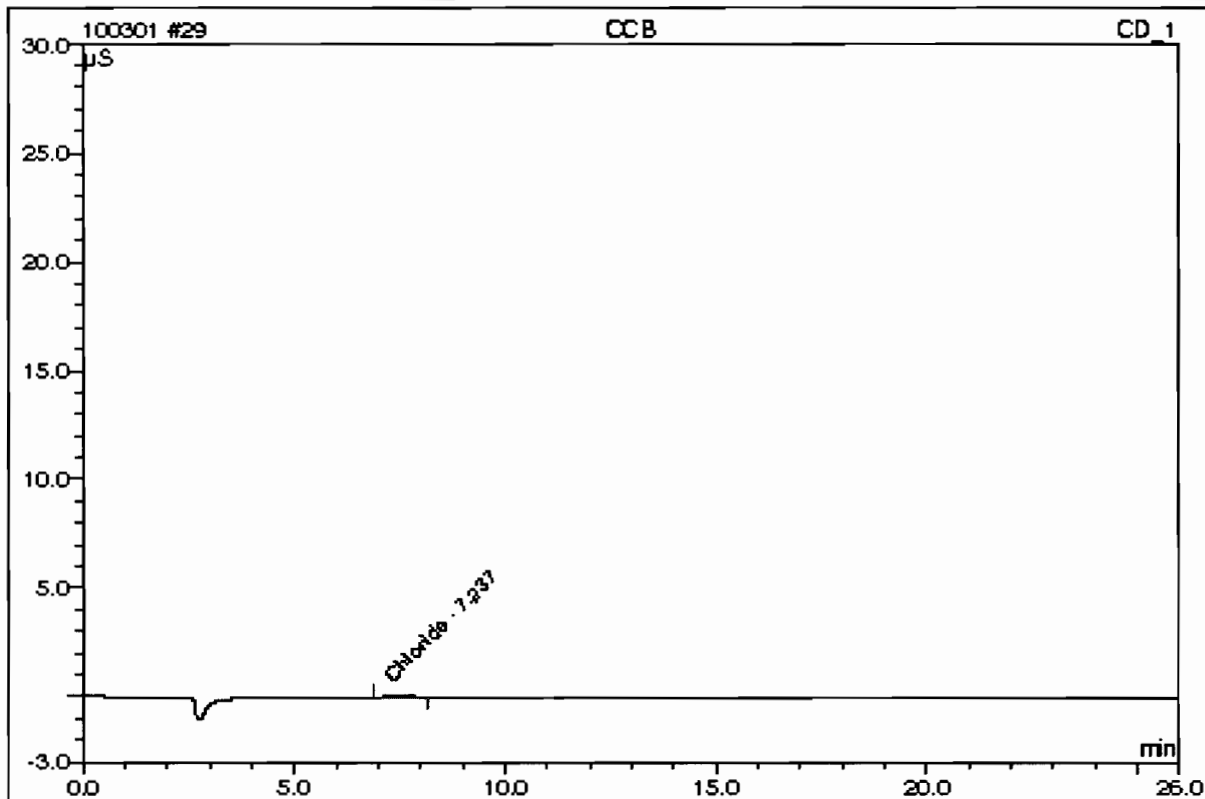
Sample Name:	WIC100301-02CVH	Injection Volume:	1.0
Vial Number:	15	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 21:16	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	7.3564		4.20237	12.08
2	7.43	Chloride	n.a.	14.6439		6.21008	17.86
3	9.54	Nitrite-N	n.a.	7.4052		6.15655	17.70
4	11.01	Chlorate	n.a.	3.6418		0.52806	1.52
5	11.98	Bromide	n.a.	3.6321		0.55906	1.61
6	14.02	Nitrate-N	n.a.	7.3633		7.35766	21.16
7	20.60	O-Phosphate-P	n.a.	3.8493		1.05565	3.04
8	23.28	Sulfate	n.a.	29.7183		8.70831	25.04
Total:				77.6104	0.000	34.778	100.00

29 CCB

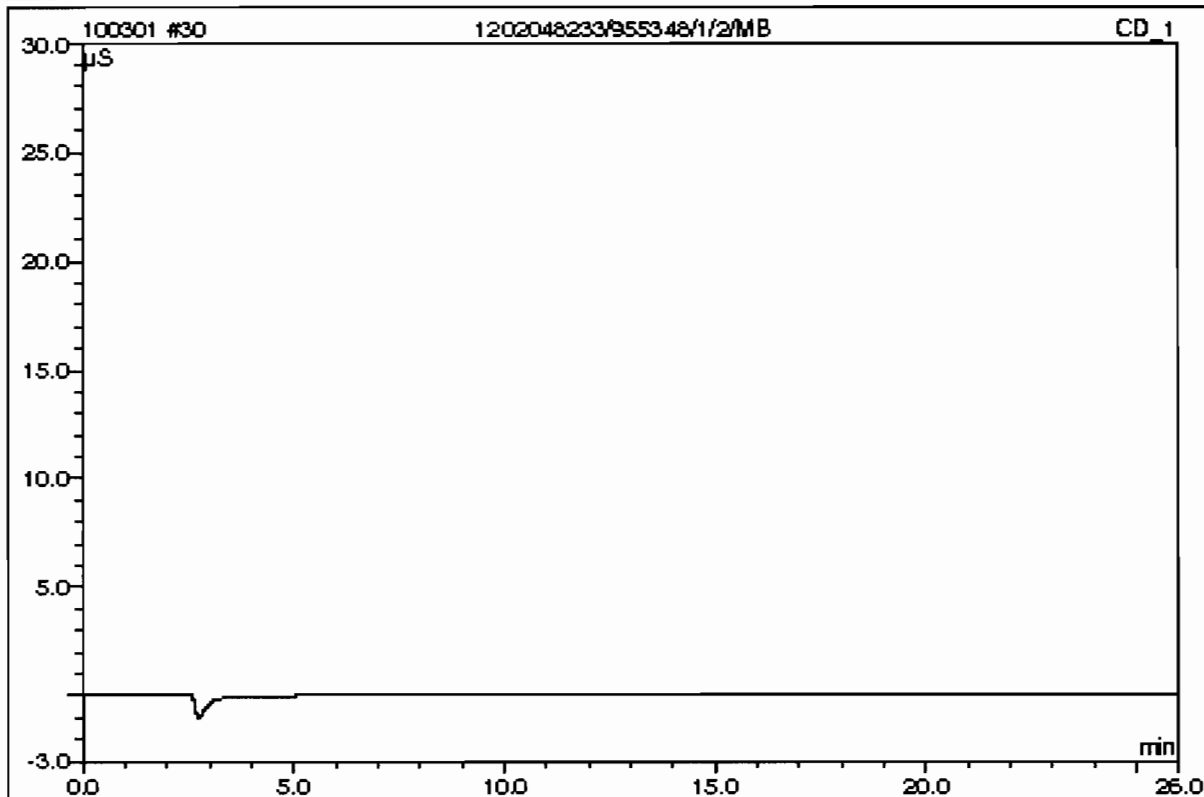
Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	16	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 21:45	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.24	Chloride	n.a.	0.2678		0.03664	100.00
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:				0.2678	0.000	0.037	100.00

30 1202048233/955348/1/2/MB

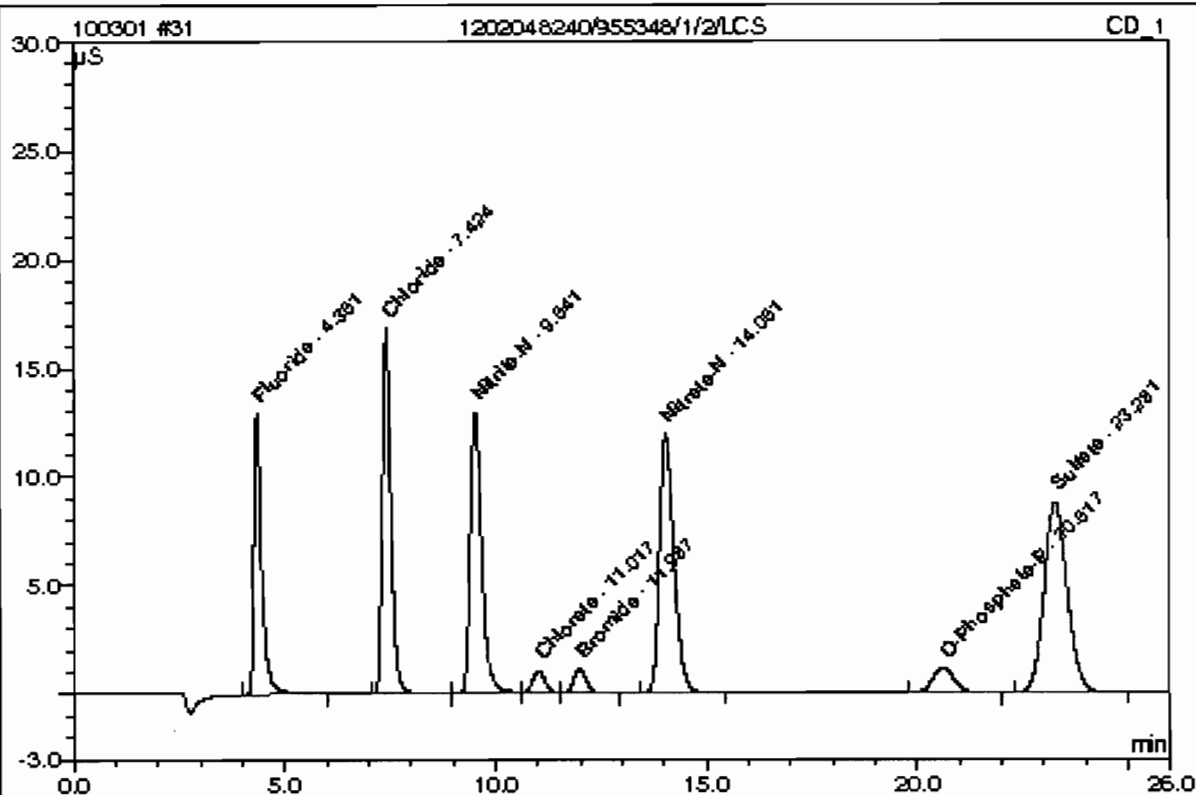
Sample Name:	1202048233/955348/1/2/MB	Injection Volume:	1.0
Vial Number:	17	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 22:14	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9058



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

31 1202048240/955348/1/2/LCS

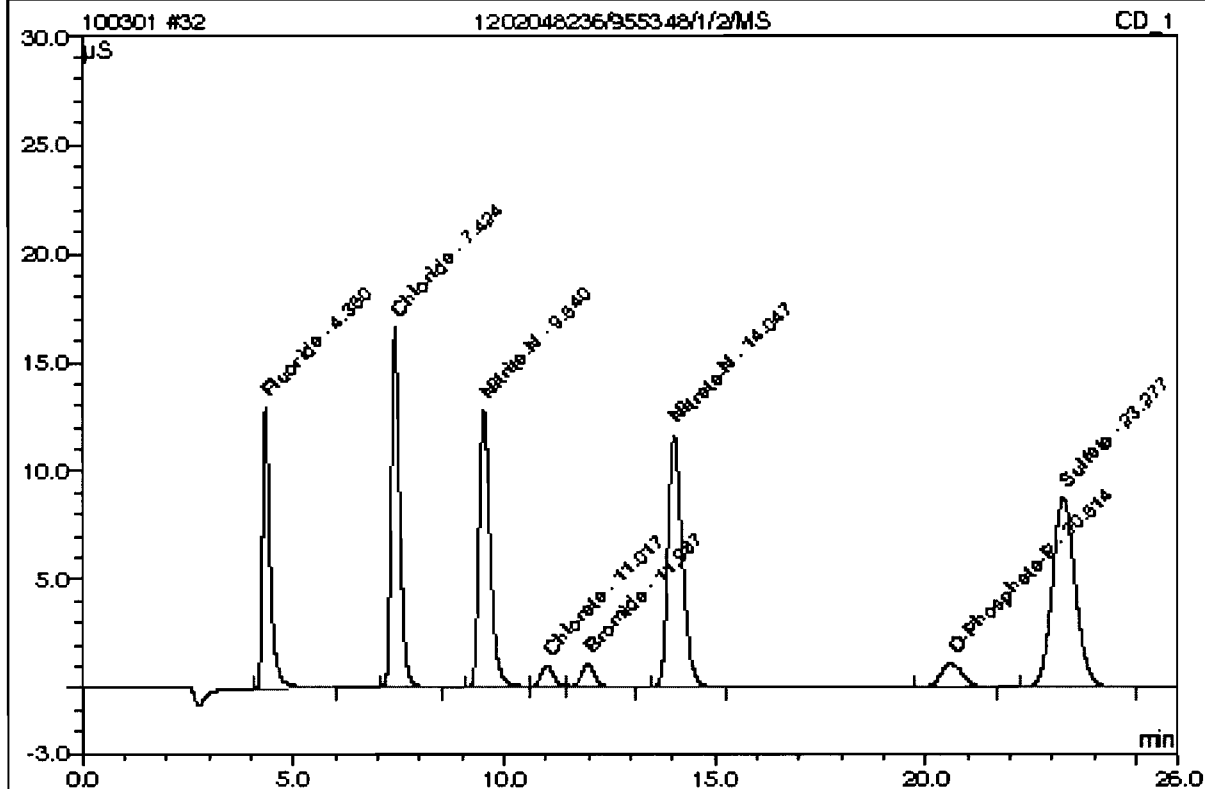
Sample Name:	1202048240/955348/1/2/LCS	Injection Volume:	1.0
Vial Number:	18	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 22:43	Analyst:	MAR1
Run Time (min):	26.00	Column:	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	4.35	Fluoride	n.a.	4.8914		2.78240	12.30
2	7.42	Chloride	n.a.	9.4720		3.98915	17.64
3	9.54	Nitrite-N	n.a.	4.8552		4.01807	17.76
4	11.02	Chlorate	n.a.	2.5129		0.36231	1.60
5	11.99	Bromide	n.a.	2.5521		0.39250	1.74
6	14.05	Nitrate-N	n.a.	4.8052		4.76987	21.09
7	20.62	O-Phosphate-P	n.a.	2.5732		0.69189	3.06
8	23.28	Sulfate	n.a.	19.2565		5.61312	24.82
Total:				50.9185	0.000	22.619	100.00

32 1202048236/955348/1/2/MS

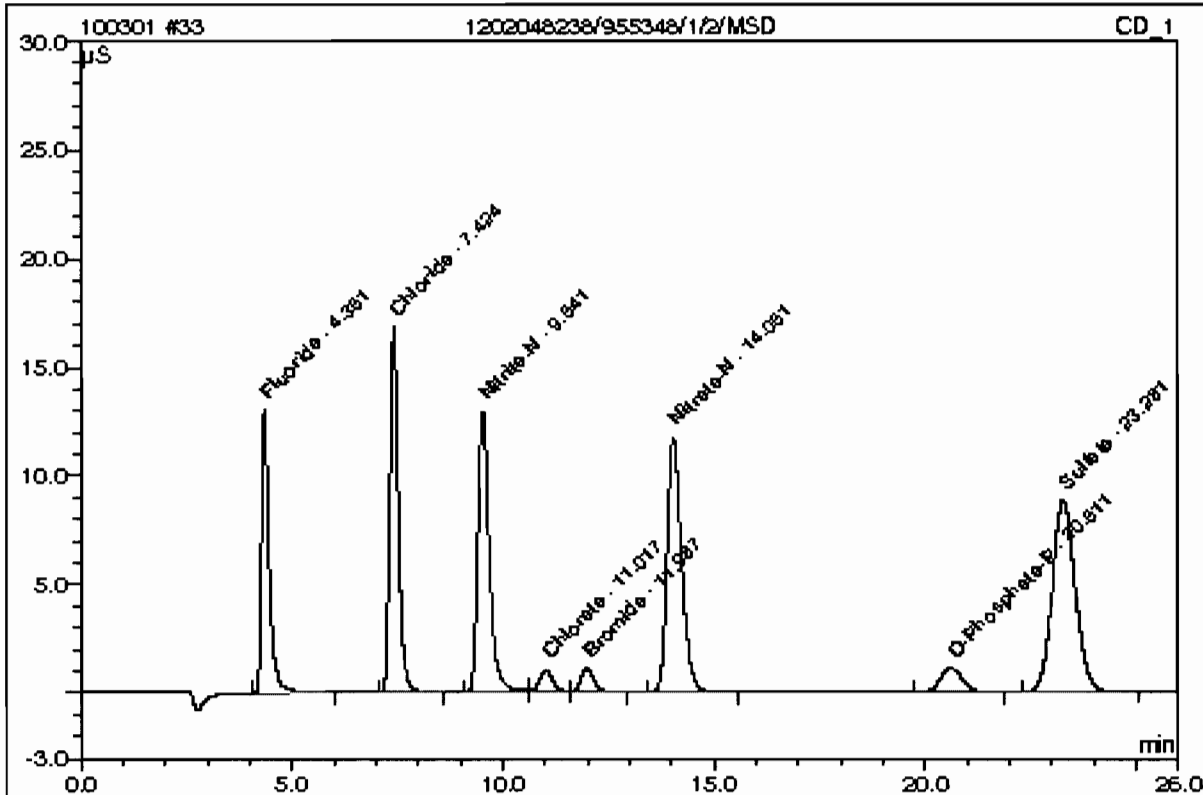
Sample Name:	1202048236/955348/1/2/MS	Injection Volume:	1.0
Vial Number:	19	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 23:12	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCB086;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	4.35	Fluoride	n.a.	4.8440		2.75509	12.34
2	7.42	Chloride	n.a.	9.3104		3.91977	17.56
3	9.54	Nitrite-N	n.a.	4.7967		3.96898	17.78
4	11.02	Chlorate	n.a.	2.4925		0.35931	1.61
5	11.99	Bromide	n.a.	2.7082		0.41658	1.87
6	14.05	Nitrate-N	n.a.	4.6776		4.64075	20.79
7	20.61	O-Phosphate-P	n.a.	2.5285		0.67914	3.04
8	23.28	Sulfate	n.a.	19.1539		5.58277	25.01
Total:				50.5118	0.000	22.322	100.00

33 1202048238/955348/1/2/MSD

Sample Name:	1202048238/955348/1/2/MSD	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:	100225an	Sample Amount:	1.0000
Recording Time:	3/1/2010 23:41	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



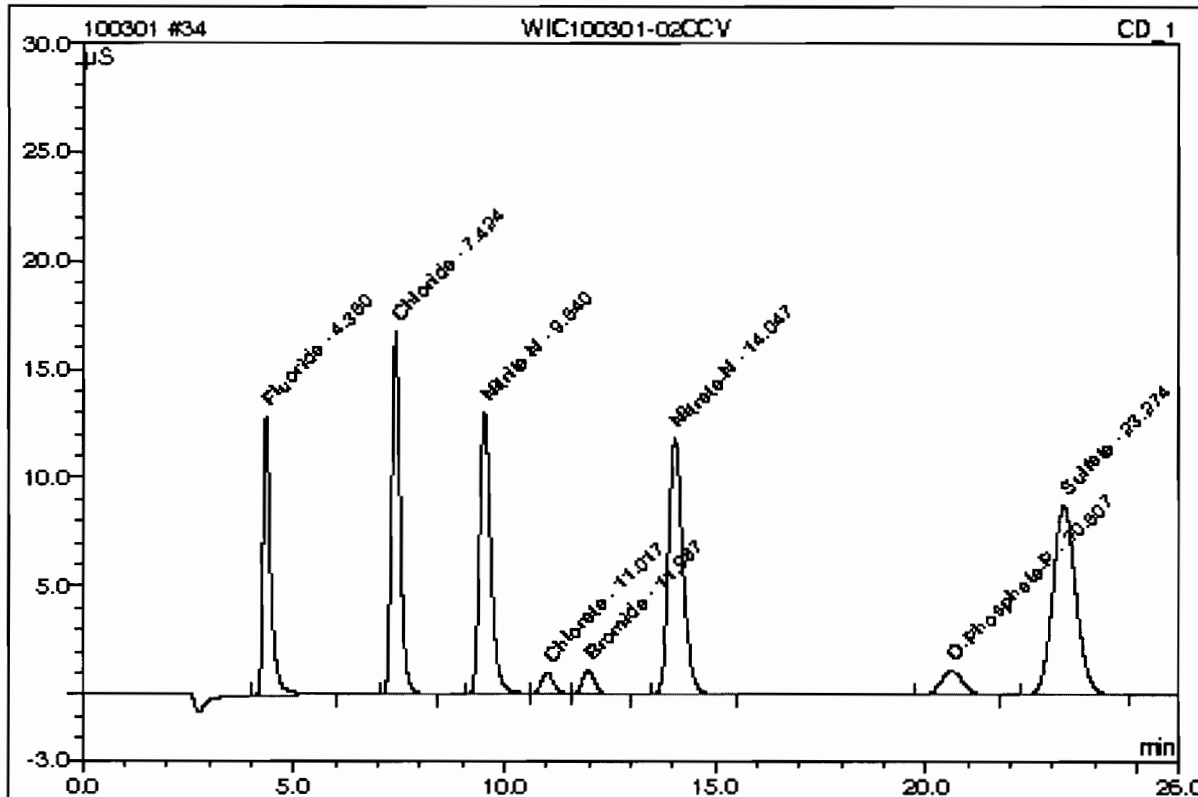
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	n.a.	4.8947		2.78433	12.32
2	7.42	Chloride	n.a.	9.4658		3.98647	17.63
3	9.54	Nitrite-N	n.a.	4.8911		4.04813	17.91
4	11.02	Chlorate	n.a.	2.5782		0.37190	1.65
5	11.99	Bromide	n.a.	2.5350		0.38986	1.72
6	14.05	Nitrate-N	n.a.	4.7356		4.69939	20.79
7	20.61	O-Phosphate-P	n.a.	2.5353		0.68109	3.01
8	23.28	Sulfate	n.a.	19.3679		5.64609	24.97
Total:				51.0035	0.000	22.607	100.00

This is runlog for Sequence 100301.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
CCV	03/02/10 00:10		1	100301	MAR1
CCB	03/02/10 00:39		1	100301	MAR1
1202056232	03/02/10 01:07	958780	1	100301	MAR1
1202056233	03/02/10 01:36	958780	1	100301	MAR1
247913001	03/02/10 02:05	958780	10	100301	MAR1
1202056234	03/02/10 02:34	958780	10	100301	MAR1
1202056235	03/02/10 03:03	958780	10	100301	MAR1
CVH	03/02/10 03:32		1	100301	MAR1
CCB	03/02/10 04:01		1	100301	MAR1

34 WIC100301-02CCV

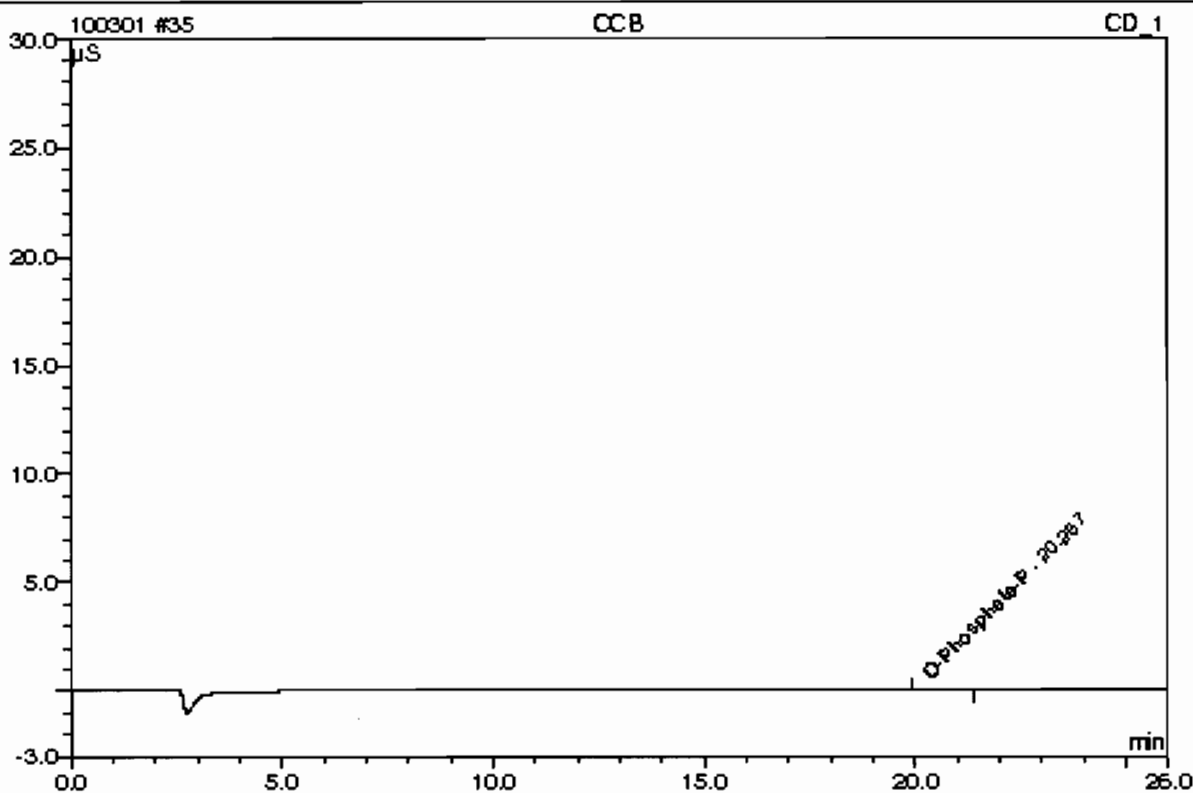
Sample Name:	WIC100301-02CCV	Injection Volume:	1.0
Vial Number:	21	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/2/2010 0:10	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	4.8349		2.74985	12.27
2	7.42	Chloride	n.a.	9.3566		3.93959	17.57
3	9.54	Nitrite-N	n.a.	4.8437		4.00842	17.88
4	11.02	Chlorate	n.a.	2.5059		0.36128	1.61
5	11.99	Bromide	n.a.	2.5194		0.38746	1.73
6	14.05	Nitrate-N	n.a.	4.7388		4.70266	20.98
7	20.61	O-Phosphate-P	n.a.	2.5522		0.68589	3.06
8	23.27	Sulfate	n.a.	19.1576		5.58386	24.91
Total:				50.5091	0.000	22.419	100.00

35 CCB

Sample Name:	CCB	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:	100225an	Sample Amount:	1.0000
Recording Time:	3/2/2010 0:39	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 %
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.
1	20.26	O-Phosphate-P	n.a.	0.2230		0.02192	100.00
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.2230	0.000	0.022	100.00

pH

pH / Corrosivity LogBook

Analyst: EXF1
 Batch: 950208
 Lab SOP: GL-GC-E-008 REV# 17
 Description: pH
 Method: SW846 9045C/9045D

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)	Description
1202036081 LCS		Soil	11:05	11:00	08-FEB-10 11:30	pH	20	20	6.94	21.0°C	7	99.143		PH 7 BUFFER FOR PH
1202036081 LCS		Soil	11:05	11:00	08-FEB-10 11:30	pH 2	20	20	6.94	21.0°C	7	99.143		LCS BUFFER SOLUTION
246437012		Soil	11:05	11:00	08-FEB-10 11:31	pH	20	20	7.94	20.3°C				
246437012		Soil	11:05	11:00	08-FEB-10 11:31	pH 2	20	20	7.95	20.3°C				
1202036080 DUP	246437012	Soil	11:05	11:00	08-FEB-10 11:35	pH	20	20	7.96	20.4°C			.252	
1202036080 DUP	246437012	Soil	11:05	11:00	08-FEB-10 11:35	pH 2	20	20	7.95	20.4°C			0	
246437013		Soil	11:05	11:00	08-FEB-10 11:41	pH	20	20	6.98	20.4°C				
246437013		Soil	11:05	11:00	08-FEB-10 11:41	pH 2	20	20	6.98	20.4°C				
246437014		Soil	11:05	11:00	08-FEB-10 11:42	pH	20	20	7.05	20.3°C				
246437014		Soil	11:05	11:00	08-FEB-10 11:42	pH 2	20	20	7.05	20.6°C				
CCV			11:05	11:00	08-FEB-10 11:44	pH	20	20	7	20.7°C	7	100		
CCV			11:05	11:00	08-FEB-10 11:44	pH 2	20	20	7	20.8°C	7	100		
246443001		Soil	11:05	11:00	08-FEB-10 11:46	pH	20	20	6.53	21.4°C				
246443001		Soil	11:05	11:00	08-FEB-10 11:46	pH 2	20	20	6.53	21.4°C				
246443002		Soil	11:05	11:00	08-FEB-10 12:03	pH	20	20	6.08	21.0°C				
246443002		Soil	11:05	11:00	08-FEB-10 12:03	pH 2	20	20	6.08	21.0°C				
246443003		Soil	11:05	11:00	08-FEB-10 12:04	pH	20	20	6.68	21.1°C				
246443003		Soil	11:05	11:00	08-FEB-10 12:04	pH 2	20	20	6.7	21.1°C				
246443004		Soil	11:05	11:00	08-FEB-10 12:06	pH	20	20	6.48	21.1°C				
246443004		Soil	11:05	11:00	08-FEB-10 12:06	pH 2	20	20	6.5	21.1°C				
246443005		Soil	11:05	11:00	08-FEB-10 12:08	pH	20	20	7.07	21.3°C				
246443005		Soil	11:05	11:00	08-FEB-10 12:08	pH 2	20	20	7.08	21.5°C				
CCV			11:05	11:00	08-FEB-10 12:12	pH	20	20	7	21.3°C	7	100		
CCV			11:05	11:00	08-FEB-10 12:12	pH 2	20	20	7	21.3°C	7	100		

Comments:

GEL Laboratories LLC

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pH / Corrosivity LogBook

Calibration Information:

Run Date:	08-FEB-10 10:46	Standard	Observed	Theoretical	C	%Recovery
Instrument:	PHX370	IMM100208-PH1	4.01	SU	21.3	100.25
Analyst:	EXF1	IMM100208-PH-	7.02	SU	21.3	100.29
		UPH100208-a	9.97	SU	21.3	99.7
		UPH100208-02c-	2.05	SU	21.3	102.5
		100208-a	12.02	SU	21.3	100.17
		IMM100208-01a	6.96	SU	21.3	99.429

Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr. 05-MAR-10	Division: Federal	Quality Criteria: Specifications	Type: Process
Instrument Type: IC	Test / Method: EPA 300.0	Matrix Type: Solid	Client Code: LANL
Batch ID: 955348	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 246443(10-1624),246566(10-1673) Application Issues: Failed Recovery for MS/PS Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. Failed Recovery for MS/MSD: QC 1202048237MS, QC 1202048239MSD		1. The MS recovery falls outside of the established acceptance limits. The MSD verifies the recovery failure with a passing RPD; therefore, the failure is attributed to matrix interference.	

Originator's Name:
Julia Hamilton 05-MAR-10

Data Validator/Group Leader:
Elzbieta Szulc 05-MAR-10