

Wednesday, February 17, 2010

Page 1 of 2
REQUEST NUMBER: 10-1912

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

These Samples are on:

General Engineering Laboratories, Inc., Charleston, SC.

LANL Request Number: 10-1912

2040 Savage Rd

Per Agreement Number: 126310011

Charleston, SC 29407

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/17/2010

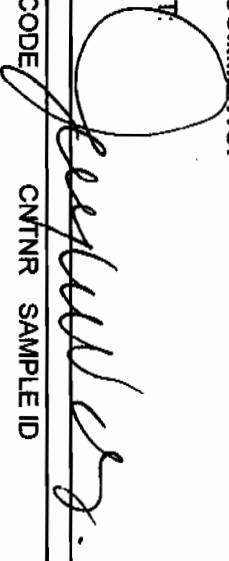
TURNAROUND/REPORT DUE: 3/19/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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SW-846:6010B		1	RE15-10-8240	R	2/13/2010	
		1	RE15-10-8241	R	2/13/2010	
		1	RE15-10-8242	R	2/13/2010	
		1	RE15-10-8243	R	2/13/2010	
		1	RE15-10-8244	R	2/13/2010	
		1	RE15-10-8245	R	2/13/2010	
		1	RE15-10-8246	R	2/13/2010	
		1	RE15-10-8267	R	2/13/2010	
		1	RE15-10-8270	W	2/13/2010	

Wednesday, February 17, 2010

REQUEST NUMBER: 10-1912

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8270	W	2/13/2010	
	SW-846:6850	1	RE15-10-8270	W	2/13/2010	
	SW-846:9012A	1	RE15-10-8240	R	2/13/2010	
		1	RE15-10-8241	R	2/13/2010	
		1	RE15-10-8242	R	2/13/2010	
		1	RE15-10-8243	R	2/13/2010	
		1	RE15-10-8244	R	2/13/2010	
		1	RE15-10-8245	R	2/13/2010	
		1	RE15-10-8246	R	2/13/2010	
		1	RE15-10-8267	R	2/13/2010	
		1	RE15-10-8270	W	2/13/2010	

Final Page of REQUEST NUMBER 10-1912

Wednesday, February 17, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1912

LOS ALAMOS

REQUEST NUMBER: 10-1912

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/19/2010

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
RE15-10-8246	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8245	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8243	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8244	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8242	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8240	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8241	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8270	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8270	1	POLY	SW-846:6850	Ice	W
RE15-10-8270	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8267	1	POLY	Metals+ClO4+CN	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: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8240

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/13/2010	MEDIA:	OBT3	OK
TIME COLLECTED (HH:MM)		09:55	SUB-MEDIA:	TUFF 1	OK
PRS ID:	15-007(d)	OK	SAMPLE TECH CODE:	HA	CBS
LOCATION ID:	15-610819		FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4.0 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5.0 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	OK	EXCAVATED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA		
BOREHOLE:	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA		BOREHOLE DECLINATION:	-90°	
			BOREHOLE DIRECTION:	NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

HE Spot Test Negative
Alpha = 23 dpm
Beta/Gamma = 2028 dpm
2280

ARM 2/13/10
PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/13/10	(Printed Name)	2/13/10
(Signature) Jon R. Marin	1442	(Signature)	2:40
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8241

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA: OBT3		OK	
TIME COLLECTED (HH:MM)		11:45		SUB-MEDIA: TUFF 1		OK	
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE: HA		CRS	
LOCATION ID:	15-610819	|		FIELD QC TYPE: NA		OK	
LOCATION TYPE:	GENERIC	|		FIELD PREP: NA		|	
TOP DEPTH:	0	19.0 ft		SAMPLE USAGE: INV		|	
BOTTOM DEPTH:	0	20.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
BOREHOLE: <input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> NA		BOREHOLE DECLINATION: -90°		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	PRM 2/13/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 2600 dpm

PRM 2/13/10
PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/13/10 2:42
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8242

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		12:15		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610819	+		FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	33.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	35.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION: -90°			
				BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	ARM 2/13/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

^{brownish}
Light gray, slightly indurated, nonwelded, devitrified, dry, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 17 dpm
Beta/Gamma ≤ 2400 dpm

ARM 2/13/10
PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) JON MARIN (Signature) J. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/13/10 2:42
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8243

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		12:31		SUB-MEDIA:		TUFF 1	
PRS ID: 15-007(d)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610819		|		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		|		FIELD PREP:		NA	
TOP DEPTH: 0		49.0 ft		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		50.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		YES	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: -90°		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	|	H3	500 ML POLY	Ice	Y	
1	|	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	|	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brownish gray, non indurated, non welded, devitrified, dry, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 53 dpm
Beta/Gamma = 250 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY (Printed Name) JORV MARIN (Signature) J. R. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/13/10 2:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8244

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		1300		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610819			FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	64 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	65 ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	OK		EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/>			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/>
BOREHOLE:	<input checked="" type="radio"/> YES / NO / NA			BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION:
							NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff.

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 89 dpm
Beta/Gamma = 2770 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. M. MARIN

L. Lopez

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/13/10 2142
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8245

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		13:25		SUB-MEDIA:		TUFF 1	
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610819	|		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	|		FIELD PREP:		NA	
TOP DEPTH:	0	79.0 ft		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	80.0 ft		SCREEN/PORT DESC:		N/A	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: N/A		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: -90°		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	ARM-2/13/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	|	H3	500 ML POLY	Ice	Y	
1	|	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	|	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light gray, slightly indurated, nonwelded, dehydrified

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 2450 dpm

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

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. J. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 2/13/10 2:42
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8246

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		13:50		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610819			FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	104.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	105.0 ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	OK		EXCAVATED: YES / NO / NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES (NO) NA
BOREHOLE: YES / NO / NA				BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 41 dpm
 Beta/Gamma \leq 2230 dpm

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

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/13/10 2:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8267

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/13/2010		MEDIA:	QBT3		OK
TIME COLLECTED(HH:MM)		12:15		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	UNK	15-610 B19		FIELD QC TYPE:	FD		OK
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	33.0 ft		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	35.0 ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	B	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION:
							NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	72m 2/13/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-8242

brownish
Light gray, slightly indurated, nonwelded, devitrified, dry, arch flow
tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 17 dpm
Beta/Gamma ≤ 2400 dpmPID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon B. Marin	Date/Time 2/13/10 1442	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/13/10 2:42
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8270

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/13/2010	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		14:10	SUB-MEDIA:	OTHER	
PRS ID:	15-007(d)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610819	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0	0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	0	SCREEN/PORT DESC:		N/A
FIELD MATRIX:	W	OK	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION: -90°		
			BOREHOLE DIRECTION:	NA	

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

SAMPLE DESC: QC Sample of RE15-10-8246

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-1

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/13/10	(Printed Name)	2/13/10
(Signature) Jon R. Marin	1442	(Signature)	2:40
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):

RE15-10-8245
8246
8243
8242
8241
8240
8244
8267

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):

RE15-10-8270

Reason:

Rinsate

.....
Print Last Name McFarland

Signature

Tracy M

Date 2/13/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1912 VALIDATION DATE: 04/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Lisa Burgess 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): _____ | | | |

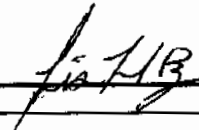
Section II. Completeness Check

- | 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):

1. The MS/MSD %R calculations were performed incorrectly. The parent sample result was < the MDL and, thus, a result of 0 ug/kg or 0 ug/L should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentrations. The soil MSD %R was >125% when calculated correctly. The associated sample results were NDs and, thus, were not qualified. The aqueous MS/MSD %Rs were within the acceptable limits when calculated correctly. No sample results were qualified.
2. It should be noted that the aqueous matrix QC were performed on a LANL sample from another RN. Parent sample raw data were not included in the data package. Sample data were not qualified as a result.


Reviewed by: Mary Donovan Level: I Date: 04/02/10

VALIDATOR'S SIGNATURE: 


DATE: 04/02/10

Form 5121-1, Revision 0.0


LOS ALAMOS
Environmental Restoration Project

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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R, PERC7f
<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	31. The Interference Check Sample was not within $\pm 20\%$ of the known value.	UJ, PERC16a	J, PERC16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8246

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347001

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 06:54	per0302083a
	Perchlorate Isotope Ratio						1	03-MAR-10 06:54	per0302083a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 06:54	per0302083a
	Perchlorate-O(18)			4.89	ug/kg		1	03-MAR-10 06:54	per0302083a

[^] 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: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8245

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347002

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 99.05

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.505	2.02	0.505	ug/kg	U	1	03-MAR-10 07:02	per0302084a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.505	2.02	0.505	ug/kg	U	1	03-MAR-10 07:02	per0302084a
	Perchlorate-O(18)			5.08	ug/kg		1	03-MAR-10 07:02	per0302084a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8243

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347003

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.5

CAS No.	Analyte [^]	MDL	RL	Conc.*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 07:28	per0302087a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:28	per0302087a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 07:28	per0302087a
	Perchlorate-O(18)			5.07	ug/kg		1	03-MAR-10 07:28	per0302087a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8244

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347004

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 97.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.511	2.05	0.511	ug/kg	U	1	03-MAR-10 07:37	per0302088a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:37	per0302088a
14797-73-0	Perchlorate-101	.511	2.05	0.511	ug/kg	U	1	03-MAR-10 07:37	per0302088a
	Perchlorate-O(18)			5.18	ug/kg		1	03-MAR-10 07:37	per0302088a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Aliquot
I %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: 957927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8242
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 247347005
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 98.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	0.507	ug/kg	U	1	03-MAR-10 08:11	per0302092a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:11	per0302092a
14797-73-0	Perchlorate-101	.507	2.03	0.507	ug/kg	U	1	03-MAR-10 08:11	per0302092a
	Perchlorate-O(18)			4.97	ug/kg		1	03-MAR-10 08:11	per0302092a

[^] 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 quantization of Perchlorate.

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 257927Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8240Date Received: 18-FEB-10GEL Job No (SDG): 10-1912GEL Sample ID: 247347006Date Filtered: 26-FEB-10Injection Volume (uL): 20%Solids: 98.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 08:20	per0302093a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:20	per0302093a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 08:20	per0302093a
	Perchlorate-O(18)			5.22	ug/kg		1	03-MAR-10 08:20	per0302093a

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

*Concentration =

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

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: 95792Z

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8241

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347007

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.8

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	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:28	per0302094a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:28	per0302094a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:28	per0302094a
	Perchlorate-O(18)			4.91	ug/kg		1	03-MAR-10 08:28	per0302094a

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

*Concentration =

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

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: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8267

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347008

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:37	per0302095a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:37	per0302095a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:37	per0302095a
	Perchlorate-O(18)			5.02	ug/kg		1	03-MAR-10 08:37	per0302095a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8270

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912-1

GEL Sample ID: 247350001

Date Filtered: 02-MAR-10

Injection Volume (mL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	07-MAR-10 16:19	per0307014a
	Perchlorate Isotope Ratio						1	07-MAR-10 16:19	per0307014a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	07-MAR-10 16:19	per0307014a
	Perchlorate-Q(18)			0.515	ug/L		1	07-MAR-10 16:19	per0307014a

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

*Concentration =

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

LTB
04/02/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1912 VALIDATION DATE: 04/02/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Lisa Burgess 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):


- The soil MS %R was <10% for Ba and Ca. All associated sample results for Ba were detects and, thus, were qualified R,I6. The soil MS %R was < the laboratory LAL but $\geq 10\%$ for Sb and the aqueous MS %R was < the laboratory LAL but $\geq 10\%$ for Tl. All associated sample results were NDs and, thus, were qualified UJ,I6a. The soil MS %R was > the laboratory UAL for Mg, Mn, K, Al, Fe and Zn. All associated sample results for Mg, Mn, K and Zn were detects and, thus, were qualified J+,I6b. The Al, Ca and Fe parent sample concentrations were >4X the spike concentrations; thus, the associated sample results were not qualified based on professional judgment.
- Target analyte Tl was detected in the aqueous ICB/CCBs. The sample result was a ND and, thus, was not qualified. Target analyte Sb was detected in the soil ICB/CCBs. The associated sample results were NDs and, thus, were not qualified.
- In the FR blank, sample RE15-10-8270, associated with all soil samples, K and Na were detected. The associated sample results were detects >5X the FR blank concentrations and, thus, were not qualified.
- It should be noted that the soil matrix QC analyses and the aqueous Hg matrix QC analyses were performed on LANL samples from other RNs. The parent sample raw data were not included in the data package. Sample data were not qualified as a result.

Reviewed by: Mary Donovan


Level: I

Date: 04/02/10


DATA VALIDATION COVER SHEET	
5118-1 Data Validation Cover Sheet	Records Use only  Los Alamos NATIONAL LABORATORY EST. 1943
VALIDATOR'S SIGNATURE: <u><i>[Signature]</i></u> DATE: <u>04/02/10</u>	
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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


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

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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS Information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.	UJ, I10a	J, I10a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was $<10\%$. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recover was $<$ the LAL but $>10\%$. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The quantitating IS area count is $<10\%$ for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347001

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8246

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	966000	ug/kg		6370	18700	18700	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-36-0	Antimony UJ,16a	4690	ug/kg	U	1550	4690	4690	5	P	JWJ	03/17/10 01:13	031610B-1	955136
7440-38-2	Arsenic	321	ug/kg	J	193	964	964	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-39-3	Barium R,16	10500	ug/kg		93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-41-7	Beryllium	287	ug/kg		19.3	96.4	96.4	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-43-9	Cadmium	157	ug/kg	J	93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-70-2	Calcium	460000	ug/kg		7500	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-47-3	Chromium	781	ug/kg		141	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-48-4	Cobalt	494	ug/kg		141	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-50-8	Copper	2060	ug/kg		281	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-89-6	Iron	7810000	ug/kg		7500	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-92-1	Lead	5340	ug/kg		234	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-95-4	Magnesium J+,16b	234000	ug/kg		7970	28100	28100	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-96-5	Manganesec J+,16b	250000	ug/kg		187	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-97-6	Mercury	11	ug/kg	U	3.73	11	11	1	AV	JXL1	03/03/10 13:28	030310S2-5	958634
7440-02-0	Nickel	397	ug/kg		96.4	386	386	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-09-7	Potassium J+,16b	503000	ug/kg		6000	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7782-49-2	Selenium	964	ug/kg	U	482	964	964	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-22-4	Silver	469	ug/kg	U	93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-23-5	Sodium	382000	ug/kg		6560	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-28-0	Thallium	193	ug/kg	U	57.8	193	193	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-62-2	Vanadium	2050	ug/kg		93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-66-6	Zinc J+,16b	53300	ug/kg		309	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.542	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.527	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.555	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347002

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8245

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 99.05

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	597000	ug/kg		6510	19200	19200	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-36-0	Antimony UJ,16a	958	ug/kg	U	316	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-38-2	Arsenic	197	ug/kg	J	192	960	960	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-39-3	Barium R,16	4790	ug/kg		95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-41-7	Beryllium	258	ug/kg		19.2	96	96	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-43-9	Cadmium	121	ug/kg	J	95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-70-2	Calcium	298000	ug/kg		7660	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-47-3	Chromium	561	ug/kg		144	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-48-4	Cobalt	328	ug/kg	J	144	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-50-8	Copper	1540	ug/kg		287	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-89-6	Iron	6010000	ug/kg		7660	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-92-1	Lead	3020	ug/kg		239	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-95-4	Magnesium J+,16b	103000	ug/kg		8140	28700	28700	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-96-5	Manganese J+,16b	168000	ug/kg		192	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-97-6	Mercury	11.3	ug/kg	U	3.84	11.3	11.3	1	AV	JXL1	03/03/10 13:29	030310S2-5	958634
7440-02-0	Nickel	313	ug/kg	J	96	384	384	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-09-7	Potassium J+,16b	346000	ug/kg		6130	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7782-49-2	Selenium	960	ug/kg	U	480	960	960	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-22-4	Silver	479	ug/kg	U	95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-23-5	Sodium	246000	ug/kg		6710	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-28-0	Thallium	192	ug/kg	U	57.6	192	192	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-62-2	Vanadium	1600	ug/kg		95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-66-6	Zinc J+,16b	41300	ug/kg		316	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.527	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.526	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.536	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347003

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8243

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1130000	ug/kg		6730	19800	19800	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-36-0	Antimony UJ,16a	990	ug/kg	U	327	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-38-2	Arsenic	248	ug/kg	J	198	990	990	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-39-3	Barium R,16	8190	ug/kg		99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-41-7	Beryllium	303	ug/kg		19.8	99	99	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-43-9	Cadmium	495	ug/kg	U	99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-70-2	Calcium	389000	ug/kg		7920	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-47-3	Chromium	3040	ug/kg		148	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-48-4	Cobalt	369	ug/kg	J	148	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-50-8	Copper	1630	ug/kg		297	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-89-6	Iron	6400000	ug/kg		7920	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-92-1	Lead	3710	ug/kg		247	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-95-4	Magnesium J+,16b	148000	ug/kg		8410	29700	29700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-96-5	Manganese J+,16b	202000	ug/kg		198	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-97-6	Mercury	11.8	ug/kg	U	4	11.8	11.8	1	AV	JXL1	03/03/10 13:34	030310S2-5	958634
7440-02-0	Nickel	717	ug/kg		99	396	396	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-09-7	Potassium J+,16b	557000	ug/kg		6340	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7782-49-2	Selenium	990	ug/kg	U	495	990	990	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-22-4	Silver	495	ug/kg	U	99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-23-5	Sodium	500000	ug/kg		6930	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-28-0	Thallium	198	ug/kg	U	59.4	198	198	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-62-2	Vanadium	1880	ug/kg		99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-66-6	Zinc J+,16b	36600	ug/kg		327	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.513	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.513	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.518	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347004

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8244

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 97.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1190000	ug/kg		6930	20400	20400	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-36-0	Antimony UJ,16a	1020	ug/kg	U	336	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-38-2	Arsenic	290	ug/kg	J	202	1010	1010	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-39-3	Barium R,16	11400	ug/kg		102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-41-7	Beryllium	374	ug/kg		20.2	101	101	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-43-9	Cadmium	143	ug/kg	J	102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-70-2	Calcium	723000	ug/kg		8150	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-47-3	Chromium	2600	ug/kg		153	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-48-4	Cobalt	591	ug/kg		153	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-50-8	Copper	2300	ug/kg		306	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-89-6	Iron	9480000	ug/kg		8150	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-92-1	Lead	6940	ug/kg		255	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-95-4	Magnesium J+,16b	297000	ug/kg		8660	30600	30600	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-96-5	Manganese J+,16b	306000	ug/kg		204	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-97-6	Mercury	11.4	ug/kg	U	3.89	11.4	11.4	1	AV	JXL1	03/03/10 13:36	030310S2-5	958634
7440-02-0	Nickel	614	ug/kg		101	403	403	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-09-7	Potassium J+,16b	600000	ug/kg		6520	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7782-49-2	Selenium	1010	ug/kg	U	504	1010	1010	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-22-4	Silver	509	ug/kg	U	102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-23-5	Sodium	554000	ug/kg		7130	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-28-0	Thallium	202	ug/kg	U	60.5	202	202	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-62-2	Vanadium	2950	ug/kg		102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-66-6	Zinc J+,16b	53600	ug/kg		336	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.502	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.507	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.537	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347005

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8242

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1070000	ug/kg		6670	19600	19600	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-36-0	Antimony UJ,16a	980	ug/kg	U	324	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-38-2	Arsenic	416	ug/kg	J	198	992	992	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-39-3	Barium R,16	12500	ug/kg		98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-41-7	Beryllium	211	ug/kg		19.8	99.2	99.2	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-43-9	Cadmium	119	ug/kg	J	98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-70-2	Calcium	355000	ug/kg		7840	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-47-3	Chromium	2420	ug/kg		147	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-48-4	Cobalt	467	ug/kg	J	147	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-50-8	Copper	1480	ug/kg		294	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-89-6	Iron	7040000	ug/kg		7840	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-92-1	Lead	3310	ug/kg		245	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-95-4	Magnesium J+,16b	155000	ug/kg		8330	29400	29400	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-96-5	Manganese J+,16b	257000	ug/kg		196	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-97-6	Mercury	11.5	ug/kg	U	3.9	11.5	11.5	1	AV	JXL	03/03/10 13:38	030310S2-5	958634
7440-02-0	Nickel	655	ug/kg		99.2	397	397	2	MS	RMJ	03/18/10 23:54	100318-4	955138
7440-09-7	Potassium J+,16b	549000	ug/kg		6270	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7782-49-2	Selenium	992	ug/kg	U	496	992	992	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-22-4	Silver	490	ug/kg	U	98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-23-5	Sodium	455000	ug/kg		6860	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-28-0	Thallium	198	ug/kg	U	59.5	198	198	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-62-2	Vanadium	2360	ug/kg		98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-66-6	Zinc J+,16b	41600	ug/kg		324	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.517	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.511	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.53	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347006

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8240

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1640000	ug/kg		6740	19800	19800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-36-0	Antimony UJ,16a	991	ug/kg	U	327	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-38-2	Arsenic	528	ug/kg	J	193	965	965	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-39-3	Barium R,16	28500	ug/kg		99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-41-7	Beryllium	342	ug/kg		19.3	96.5	96.5	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-43-9	Cadmium	114	ug/kg	J	99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-70-2	Calcium	1530000	ug/kg		7930	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-47-3	Chromium	2700	ug/kg		149	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-48-4	Cobalt	567	ug/kg		149	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-50-8	Copper	1690	ug/kg		297	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-89-6	Iron	7240000	ug/kg		7930	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-92-1	Lead	3040	ug/kg		248	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-95-4	Magnesium J+,16b	465000	ug/kg		8420	29700	29700	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-96-5	Manganese J+,16b	245000	ug/kg		198	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-97-6	Mercury	3.76	ug/kg	J	3.6	10.6	10.6	1	AV	JXL1	03/03/10 13:39	030310S2-5	958634
7440-02-0	Nickel	1460	ug/kg		96.5	386	386	2	MS	RMJ	03/18/10 23:57	100318-4	955138
7440-09-7	Potassium J+,16b	508000	ug/kg		6340	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7782-49-2	Selenium	965	ug/kg	U	482	965	965	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-22-4	Silver	496	ug/kg	U	99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-23-5	Sodium	355000	ug/kg		6940	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-28-0	Thallium	193	ug/kg	U	57.9	193	193	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-62-2	Vanadium	3580	ug/kg		99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-66-6	Zinc J+,16b	35800	ug/kg		327	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.513	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.527	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.576	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347007

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8241

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	965000	ug/kg		6800	20000	20000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-36-0	Antimony UJ,16a	1000	ug/kg	U	330	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-38-2	Arsenic	288	ug/kg	J	202	1010	1010	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-39-3	Barium R,16	8340	ug/kg		100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-41-7	Beryllium	442	ug/kg		20.2	101	101	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-43-9	Cadmium	500	ug/kg	U	100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-70-2	Calcium	263000	ug/kg		8000	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-47-3	Chromium	2270	ug/kg		150	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-48-4	Cobalt	299	ug/kg	J	150	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-50-8	Copper	1470	ug/kg		300	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-89-6	Iron	6120000	ug/kg		8000	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-92-1	Lead	3130	ug/kg		250	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-95-4	Magnesium J+,16b	107000	ug/kg		8500	30000	30000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-96-5	Manganese J+,16b	195000	ug/kg		200	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-97-6	Mercury	12.1	ug/kg	U	4.13	12.1	12.1	1	AV	JXL	03/03/10 13:41	030310S2-5	958634
7440-02-0	Nickel	516	ug/kg		101	403	403	2	MS	RMJ	03/18/10 23:59	100318-4	955138
7440-09-7	Potassium J+,16b	513000	ug/kg		6400	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7782-49-2	Selenium	1010	ug/kg	U	504	1010	1010	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-22-4	Silver	500	ug/kg	U	100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-23-5	Sodium	430000	ug/kg		7000	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-28-0	Thallium	202	ug/kg	U	60.5	202	202	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-62-2	Vanadium	1750	ug/kg		100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-66-6	Zinc J+,16b	36400	ug/kg		330	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.506	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.502	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.5	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347008

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8267

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1100000	ug/kg		6860	20200	20200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-36-0	Antimony UJ,16a	5040	ug/kg	U	1660	5040	5040	5	P	JWJ	03/17/10 01:17	031610B-1	955136
7440-38-2	Arsenic	304	ug/kg	J	182	912	912	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-39-3	Barium R,16	12400	ug/kg		101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-41-7	Beryllium	210	ug/kg		18.2	91.2	91.2	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-43-9	Cadmium	101	ug/kg	J	101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-70-2	Calcium	350000	ug/kg		8070	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-47-3	Chromium	2480	ug/kg		151	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-48-4	Cobalt	497	ug/kg	J	151	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-50-8	Copper	1500	ug/kg		302	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-89-6	Iron	6970000	ug/kg		8070	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-92-1	Lead	3390	ug/kg		252	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-95-4	Magnesium J+,16b	145000	ug/kg		8570	30200	30200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-96-5	Mangancsc J+,16b	250000	ug/kg		202	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-97-6	Mercury	10.3	ug/kg	U	3.51	10.3	10.3	1	AV	JXL	03/03/10 13:43	030310S2-5	958634
7440-02-0	Nickel	569	ug/kg		91.2	365	365	2	MS	RMJ	03/19/10 00:02	100318-4	955138
7440-09-7	Potassium J+,16b	570000	ug/kg		6450	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7782-49-2	Selenium	912	ug/kg	U	456	912	912	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-22-4	Silver	504	ug/kg	U	101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-23-5	Sodium	465000	ug/kg		7060	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-28-0	Thallium	182	ug/kg	U	54.7	182	182	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-62-2	Vanadium	2080	ug/kg		101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-66-6	Zinc J+,16b	41200	ug/kg		333	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.502	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.555	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.588	g	30	mL	03/02/10	TXB3

LTB
04/02/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247350001

BASIS: As Received

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8270

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: WATER


%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	RMJ	03/20/10 04:58	100319-6	966864
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/16/10 15:01	031610B-1	955132
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/16/10 15:01	031610B-1	955132
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/16/10 15:01	031610B-1	955132
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/25/10 13:16	022510W1-7	957034
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-09-7	Potassium	324	ug/L		50	150	150	1	P	HSC	03/16/10 15:01	031610B-1	955132
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-23-5	Sodium	234	ug/L	J	100	300	300	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-28-0	Thallium	1	ug/L	UN	0.3	1	1	1	MS	PRB	03/18/10 13:50	100318-4	955134
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/16/10 15:01	031610B-1	955132

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955132	955131	SW846 3005A	50	mL	50	mL	02/24/10	FGA
955134	955133	SW846 3005A	50	mL	50	mL	02/24/10	FGA
957034	957032	SW846 7470A Prep	20	mL	20	mL	02/24/10	TXB3
966864	966863	SW846 3005A	25	mL	25	mL	03/19/10	AXG2

LTB
04/02/10

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

Section I.	
REQUEST NUMBER: <u>10-1912</u>	VALIDATION DATE: <u>04/02/10</u> LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>	
VALIDATOR: <u>Lisa Burgess</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>	
ANALYTICAL SUITE (CHECK ALL THAT APPLY):	
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS
<input checked="" type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY
<input type="checkbox"/> OTHER (DESCRIBE): <u>Total CN</u>	

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 analyte total CN was detected in the soil ICB. The associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the matrix QC analyses for both matrices were performed on LANL samples from other RNs. No sample data were qualified as a result.


Reviewed by: Mary Donovan Level: I Date: 04/02/10

VALIDATOR'S SIGNATURE: _____


DATE: 04/02/10

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

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

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

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
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)

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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 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8246
Sample ID: 247347001
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.57%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.7	249	ug/kg	1	AXC2	02/25/10	1608	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8245
Sample ID: 247347002
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: .955%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.7	252	ug/kg	1	AXC2	02/25/10	1609	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8243
Sample ID: 247347003
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.54%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	65.2	240	ug/kg	1	AXC2	02/25/10	1610	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8244
Sample ID: 247347004
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 2.23%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	68.2	251	ug/kg	1	AXC2	02/25/10	1611	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8242
Sample ID: 247347005
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.35%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	63.8	235	ug/kg	1	AXC2	02/25/10	1612	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8240
Sample ID: 247347006
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.66%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.5	244	ug/kg	1	AXC2	02/25/10	1613	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8241
Sample ID: 247347007
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.17%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	60.4	222	ug/kg	1	AXC2	02/25/10	1613	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8267
Sample ID: 247347008
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.22%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.5	248	ug/kg	1	AXC2	02/25/10	1618	955987	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 10, 2010

Client SDG: 10-1912-1

Client Sample ID: RE15-10-8270
Sample ID: 247350001
Matrix: W
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/23/10	1351	955981	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/23/10	1200	955979

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Wednesday, February 17, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1912

LOS ALAMOS

REQUEST NUMBER: 10-1912

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/19/2010

General Engineering Laboratories, Inc.,
Charleston, SC

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247347, 247350%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8246	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8245	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8243	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8244	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8242	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8240	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8241	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8270	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8270	1	POLY	SW-846/8850	Ice	W
RE15-10-8270	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8267	1	POLY	Metals+ClO4+CN	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Wednesday, February 17, 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: 2/17/2010

TURNAROUND/REPORT DUE: 3/19/2010

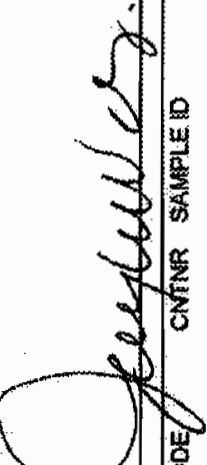
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 2

REQUEST NUMBER: 10-1912

These Samples are on:

LANL Request Number: 10-1912

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.60108	1	RE15-10-8240	R	2/13/2010	
		1	RE15-10-8241	R	2/13/2010	
		1	RE15-10-8242	R	2/13/2010	
		1	RE15-10-8243	R	2/13/2010	
		1	RE15-10-8244	R	2/13/2010	
		1	RE15-10-8245	R	2/13/2010	
		1	RE15-10-8246	R	2/13/2010	
		1	RE15-10-8267	R	2/13/2010	
		1	RE15-10-8270	W	2/13/2010	

Page 2 of 2
REQUEST NUMBER: 10-1912

Wednesday, February 17, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-9020	1	RE15-10-8270	W	2/13/2010	
	SW-846-9050	1	RE15-10-8270	W	2/13/2010	
	SW-846-9012A	1	RE15-10-8240	R	2/13/2010	
		1	RE15-10-8241	R	2/13/2010	
		1	RE15-10-8242	R	2/13/2010	
		1	RE15-10-8243	R	2/13/2010	
		1	RE15-10-8244	R	2/13/2010	
		1	RE15-10-8245	R	2/13/2010	
		1	RE15-10-8246	R	2/13/2010	
		1	RE15-10-8267	R	2/13/2010	
		1	RE15-10-8270	W	2/13/2010	

Final Page of REQUEST NUMBER 10-1912



February 22, 2010

www.gel.com

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

Re: LANL ER Project
Work Orders: 247347 247350
SDG: 10-1912

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 18, 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: 10-1912
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 247347 and 247350
SDG: 10-1912

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 247347 and 247350
SDG # : 10-1912**

February 22, 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 18, 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>
247347001	RE15-10-8246
247347002	RE15-10-8245
247347003	RE15-10-8243
247347004	RE15-10-8244
247347005	RE15-10-8242
247347006	RE15-10-8240
247347007	RE15-10-8241
247347008	RE15-10-8267
247350001	RE15-10-8270

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 22 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

Wednesday, February 17, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1912

LOS ALAMOS

REQUEST NUMBER: 10-1912

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/19/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247347, 247350^o/_o

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8246	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8245	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8243	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8244	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8242	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8240	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8241	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8270	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8270	1	POLY	SW-846:6850	Ice	W
RE15-10-8270	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8267	1	POLY	Metals+ClO4+CN	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Wednesday, February 17, 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: 2/17/2010

TURNAROUND/REPORT DUE: 3/19/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 2

REQUEST NUMBER: 10-1912

These Samples are on:

LANL Request Number: 10-1912

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-6010B	1	RE15-10-8240	R	2/13/2010	
		1	RE15-10-8241	R	2/13/2010	
		1	RE15-10-8242	R	2/13/2010	
		1	RE15-10-8243	R	2/13/2010	
		1	RE15-10-8244	R	2/13/2010	
		1	RE15-10-8245	R	2/13/2010	
		1	RE15-10-8246	R	2/13/2010	
		1	RE15-10-8267	R	2/13/2010	
		1	RE15-10-8270	W	2/13/2010	

Wednesday, February 17, 2010

Page 2 of 2

REQUEST NUMBER: 10-1912

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8020	1	RE15-10-8270	W	2/13/2010	
	SW-846:6850	1	RE15-10-8270	W	2/13/2010	
	SW-846:9012A	1	RE15-10-8240	R	2/13/2010	
		1	RE15-10-8241	R	2/13/2010	
		1	RE15-10-8242	R	2/13/2010	
		1	RE15-10-8243	R	2/13/2010	
		1	RE15-10-8244	R	2/13/2010	
		1	RE15-10-8245	R	2/13/2010	
		1	RE15-10-8246	R	2/13/2010	
		1	RE15-10-8267	R	2/13/2010	
		1	RE15-10-8270	W	2/13/2010	

Final Page of REQUEST NUMBER 10-1912



SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1912	
Received By: Patricia Dover-Dent		Date Received: February 18, 2009	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 60 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

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

Comments: FEDEX#S

7209 7850 1047 1C
 7209 7850 1014 2C
 7209 7850 1036 2C
 7209 7850 1025 2C
 7209 7850 0990 10C
 7209 7850 1003 10C

PM (or PMA) review: Initials

Date

2/19/10

RIGIN ID: SAFA (505) 665-9968
OYLENE VALDEZ
OS ALAMOS NATL LAB
A00 BLDG 1237 DPU 03

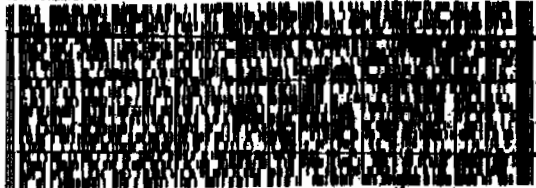
OS ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR3A05529E00

10



FedEx
Express

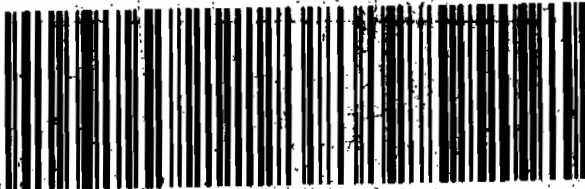


TRKH 7209 7850 1047

THU - 18FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



OS ALAMOS, NM 87545
UNITED STATES US

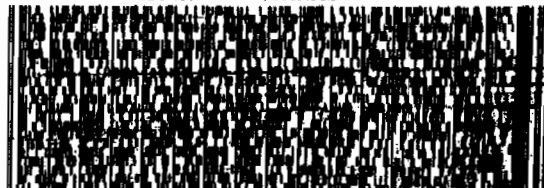
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR3A05529E00

2°



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Express

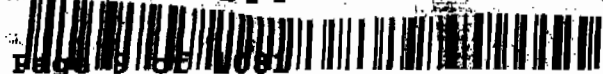


2 of 2
PSH 7209 7850 1036

THU - 18FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



SHIP DATE: 17FEB10
ACTNGT: 51.8 LB MAN
CAD: 0014176/CAPE2450

BILL SENDER

TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

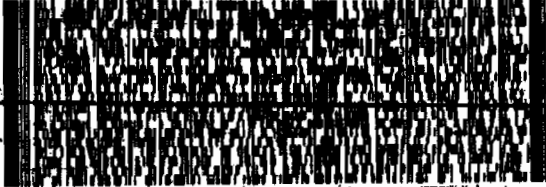
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

2°



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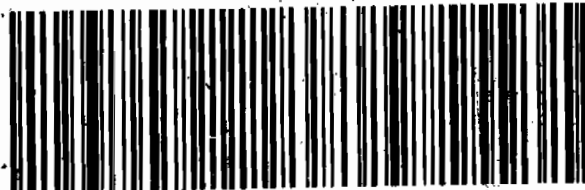


TRKH 7209 7850 1014

THU - 18FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



OS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 17FEB10
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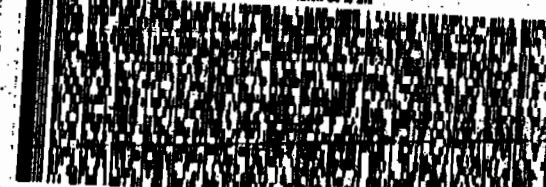
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR3A05529E00

2°



FedEx
Express

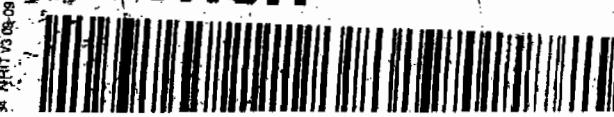


1 of 2
TRKH 7209 7850 1025

THU - 18FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



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

LOS ALAMOS, NM 87545
UNITED STATES US

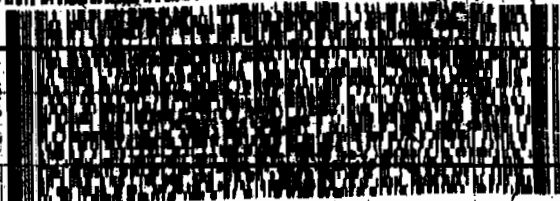
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ACTWGT: 67.0 LB MAN
CAG: 0014178/CAFE2450

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

REF: 6B010AMR2A0515BYDO



THU - 18FEB A1
PRIORITY OVERNIGHT

DPS# 7209 7850 0990
0263

INSTR 7209 7050 0089 0201

XX CHSA

29407
SC-US
CHS



ORIGIN ID: SAFA (805) 655-0960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TRNG BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

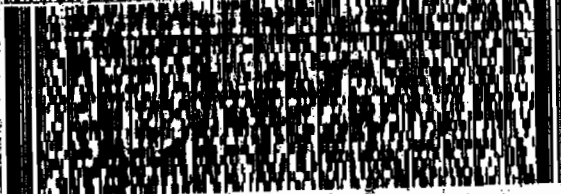
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ACTNGT: 42.0 LB MAN/
CAD: 0014176/CAFE2450

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

REF: 6B010AMR2A0515BYDO



THU - 18FEB A1
PRIORITY OVERNIGHT

MPS# 7209 7850 1003
0263

Mstr# 7209 7850 0989 0201

XX CHSA

29407
SC-US
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 10-1912**

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: 957929

Prep Batch Number: 957927

Sample Analysis

Sample ID	Client ID
247347001	RE15-10-8246
247347002	RE15-10-8245
247347003	RE15-10-8243
247347004	RE15-10-8244
247347005	RE15-10-8242
247347006	RE15-10-8240
247347007	RE15-10-8241
247347008	RE15-10-8267
1202054203	Interference Check Sample (ICS)
1202054199	Method Blank (MB)
1202054200	Laboratory Control Sample (LCS)
1202054201	247347002(RE15-10-8245) Matrix Spike (MS)
1202054202	247347002(RE15-10-8245) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

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CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 247347002 (RE15-10-8245) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

High recovery for Perchlorate-101 was observed in 1202054202 (MS). The recovery was 127% and the acceptance range is 75-125%. The high recovery may be the result of the spike standard or extraction procedure since a similar, but passing recovery, was observed for the LCS.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information

Holding Time Specifications

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those

10-1912-PERLCMS

holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

Data exception report (DER ID 798798) was generated for this SDG.

Manual Integrations

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

Method Comments

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

Additional Comments

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Certification Statement

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

Review Validation:

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

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

Reviewer:  Date: 3/5/2010

SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8246

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347001

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 06:54	per0302083a
	Perchlorate Isotope Ratio						1	03-MAR-10 06:54	per0302083a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 06:54	per0302083a
	Perchlorate-O(18)			4.89	ug/kg		1	03-MAR-10 06:54	per0302083a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8245

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347002

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

% Solids: 99.05

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.505	2.02	0.505	ug/kg	U	1	03-MAR-10 07:02	per0302084a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:02	per0302084a
14797-73-0	Perchlorate-101	.505	2.02	0.505	ug/kg	U	1	03-MAR-10 07:02	per0302084a
	Perchlorate-O(18)			5.08	ug/kg		1	03-MAR-10 07:02	per0302084a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8243

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347003

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 07:28	per0302087a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:28	per0302087a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 07:28	per0302087a
	Perchlorate-O(18)			5.07	ug/kg		1	03-MAR-10 07:28	per0302087a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8244
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 247347004
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 97.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.511	2.05	0.511	ug/kg	U	1	03-MAR-10 07:37	per0302088a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:37	per0302088a
14797-73-0	Perchlorate-101	.511	2.05	0.511	ug/kg	U	1	03-MAR-10 07:37	per0302088a
	Perchlorate-O(18)			5.18	ug/kg		1	03-MAR-10 07:37	per0302088a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 257927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8242

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347005

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	0.507	ug/kg	U	1	03-MAR-10 08:11	per0302092a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:11	per0302092a
14797-73-0	Perchlorate-101	.507	2.03	0.507	ug/kg	U	1	03-MAR-10 08:11	per0302092a
	Perchlorate-O(18)			4.97	ug/kg		1	03-MAR-10 08:11	per0302092a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 257927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8240

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347006

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

% Solids: 98.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 08:20	per0302093a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:20	per0302093a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 08:20	per0302093a
	Perchlorate-O(18)			5.22	ug/kg		1	03-MAR-10 08:20	per0302093a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 % Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8241

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347007

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:28	per0302094a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:28	per0302094a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:28	per0302094a
	Perchlorate-O(18)			4.91	ug/kg		1	03-MAR-10 08:28	per0302094a

[^] 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: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8267

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347008

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:37	per0302095a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:37	per0302095a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:37	per0302095a
	Perchlorate-O(18)			5.02	ug/kg		1	03-MAR-10 08:37	per0302095a

[^] 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): 10-1912

Extract Batch Code: 957927

Date Filtered: 26-FEB-10

Matrix: SOIL

Sample ID: 1202054200

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.46	ug/kg	123		70 - 130
Perchlorate Isotope Ratio		3.14				-
Perchlorate-101	2.00	2.47	ug/kg	124		70 - 130
Perchlorate-O(18)		5.18	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): 10-1912

Extract Batch Code: 957927

Date Filtered: 26-FEB-10

Matrix: SOIL

Sample ID: 1202054203

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.2	ug/kg	110		70 - 130
Perchlorate Isotope Ratio		2.95				
Perchlorate-101	2.00	2.36	ug/kg	118		70 - 130
Perchlorate-O(18)		4.91	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

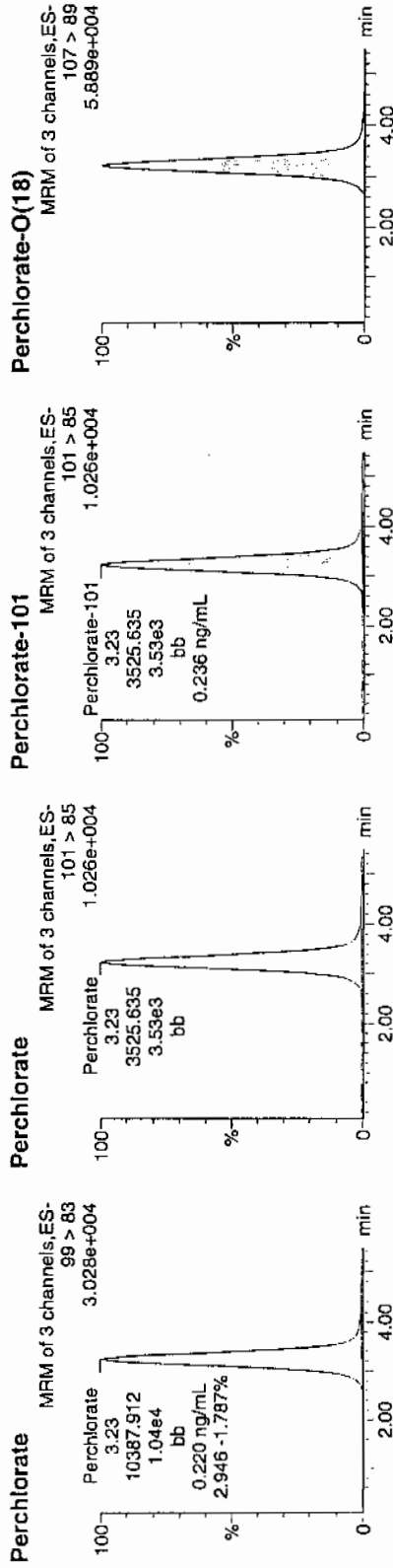
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

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

Name: per0302082a
Date: 03-Mar-2010
Time: 06:45:44
ID: 1202054203
Vial: 3:1,C

03-03-10

1202054203 | 5000 | 1.1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054203	Perchlorate	99 > 83	3.23	10387.912	10387.912	bb			0.2197	109.87	9.87	2202.8...	2.95
1202054203	Perchlorate-101	101 > 85	3.23	3525.635	3525.635	bb			0.2356	117.81	17.81	532.137	
1202054203	Perchlorate-O(18)	107 > 89	3.22	20280.904	20280.904	bb			0.4906	98.12	-1.88	9303.3...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 957927

GEL MS/PS ID: 1202054201

GEL MSD/PSD ID: 1202054202

GEL Job No (SDG): 10-1912

Date Extracted: 26-FEB-10

Client ID: RE15-10-8245

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.02	0.111	ug/kg	2.37	112	2.6	123	9.12	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.07		3.04		0		-
Perchlorate-101	2.02	0.142	ug/kg	2.44	114	2.7	127	10.1	30	75 - 125
Perchlorate-O(18)	0	5.08	ug/kg	5.03		5.17		2.82		-

[^] 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): 10-1912

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

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

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

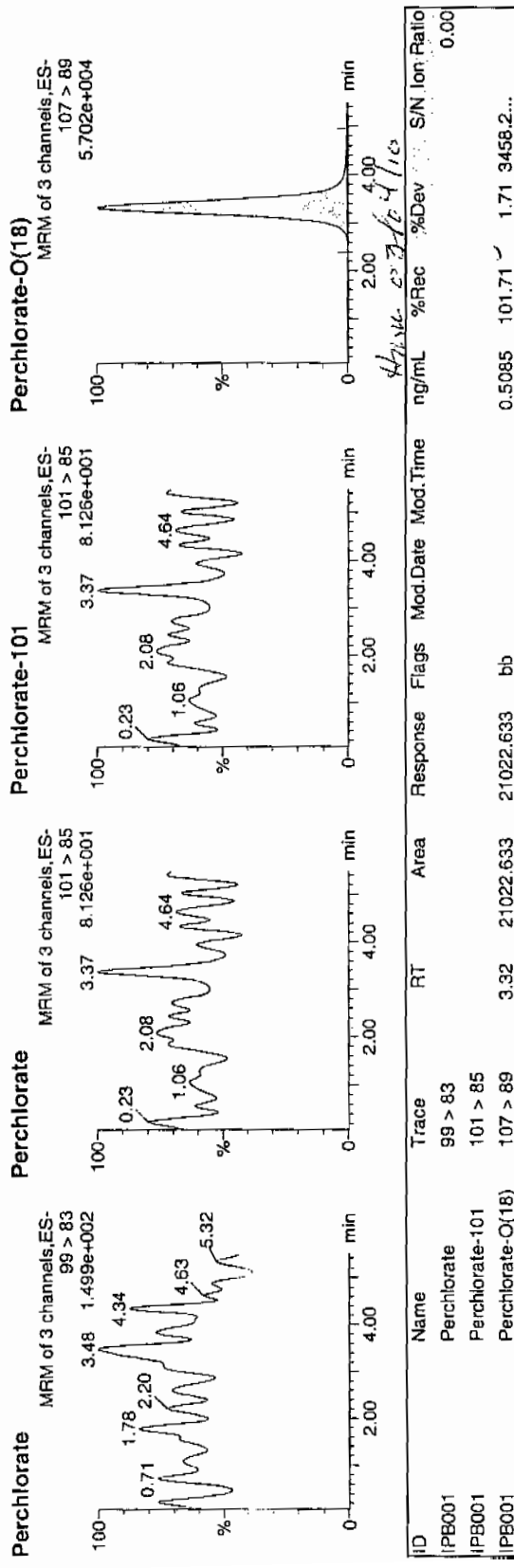
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Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

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Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030210a.cdb 03 Mar 2010 11:30:20

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

0303-10



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

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

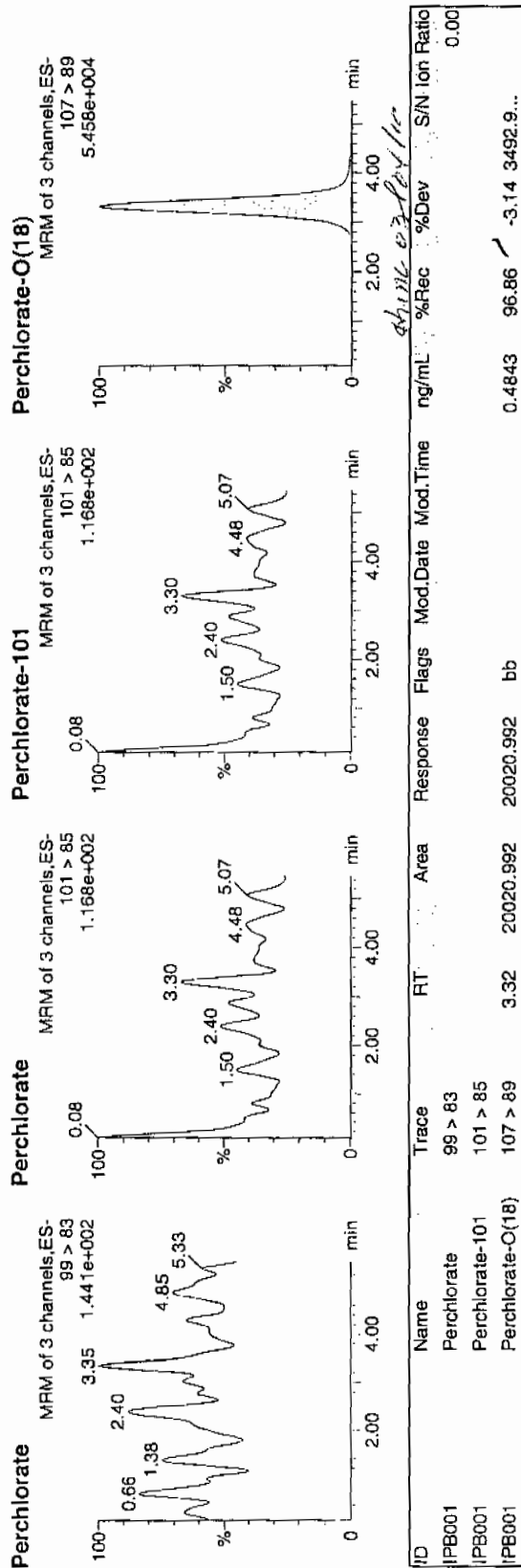
98 Name: per0302002a

Date: 02-Mar-2010

Time: 19:18:55

ID: IPB001

Vial: 1:1,A



Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1912

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	02-MAR-10	per0302008a	IPB002
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302008a	IPB002
Perchlorate	0.00	0	NA	02-MAR-10	per0302010a	IPB003
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302010a	IPB003
Perchlorate	0.00	0	NA	02-MAR-10	per0302022a	IPB004
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302022a	IPB004
Perchlorate	0.00	0	NA	02-MAR-10	per0302033a	IPB005
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302033a	IPB005
Perchlorate	0.00	0	NA	03-MAR-10	per0302044a	IPB006
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302044a	IPB006
Perchlorate	0.00	0	NA	03-MAR-10	per0302056a	IPB007
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302056a	IPB007
Perchlorate	0.00	0	NA	03-MAR-10	per0302067a	IPB008

Perchlorate Continuing Calibration Blank

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Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1912Lab Code: GELReporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302067a	IPB008
Perchlorate	0.00	0	NA	03-MAR-10	per0302078a	IPB009
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302078a	IPB009
Perchlorate	0.00	0	NA	03-MAR-10	per0302090a	IPB010
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302090a	IPB010
Perchlorate	0.00	0	NA	03-MAR-10	per0302101a	IPB011
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302101a	IPB011

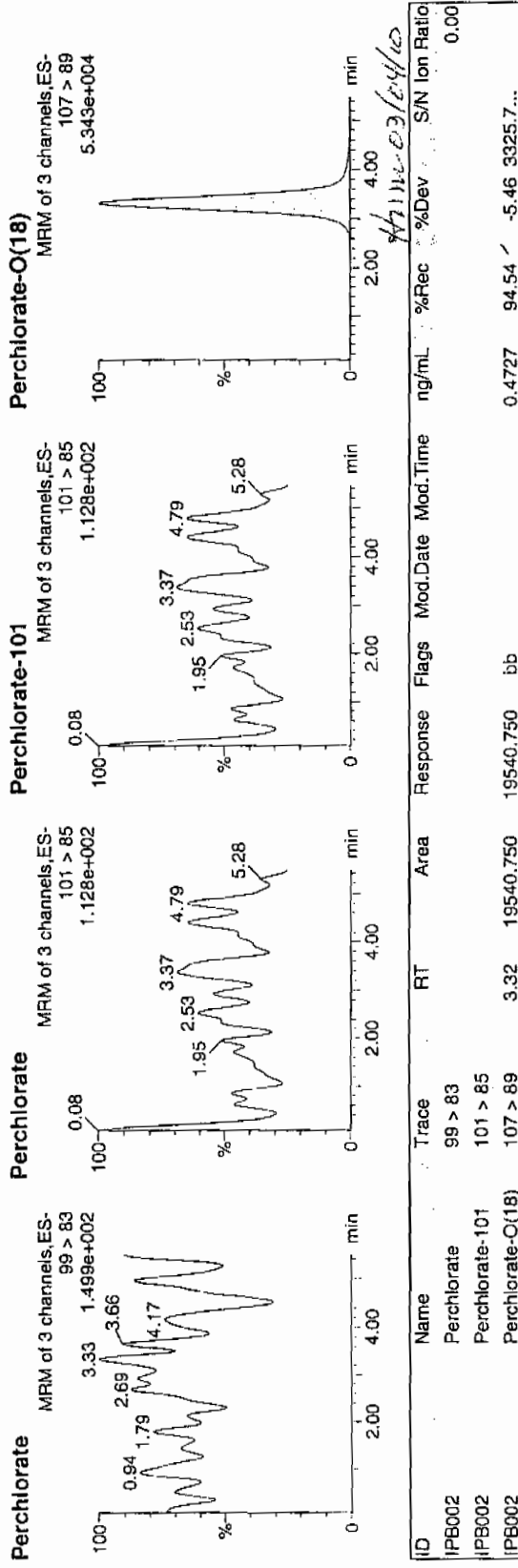
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

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

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

Name: per0302008a
Date: 02-Mar-2010
Time: 20:10:03
ID: IPB002
Vial: 1:1,A

03-03-10

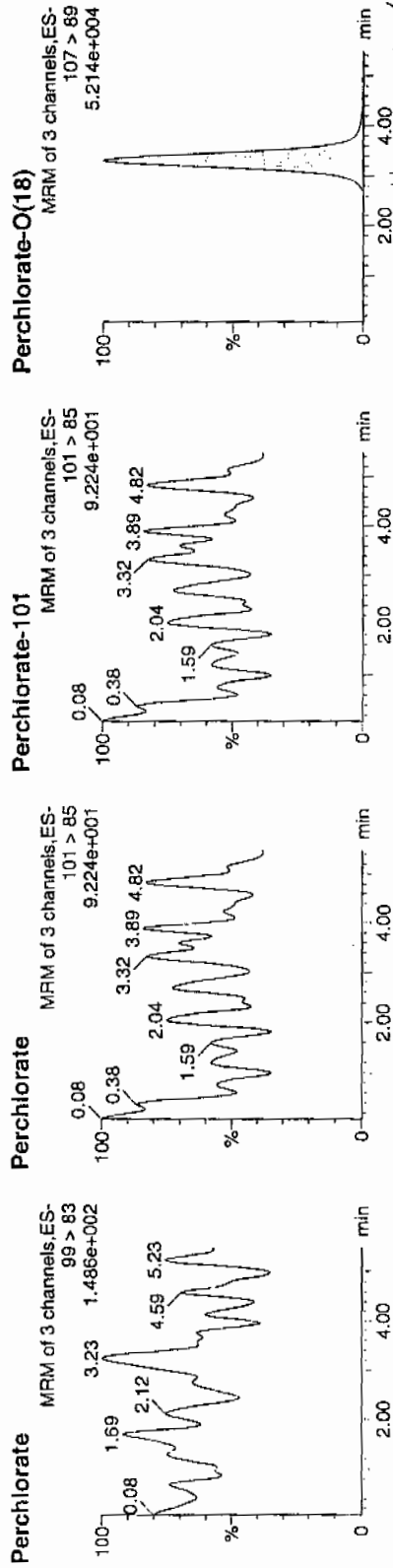


Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

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

1
Name: per0302010a
Date: 02-Mar-2010
Time: 20:27:08
ID: IPB003
Vial: 1:1,A

03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	3.31	19196.836	19196.836	bb			0.4644	92.87	-7.13	3700.2...	

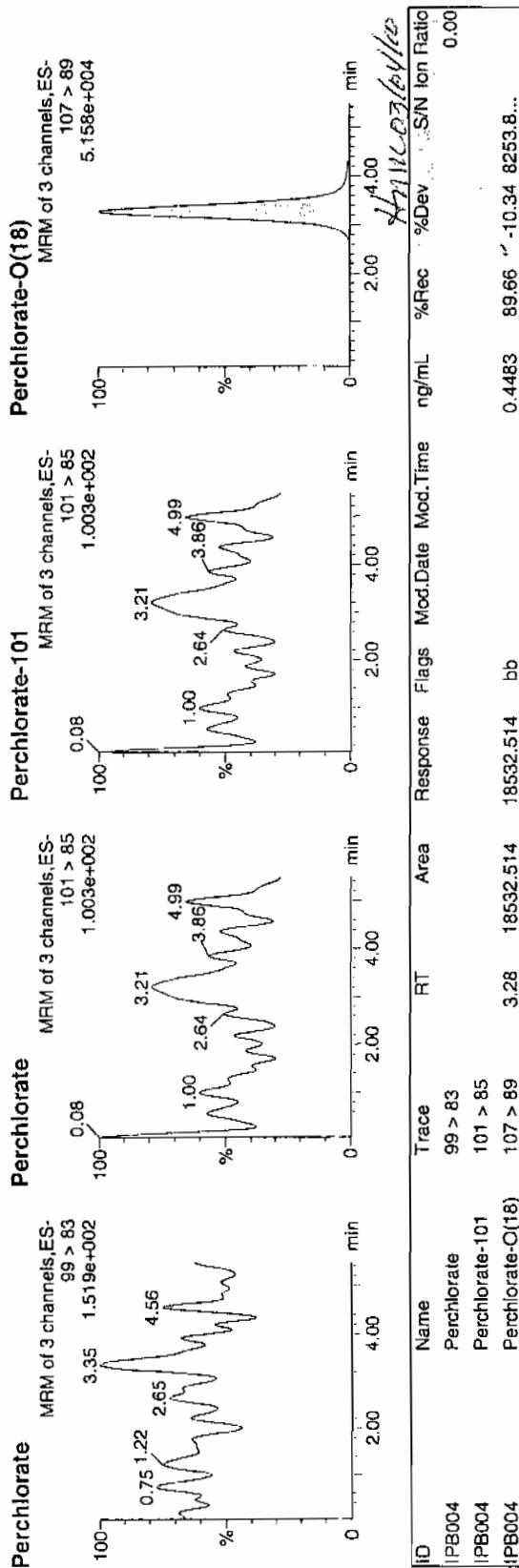
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

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

03-03-10



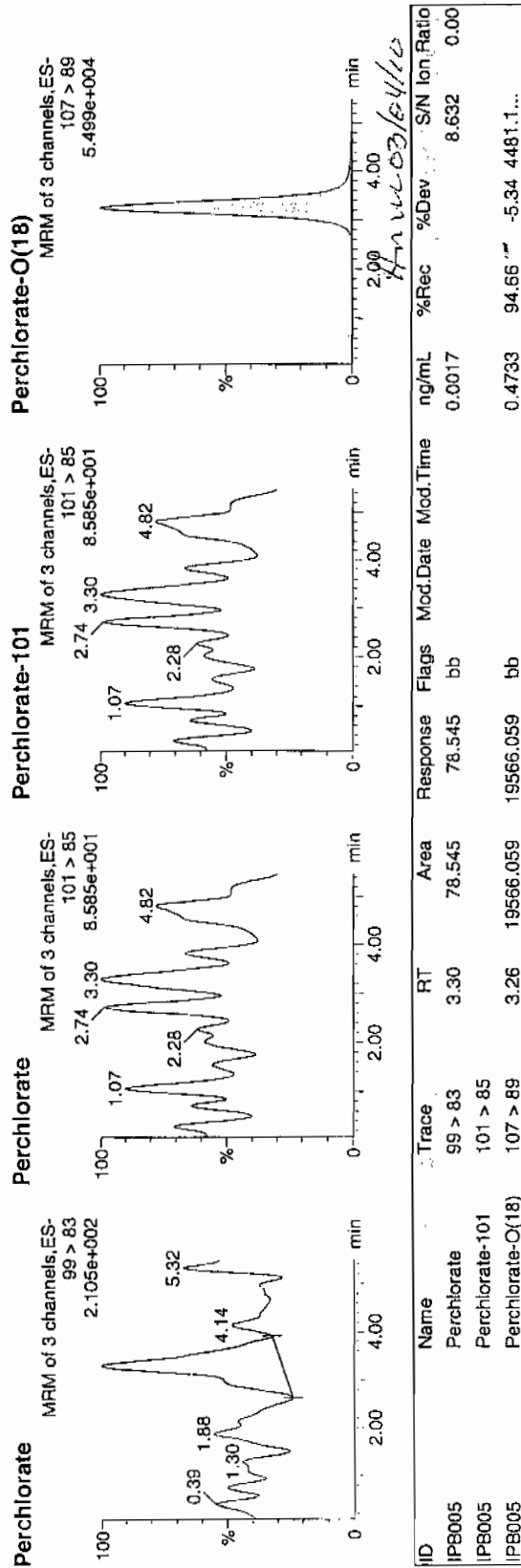
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

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

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

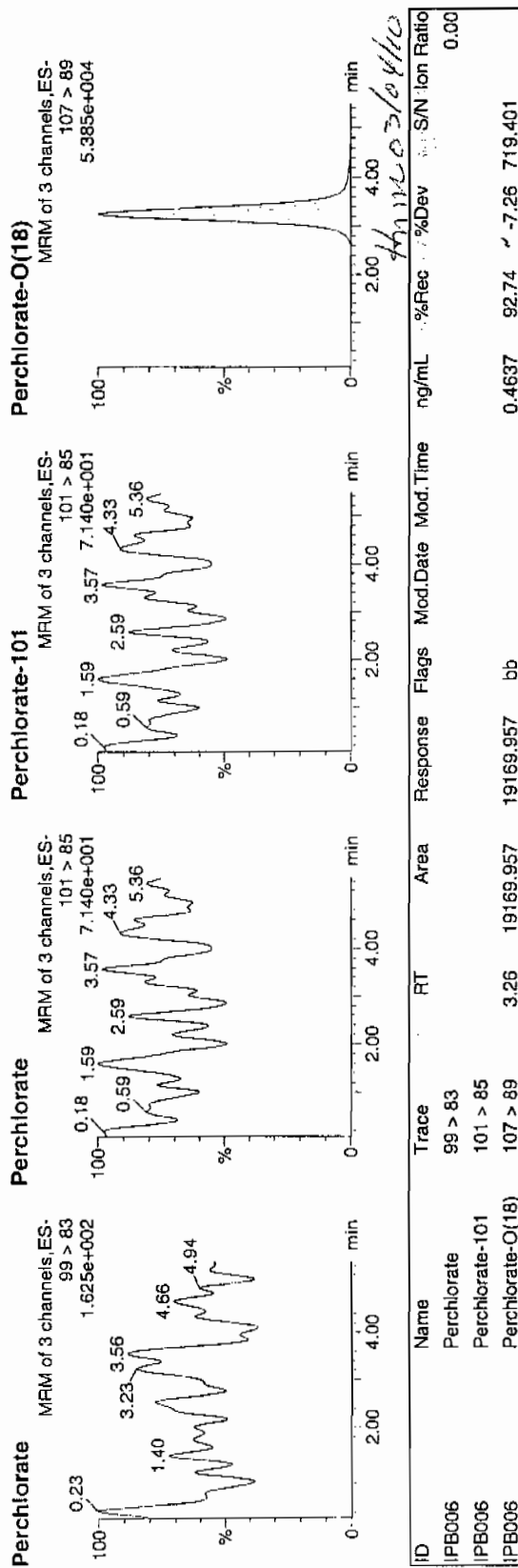
Name: per0302033a
Date: 02-Mar-2010
Time: 23:44:14
ID: IPB005
Vial: 1:1,A

03-03-10



Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld
Printed: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time
Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85	3.26	19169.957	19169.957	bb			0.4637	92.74	-7.26	719.401	
IPB006	Perchlorate-O(18)	107 > 89											

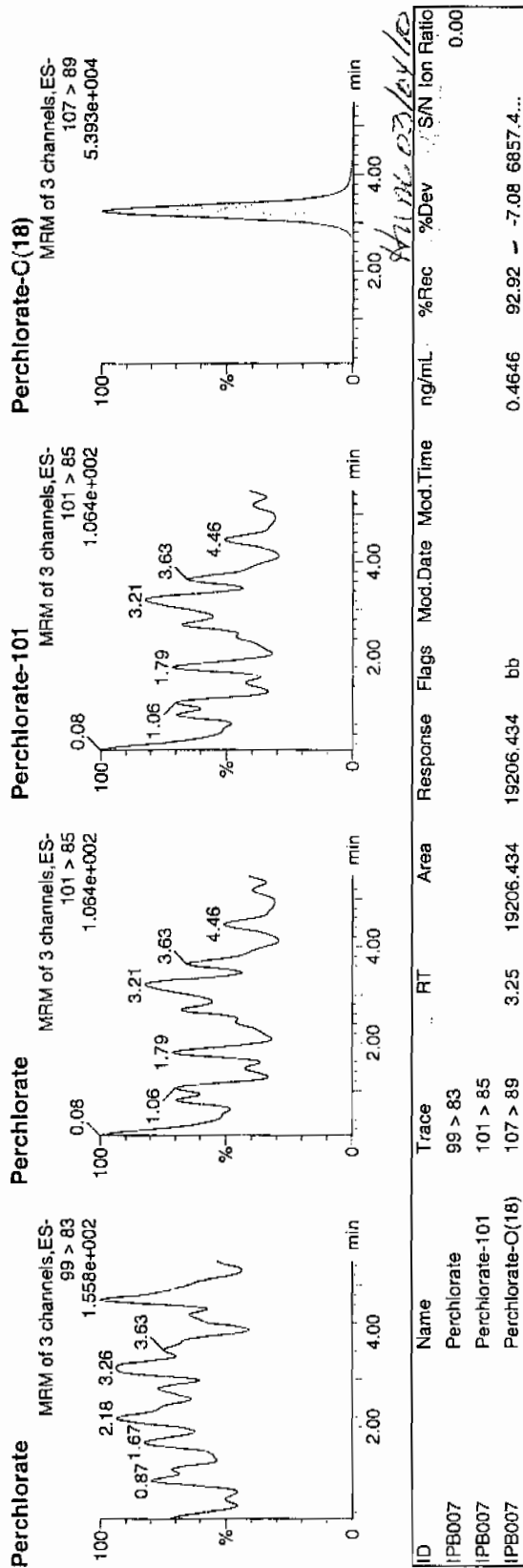
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302056a
Date: 03-Mar-2010
Time: 03:01:57
ID: IPB007
Vial: 1:1,A

03-03-10



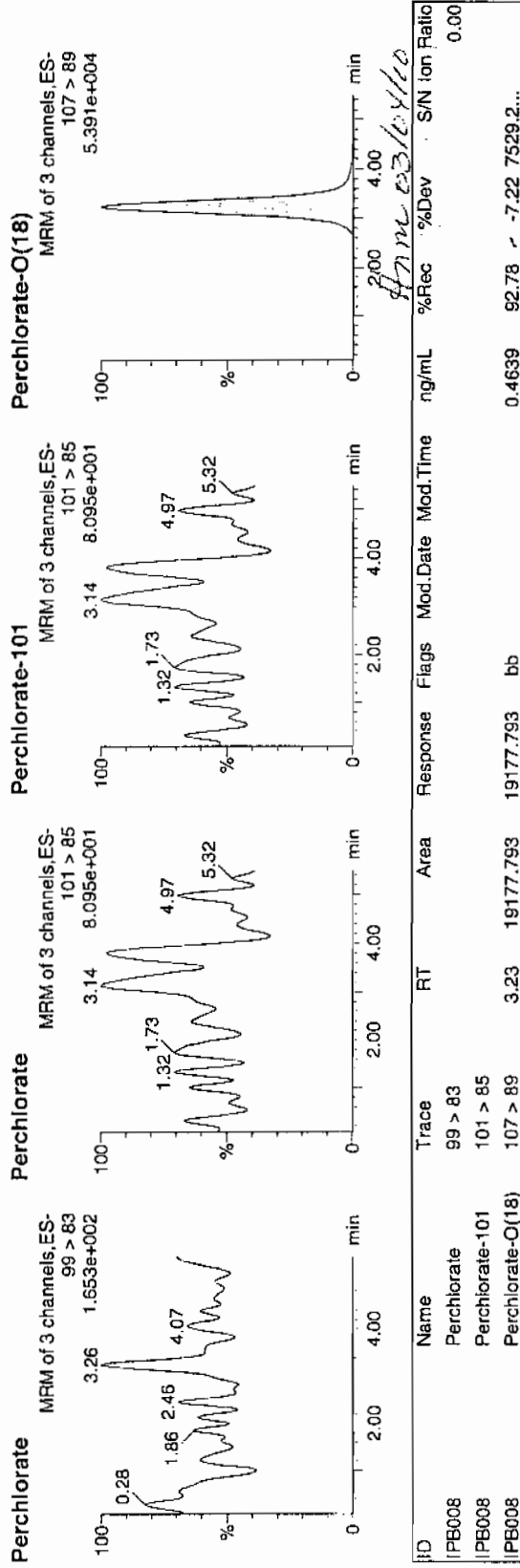
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302067a
Date: 03-Mar-2010
Time: 04:36:29
ID: IPB008
Vial: 1:1,A

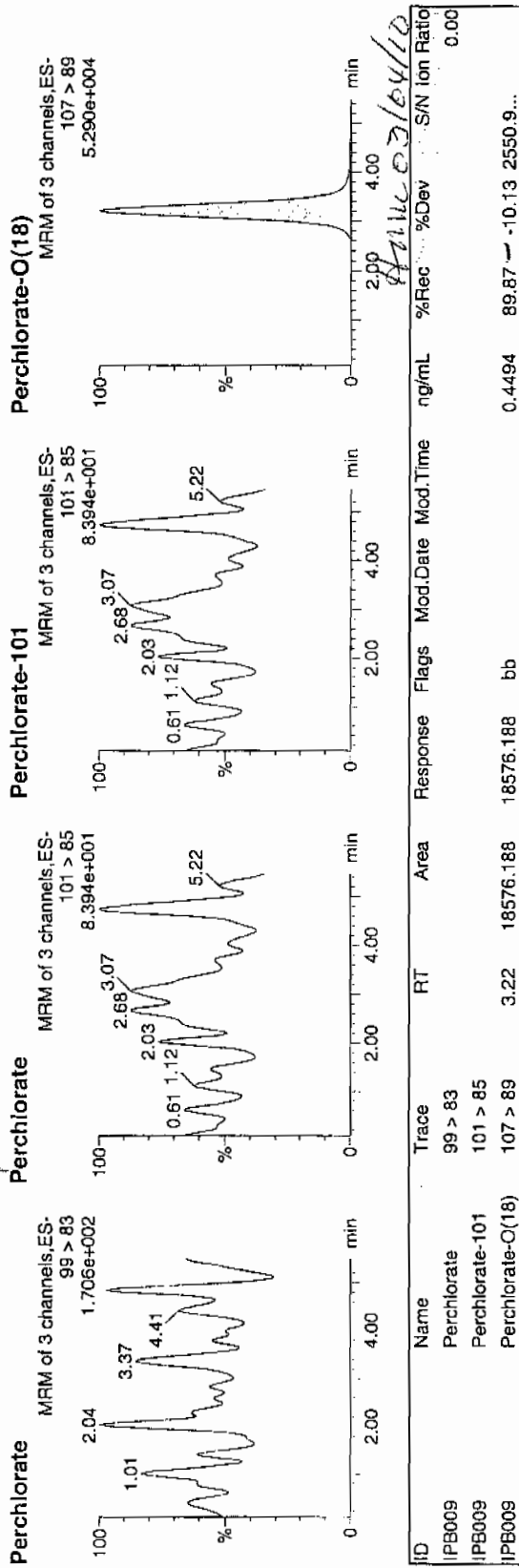
03-03-10



Quantify Sample Report MassLynx 4.0 SP4
 The GEL Group, LLC Analyst: Charters W. Wilson
 Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld
 Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time
 Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302078a
 Date: 03-Mar-2010
 Time: 06:11:06
 ID: IPB009
 Vial: 1:1,A

03-03-10



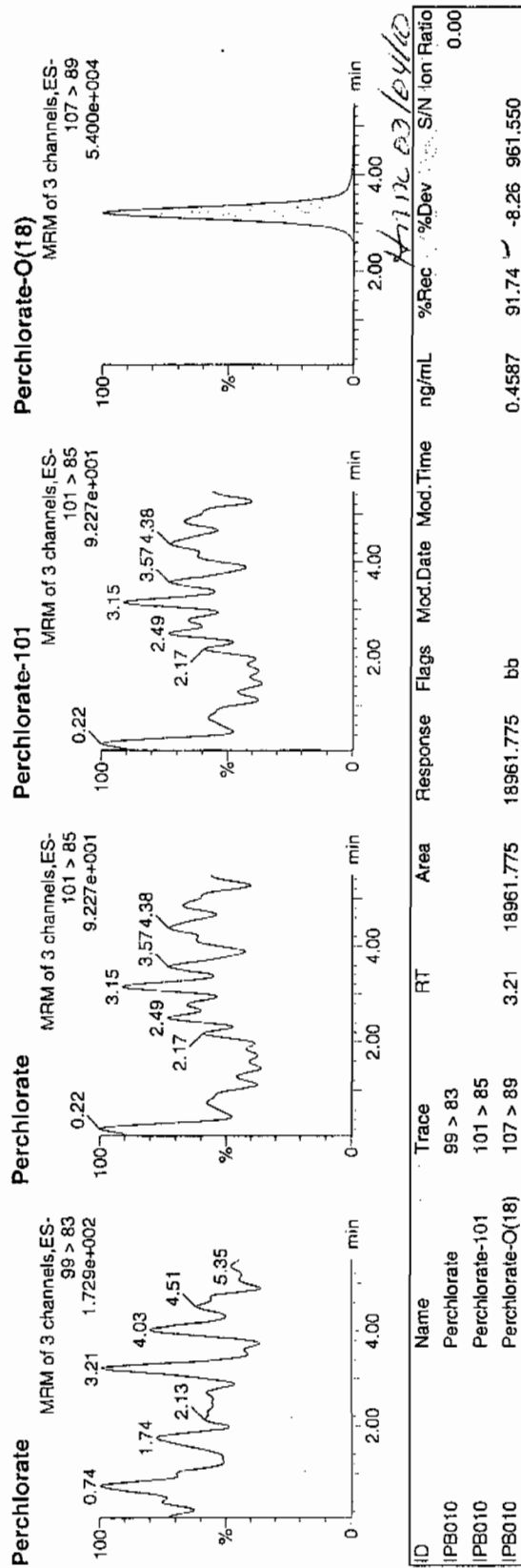
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

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

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

Name: per0302090a
Date: 03-Mar-2010
Time: 07:54:26
ID: IPB010
Vial: 1:1.A

03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB010	Perchlorate	99 > 83											0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	3.21	18961.775	18961.775	bb			0.4587	91.74	-8.26	961.550	

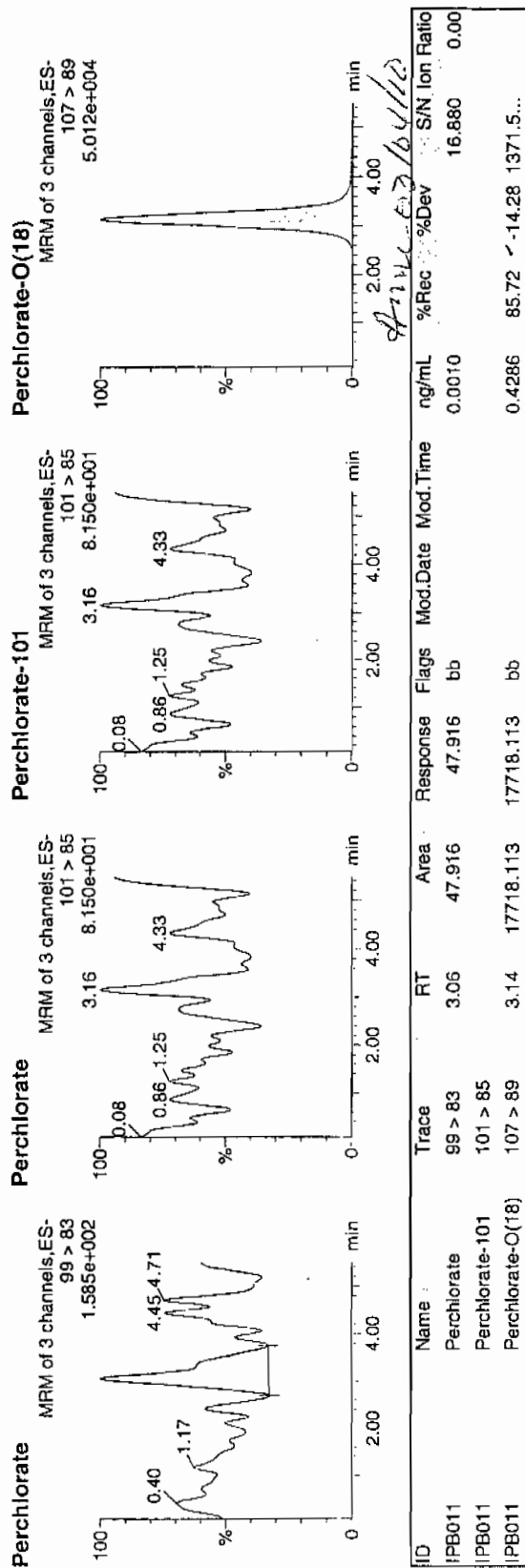
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302101a
Date: 03-Mar-2010
Time: 09:29:07
ID: IPB011
Vial: 1:1,A

03-03-10



Nairb.ref

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

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

QUANTO ULTIMA: nairb 01.08.08.ca

Calibration Report - MS1 Static

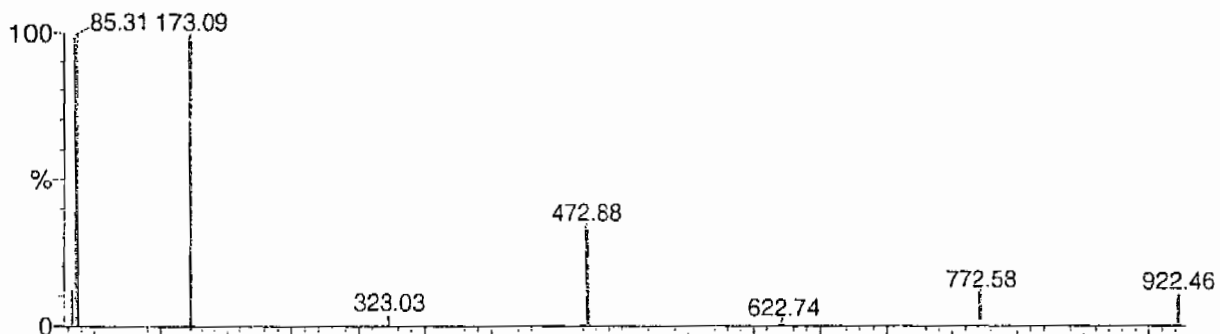
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

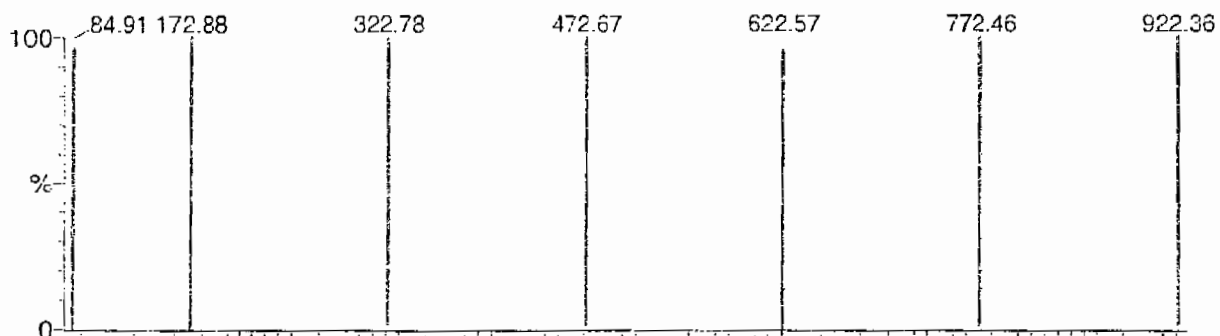
DATA HIGHLIGHTED BY GEL 01-08-08

Data file: STATMS1 - Uncalibrated

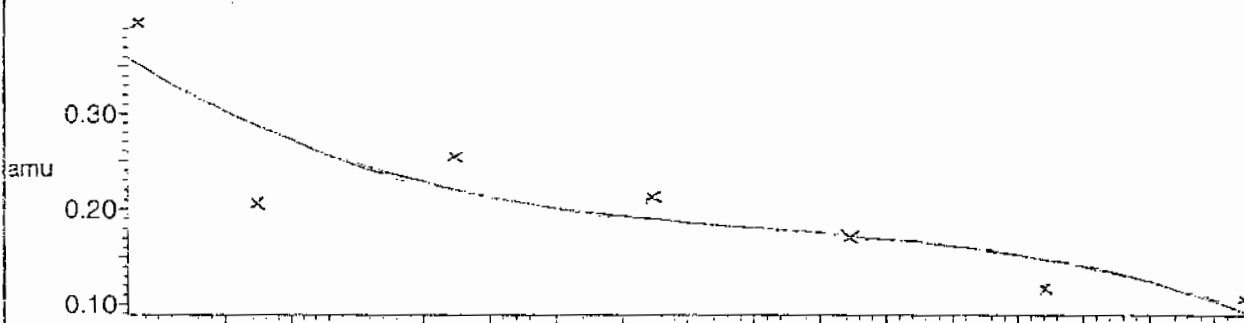
7 matches of 7 tested references



Reference file: Nairb

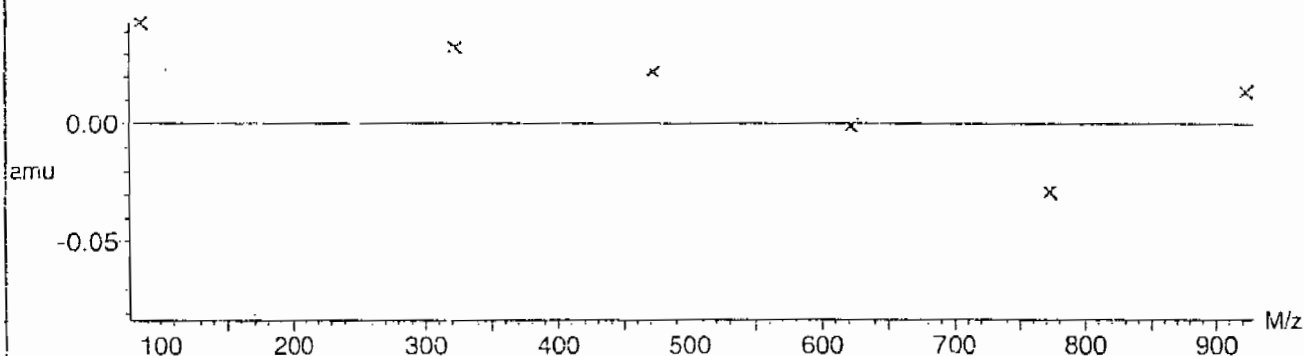


Mass difference (Raw - Ref mass)



Residuals

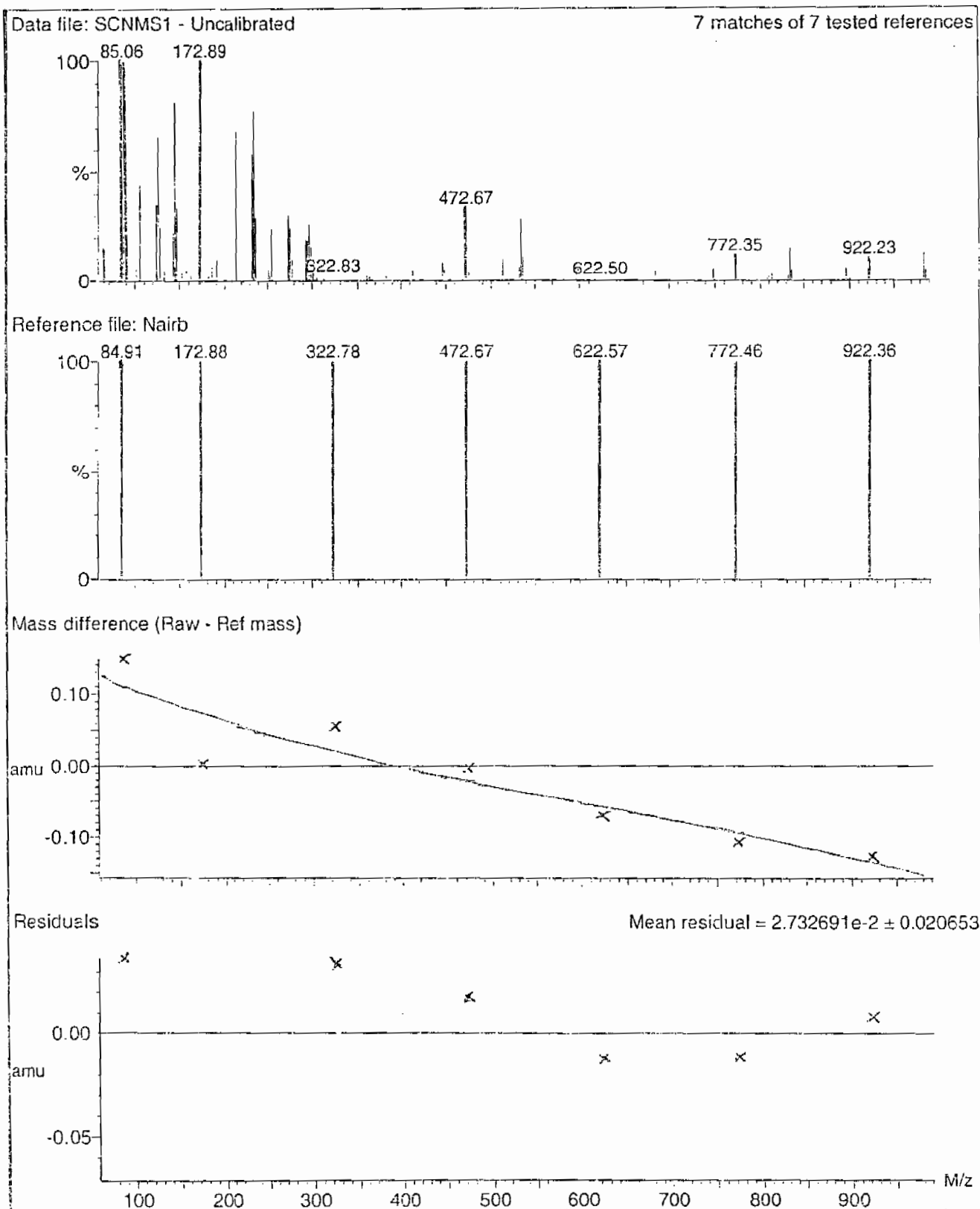
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

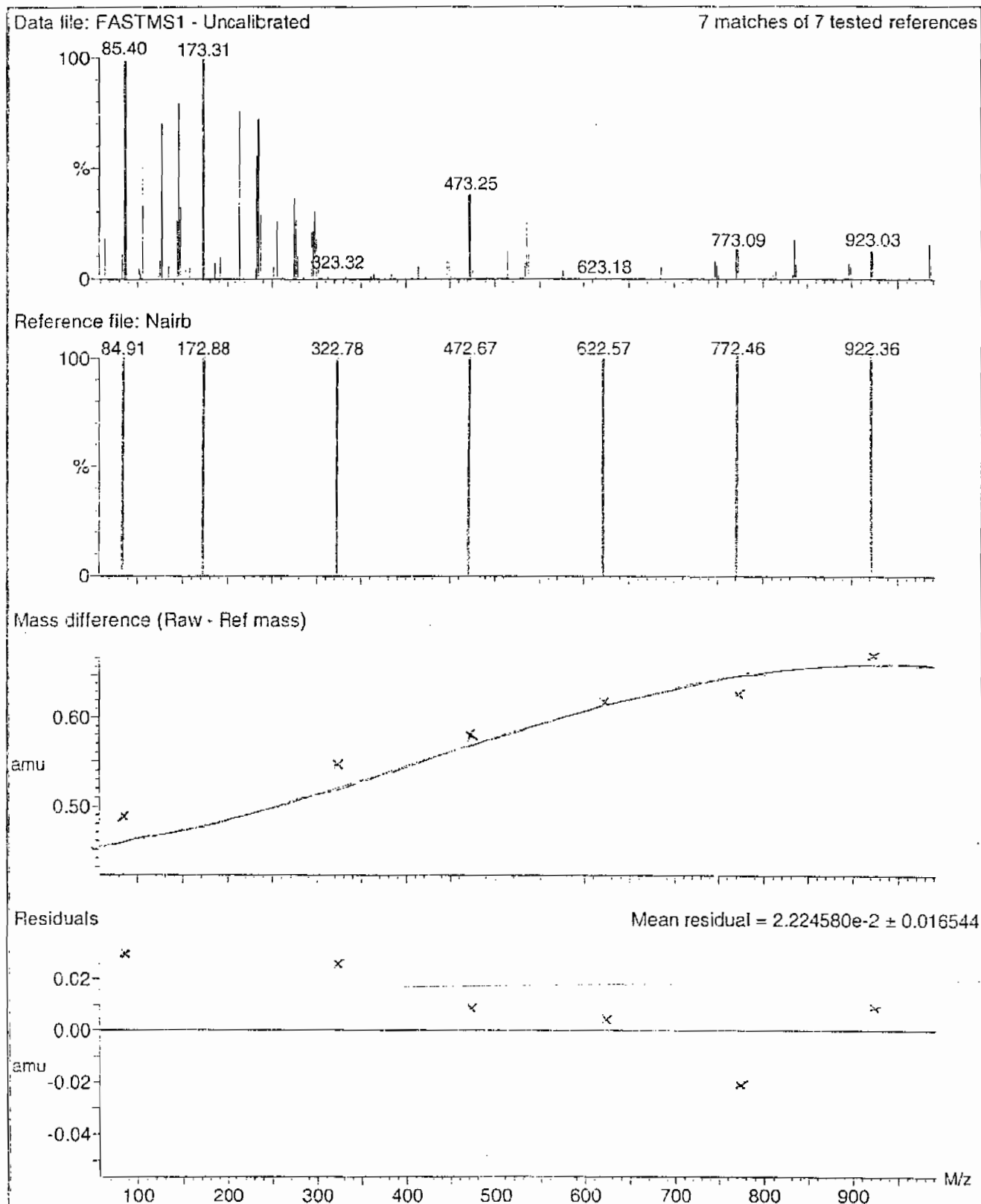
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

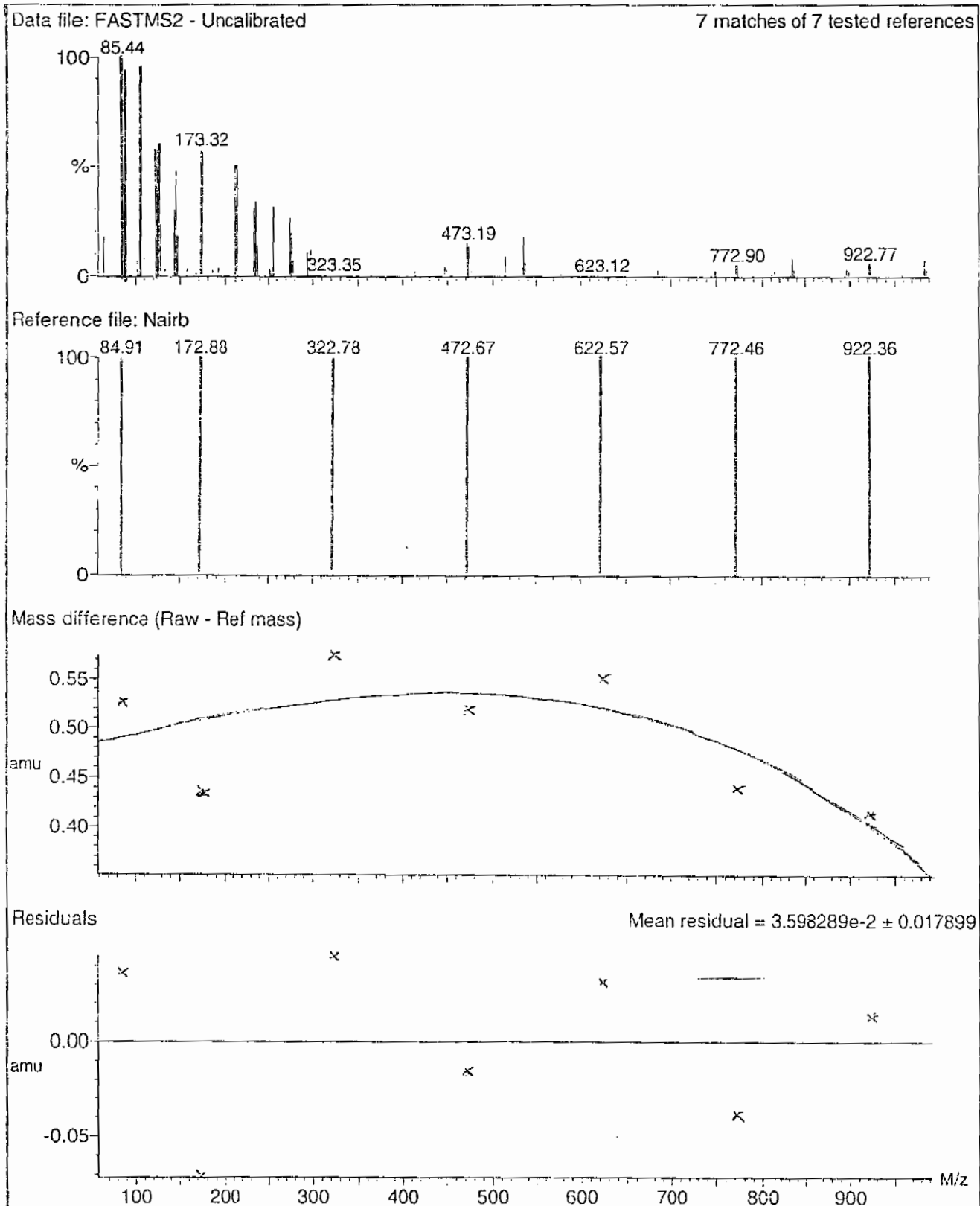
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

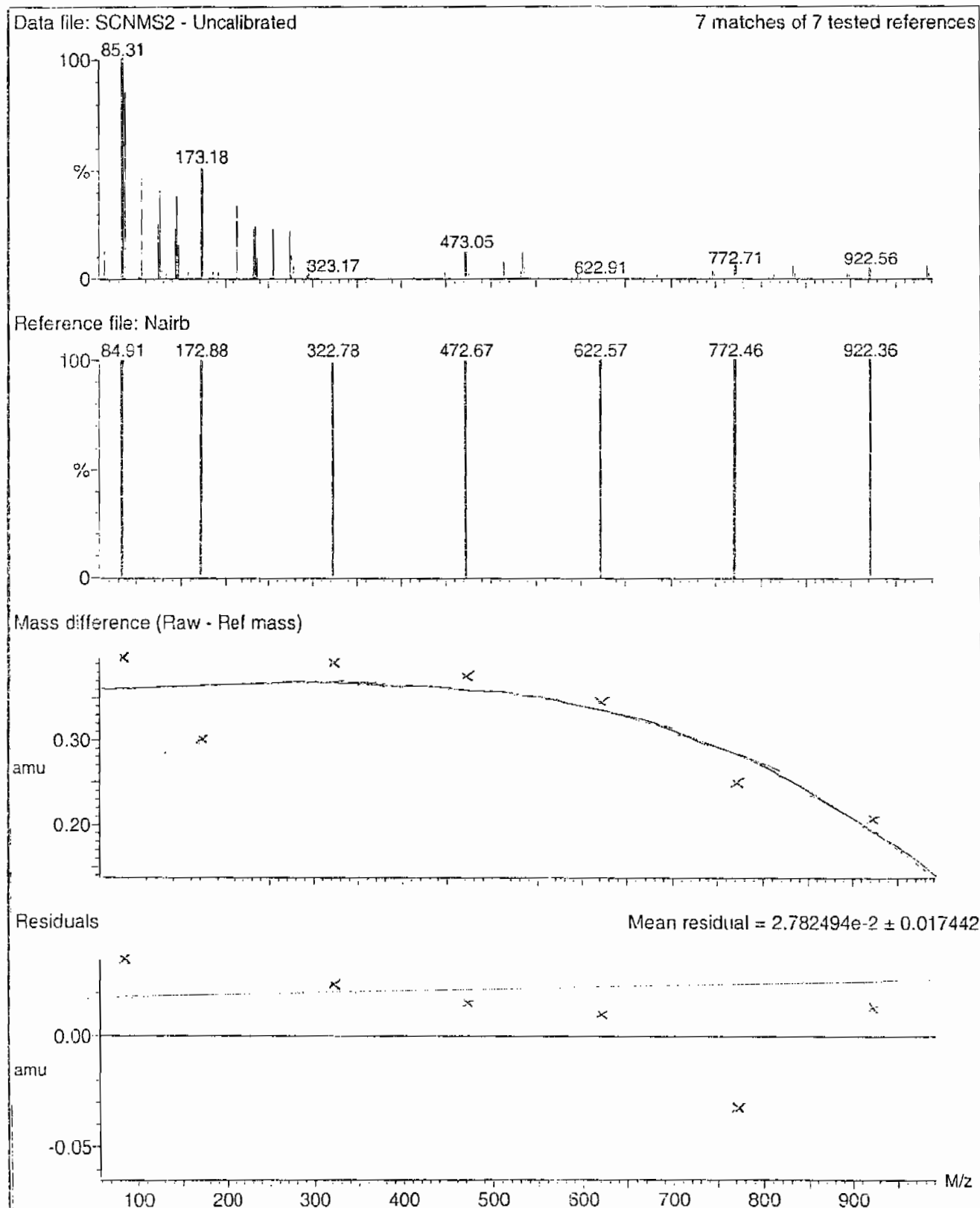
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



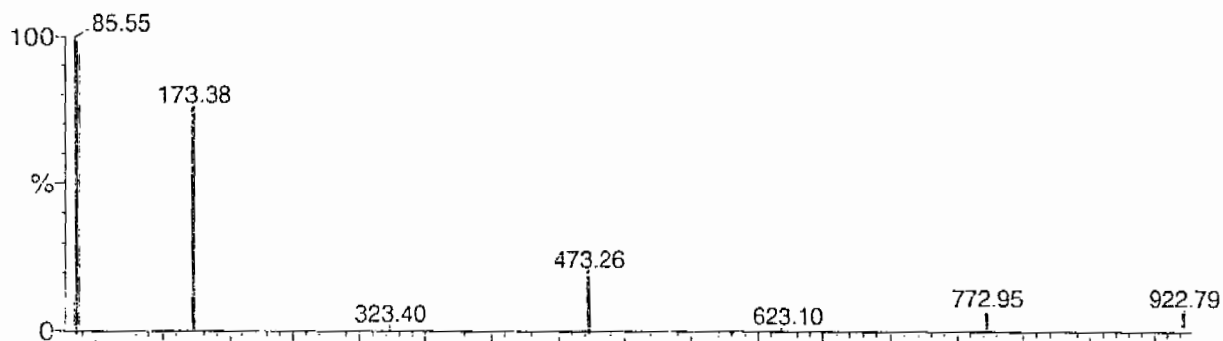
Calibration Report - MS2 Static

Page 1 of 1

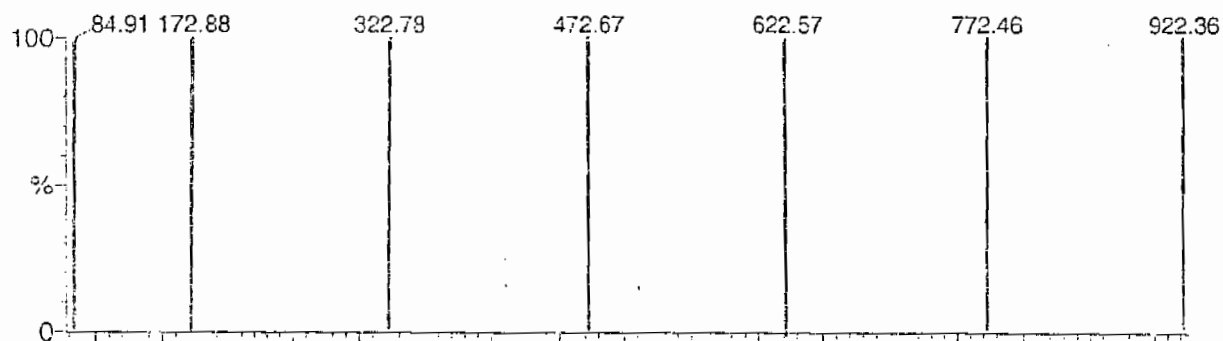
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

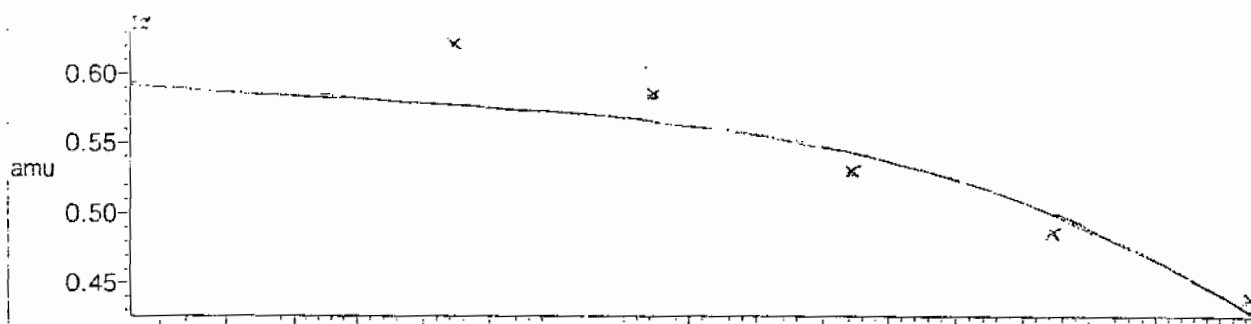
7 matches of 7 tested references



Reference file: Nairb

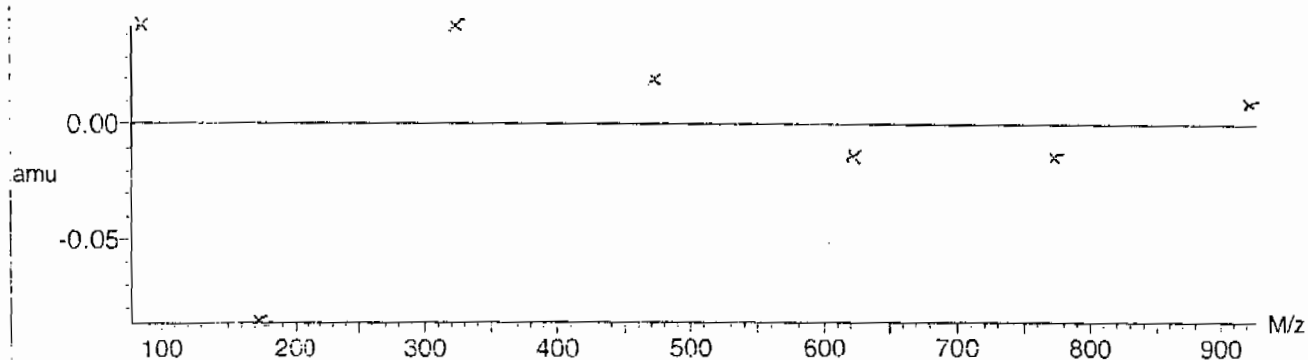


Mass difference (Raw - Ref mass)



Residuals

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



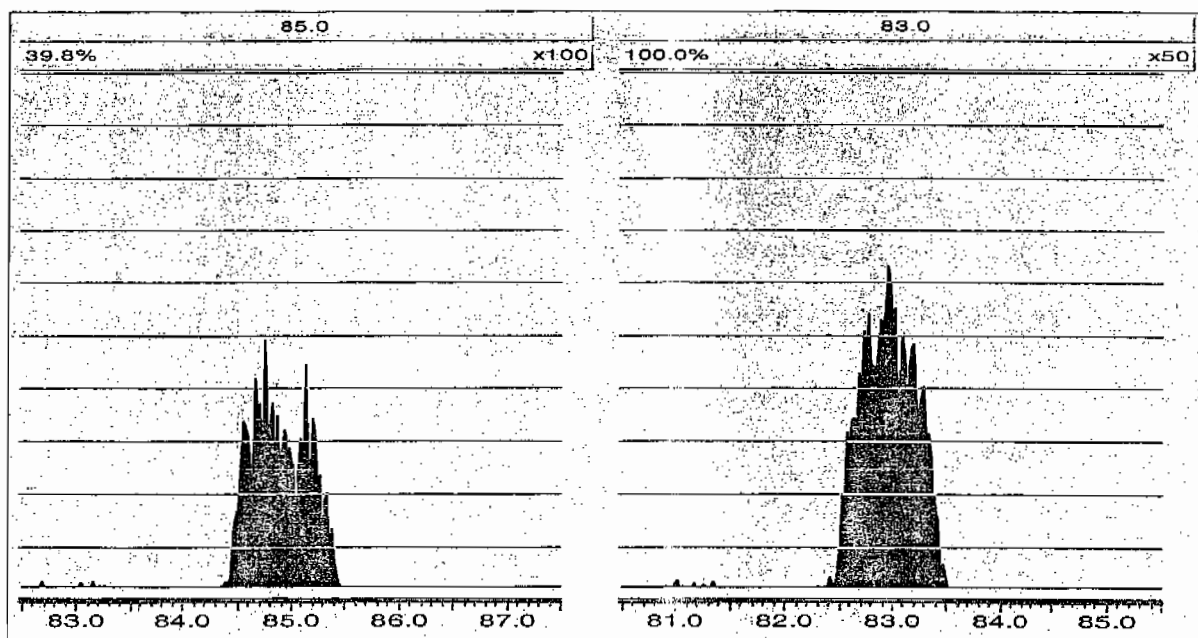
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

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



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0302006a	02-MAR-10	20869.1				
Lower Area Limit			10434.55				
Upper Area Limit			41738.2				
1202054199	per0302080a	03-MAR-10 06:28	19787.3	3.22	3.24682	1.008	
1202054200	per0302081a	03-MAR-10 06:37	21424.1	3.22	3.23435	1.004	
1202054203	per0302082a	03-MAR-10 06:45	20280.9	3.22	3.23435	1.004	
247347001	per0302083a	03-MAR-10 06:54	19881.1	3.21	3.19707	.996	
247347002	per0302084a	03-MAR-10 07:02	20800.7	3.21	3.23435	1.008	
1202054201	per0302085a	03-MAR-10 07:11	20590.8	3.2	3.22187	1.007	
1202054202	per0302086a	03-MAR-10 07:19	21180.6	3.32	3.33372	1.004	
247347003	per0302087a	03-MAR-10 07:28	20638.4	3.2	3.20957	1.003	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0302006a	02-MAR-10	20869.1				
Lower Area Limit			10434.55				
Upper Area Limit			41738.2				
247347004	per0302088a	03-MAR-10 07:37	20954.4	3.2	3.20955	1.003	
247347005	per0302092a	03-MAR-10 08:11	20269.2	3.21	3.2219	1.004	
247347006	per0302093a	03-MAR-10 08:20	21233.8	3.2	3.1971	.999	
247347007	per0302094a	03-MAR-10 08:28	20048.5	3.18	3.20958	1.009	
247347008	per0302095a	03-MAR-10 08:37	20487.9	3.2	3.19708	.999	

SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8246
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 247347001
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 98.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 06:54	per0302083a
	Perchlorate Isotope Ratio						1	03-MAR-10 06:54	per0302083a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 06:54	per0302083a
	Perchlorate-O(18)			4.89	ug/kg		1	03-MAR-10 06:54	per0302083a

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

*Concentration =

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

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

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

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

Name: per0302083a

Date: 03-Mar-2010

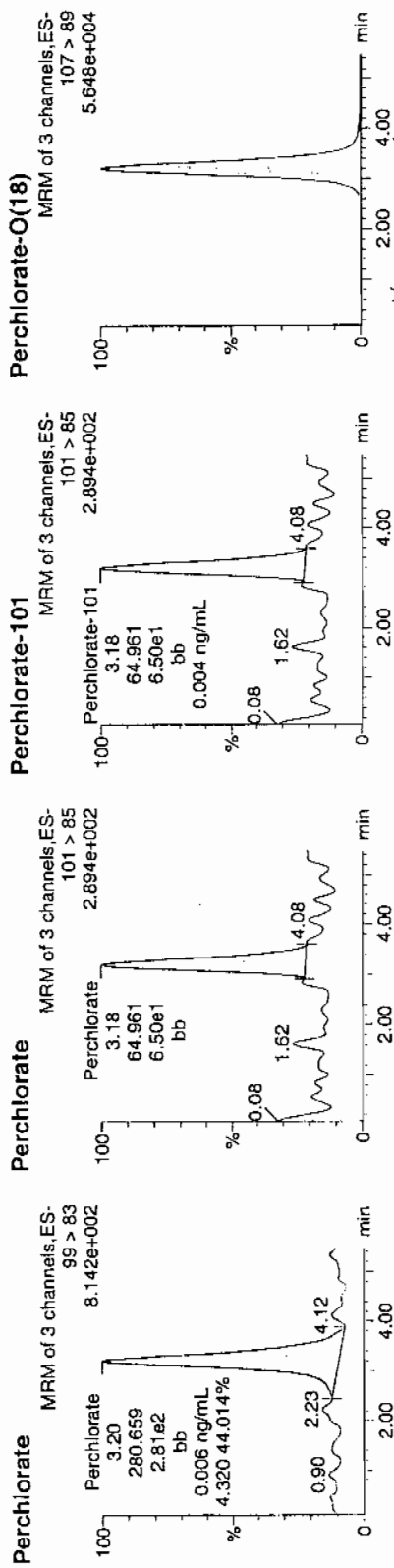
Time: 06:54:24

ID: 247347001

Vial: 3:1,D

03-03-10

12700 | 957424 | 2002 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347001	Perchlorate	99 > 83	3.20	280.659	280.659	bb			0.0059			54.156	4.32
247347001	Perchlorate-101	101 > 85	3.18	64.961	64.961	bb			0.0043			16.089	
247347001	Perchlorate-O(18)	107 > 89	3.21	19881.064	19881.064	bb			0.4809	96.18	-3.82	6420.4...	

SWA4
200500

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: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8245

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347002

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 99.05

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.505	2.02	0.505	ug/kg	U	1	03-MAR-10 07:02	per0302084a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:02	per0302084a
14797-73-0	Perchlorate-101	.505	2.02	0.505	ug/kg	U	1	03-MAR-10 07:02	per0302084a
	Perchlorate-O(18)			5.08	ug/kg		1	03-MAR-10 07:02	per0302084a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302084a

Date: 03-Mar-2010

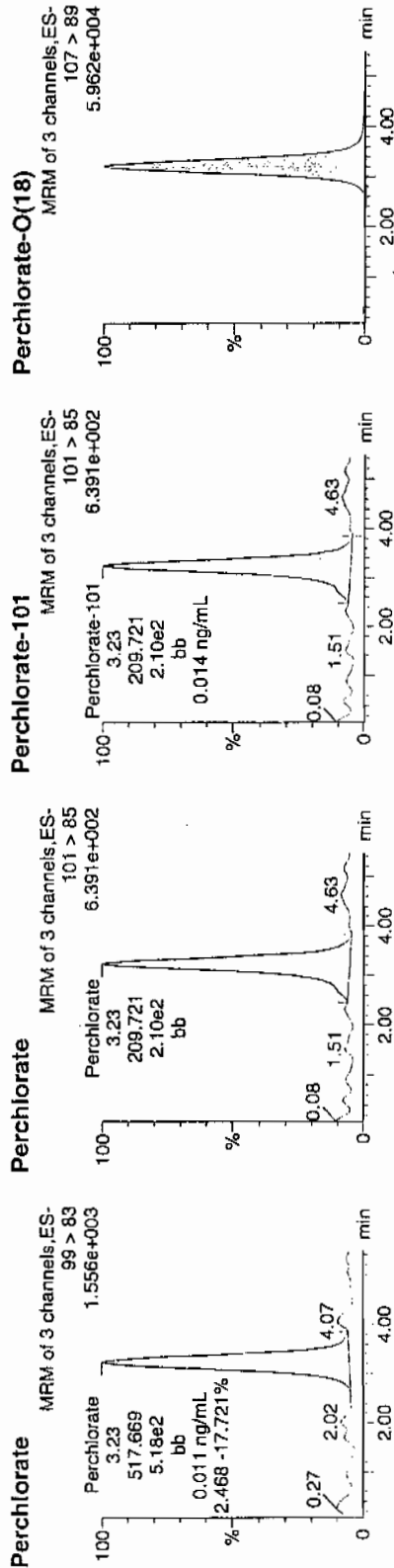
Time: 07:02:55

ID: 247347002

Vial: 3:1,E

03-03-10

16722 | 957924 | 5000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347002	Perchlorate	99 > 83	3.23	517.669	517.669	bb			0.0110			64.416	2.47
247347002	Perchlorate-101	101 > 85	3.23	209.721	209.721	bb			0.0140			40.877	
247347002	Perchlorate-O(18)	107 > 89	3.21	20800.707	20800.707	bb			0.5032	100.63	0.63	7126.0...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8243

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347003

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 98.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 07:28	per0302087a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:28	per0302087a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 07:28	per0302087a
	Perchlorate-O(18)			5.07	ug/kg		1	03-MAR-10 07:28	per0302087a

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

*Concentration =

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

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

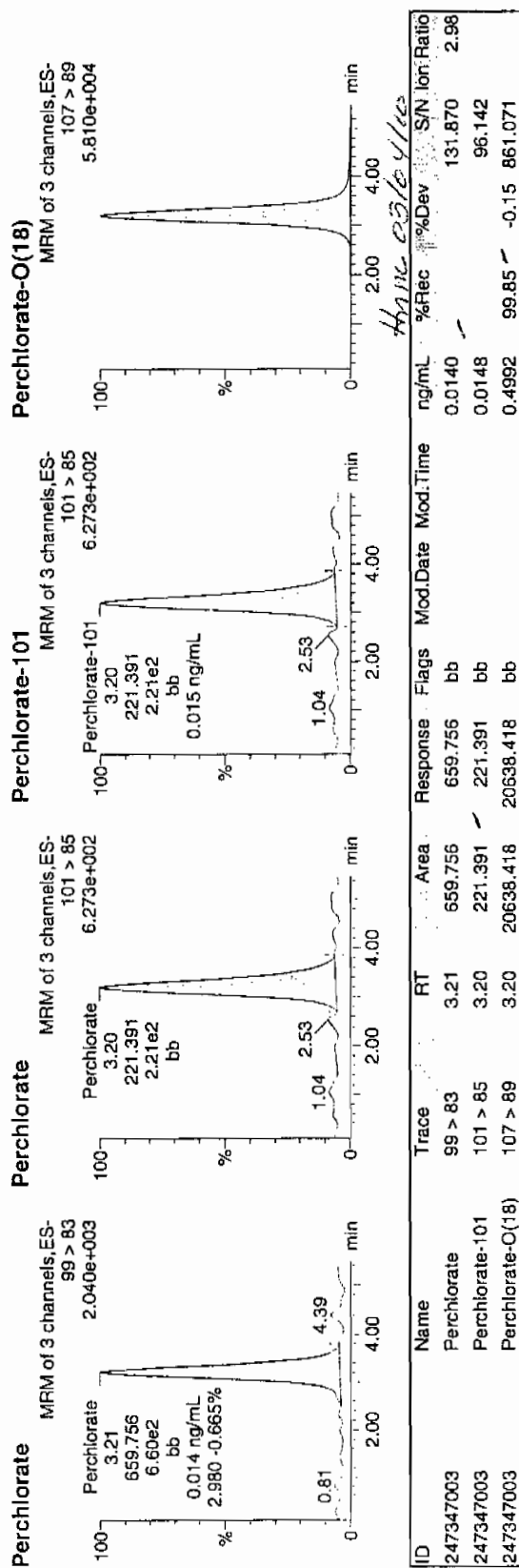
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

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

Name: per0302087a
Date: 03-Mar-2010
Time: 07:28:29
ID: 247347003
Vial: 3:2.B

WWD
03-03-10

LAJUL 957429 | 3000 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347003	Perchlorate	99 > 83	3.21	659.756	659.756	bb			0.0140			131.870	2.98
247347003	Perchlorate-101	101 > 85	3.20	221.391	221.391	bb			0.0148			96.142	
247347003	Perchlorate-O(18)	107 > 89	3.20	20638.418	20638.418	bb			0.4992	99.85	-0.15	861.071	

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8244

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347004

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 97.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.511	2.05	0.511	ug/kg	U	1	03-MAR-10 07:37	per0302088a
	Perchlorate Isotope Ratio						1	03-MAR-10 07:37	per0302088a
14797-73-0	Perchlorate-101	.511	2.05	0.511	ug/kg	U	1	03-MAR-10 07:37	per0302088a
	Perchlorate-O(18)			5.18	ug/kg		1	03-MAR-10 07:37	per0302088a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302088a

Date: 03-Mar-2010

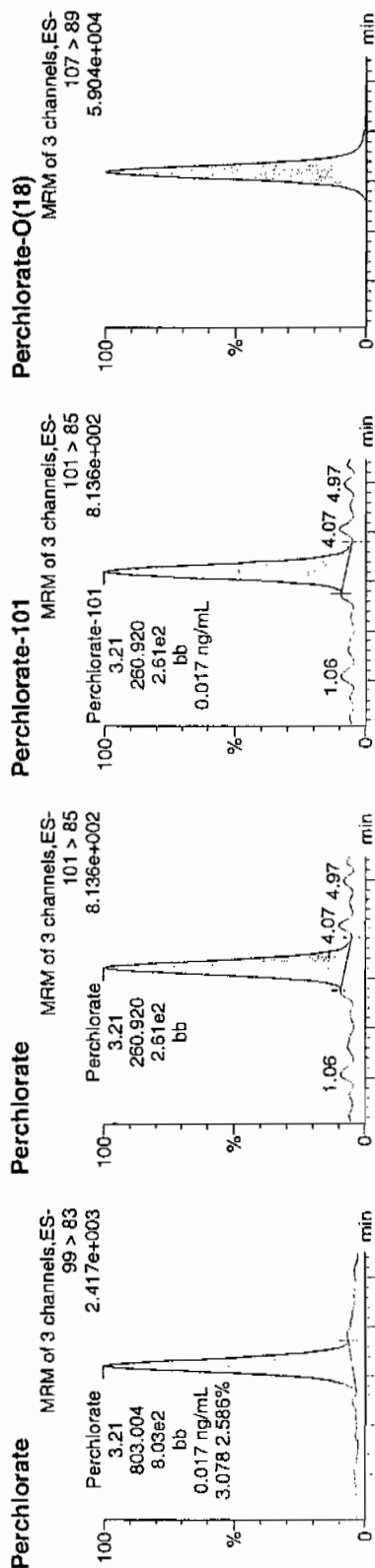
Time: 07:37:01

ID: 247347004

Vial: 3:2,C

03-03-10

15726 | 957929 | 50020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347004	Perchlorate	99 > 83	3.21	803.004	803.004	bb			0.0170			191.355	3.08
247347004	Perchlorate-101	101 > 85	3.21	260.920	260.920	bb			0.0174			13.349	
247347004	Perchlorate-O(18)	107 > 89	3.20	20954.391	20954.391	bb			0.5069	101.38	1.38	684.364	

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: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8242

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 247347005

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 28.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	0.507	ug/kg	U	1	03-MAR-10 08:11	per0302092a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:11	per0302092a
14797-73-0	Perchlorate-101	.507	2.03	0.507	ug/kg	U	1	03-MAR-10 08:11	per0302092a
	Perchlorate-O(18)			4.97	ug/kg		1	03-MAR-10 08:11	per0302092a

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

*Concentration =

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

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

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

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

Name: per0302092a

Date: 03-Mar-2010

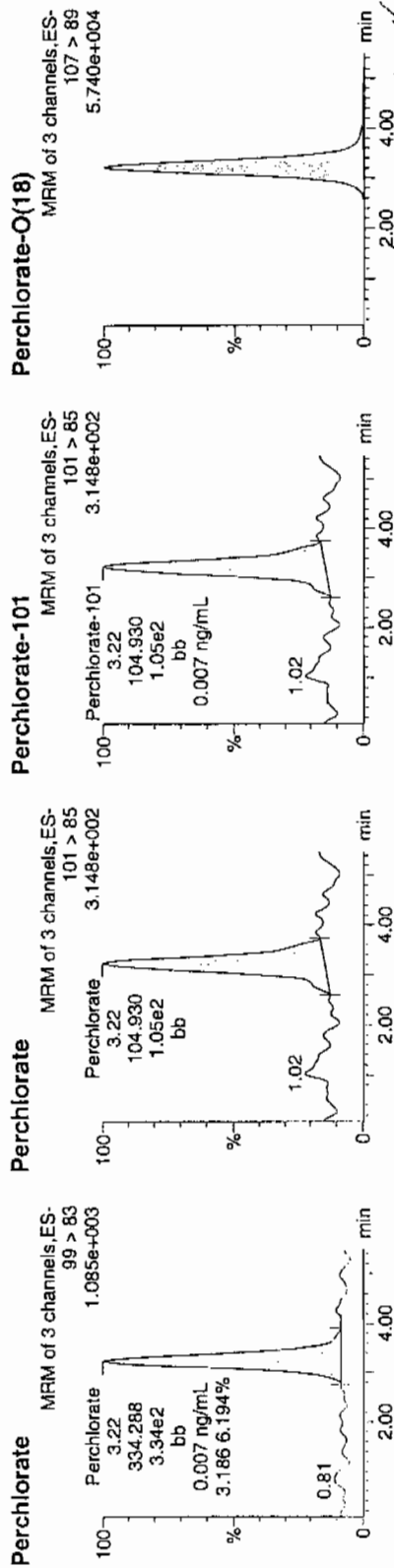
Time: 08:11:38

ID: 247347005

Vial: 3:2,D

03-03-10

LANC | 957429 | 5020 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN/Ion Ratio
247347005	Perchlorate	99 > 83	3.22	334.288	334.288	bb			0.0071			3.19
247347005	Perchlorate-101	101 > 85	3.22	104.930	104.930	bb			0.0070			39.197
247347005	Perchlorate-O(18)	107 > 89	3.21	20269.230	20269.230	bb			0.4903	98.06	-1.94	3810.6...

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8240
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 247347006
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 98.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 08:20	per0302093a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:20	per0302093a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	03-MAR-10 08:20	per0302093a
	Perchlorate-O(18)			5.22	ug/kg		1	03-MAR-10 08:20	per0302093a

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

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

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

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

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

Name: per0302093a

Date: 03-Mar-2010

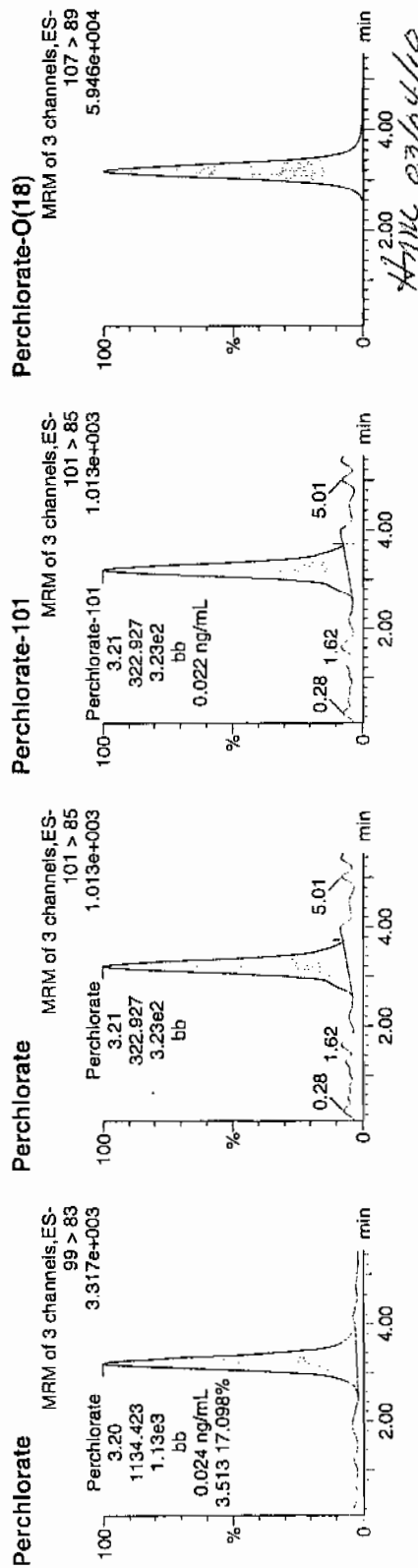
Time: 08:20:24

ID: 247347006

Vial: 3:2,E

03-03-10

1200 | 957424 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347006	Perchlorate	99 > 83	3.20	1134.423	1134.423	bb			0.0240			307.507	3.51
247347006	Perchlorate-101	101 > 85	3.21	322.927	322.927	bb			0.0216			118.376	
247347006	Perchlorate-O(18)	107 > 89	3.20	21233.787	21233.787	bb			0.5136	102.73	2.73	10917....	

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: 957927
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8241
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 247347007
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 98.8

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	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:28	per0302094a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:28	per0302094a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:28	per0302094a
	Perchlorate-O(18)			4.91	ug/kg		1	03-MAR-10 08:28	per0302094a

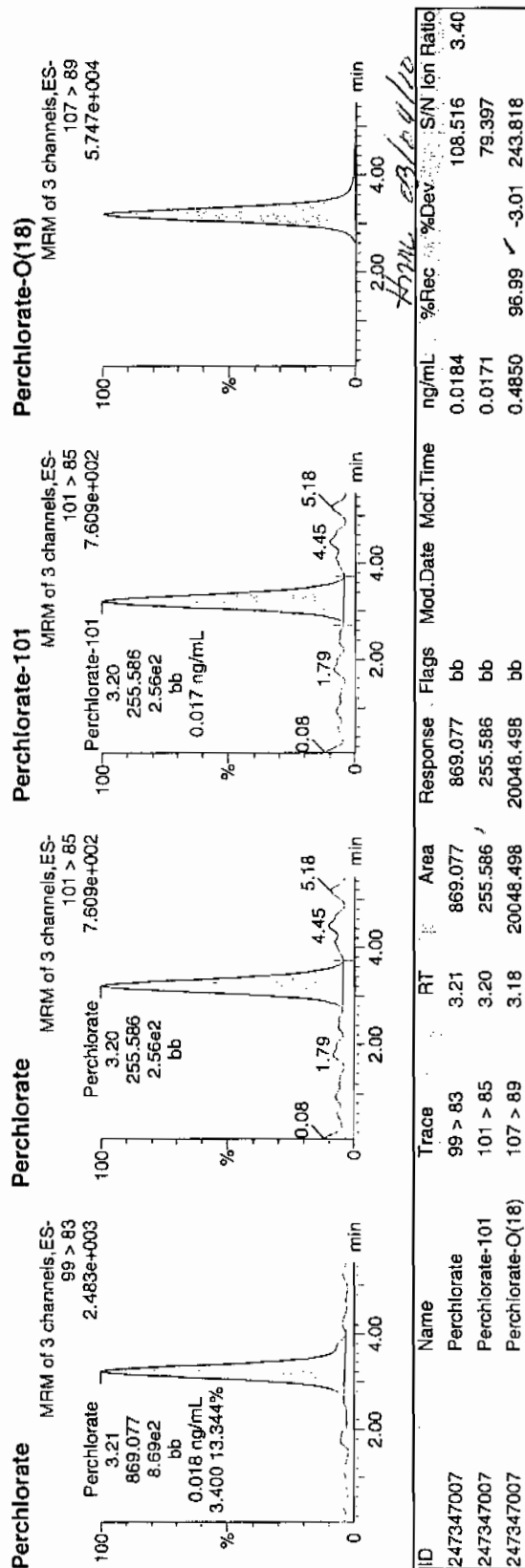
[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence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

*Concentration =

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

03-03-10

LANC | 957929 | 3070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347007	Perchlorate	99 > 83	3.21	869.077	869.077	bb			0.0184			108.516	3.40
247347007	Perchlorate-101	101 > 85	3.20	255.586	255.586	bb			0.0171			79.397	
247347007	Perchlorate-O(18)	107 > 89	3.18	20048.498	20048.498	bb			0.4850	96.99	-3.01	243.818	

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: 957927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8267
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 247347008
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 98.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:37	per0302095a
	Perchlorate Isotope Ratio						1	03-MAR-10 08:37	per0302095a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	03-MAR-10 08:37	per0302095a
	Perchlorate-O(18)			5.02	ug/kg		1	03-MAR-10 08:37	per0302095a

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

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

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

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

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

Name: per0302095a

Date: 03-Mar-2010

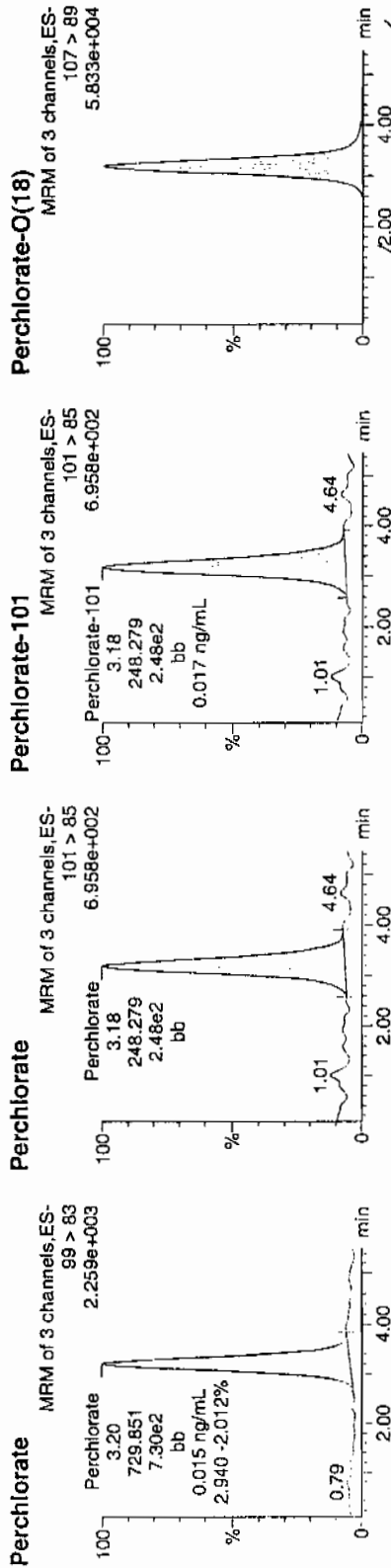
Time: 08:37:26

ID: 247347008

Vial: 3:3,A

03-03-10

15726 | 957929 | 50720 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247347008	Perchlorate	99 > 83	3.20	729.851	729.851	bb			0.0154			243.000	2.94
247347008	Perchlorate-101	101 > 85	3.18	248.279	248.279	bb			0.0166			20.406	
247347008	Perchlorate-O(18)	107 > 89	3.20	20487.854	20487.854	bb			0.4956	99.12	-0.88	856.385	

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 02-MAR-10

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

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 47275.02

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1912

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 02-MAR-10

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

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

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14962.94

Response Type: External Standard

Curve Type: RF

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

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

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

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

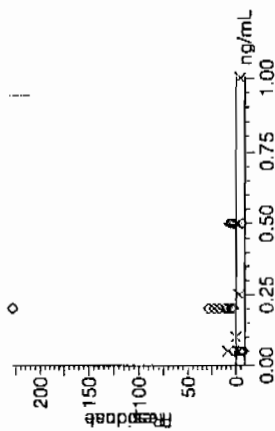
Compound name: Perchlorate

Response Factor: 47275

RRF SD: 2481.24, % Relative SD: 5.24853

Response type: External Std, Area

Curve type: RF



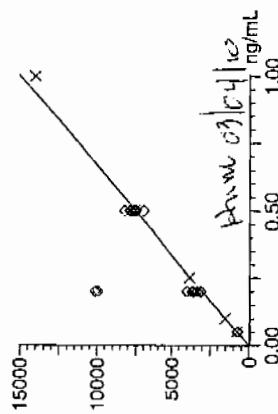
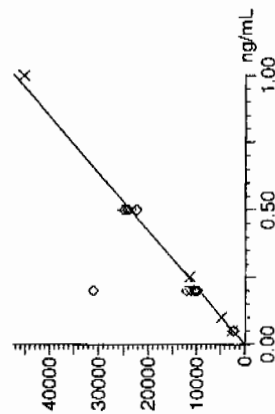
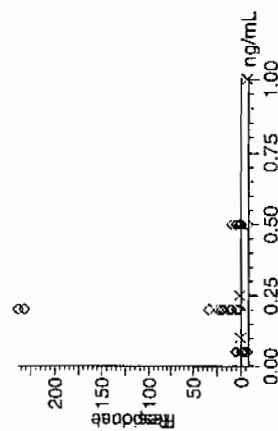
Compound name: Perchlorate-101

Response Factor: 14962.9

RRF SD: 535.272, % Relative SD: 3.57732

Response type: External Std, Area

Curve type: RF



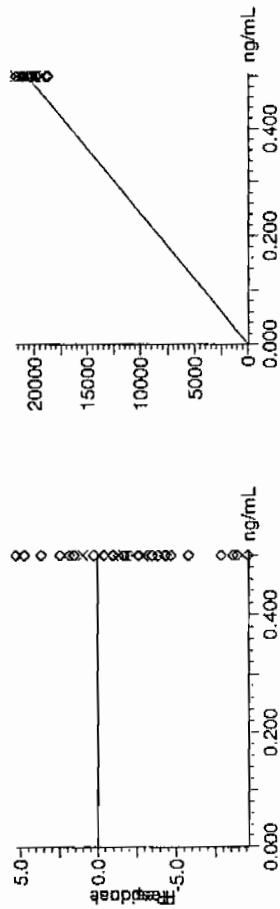
03-03-10

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

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

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

Compound name: Perchlorate-O(18)
Response Factor: 41339.9
RIF SD: 1355.58, % Relative SD: 3.2791
Response type: External Std, Area
Curve type: RF



Form 3

Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1912

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

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

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

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

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

Name: per0302009a

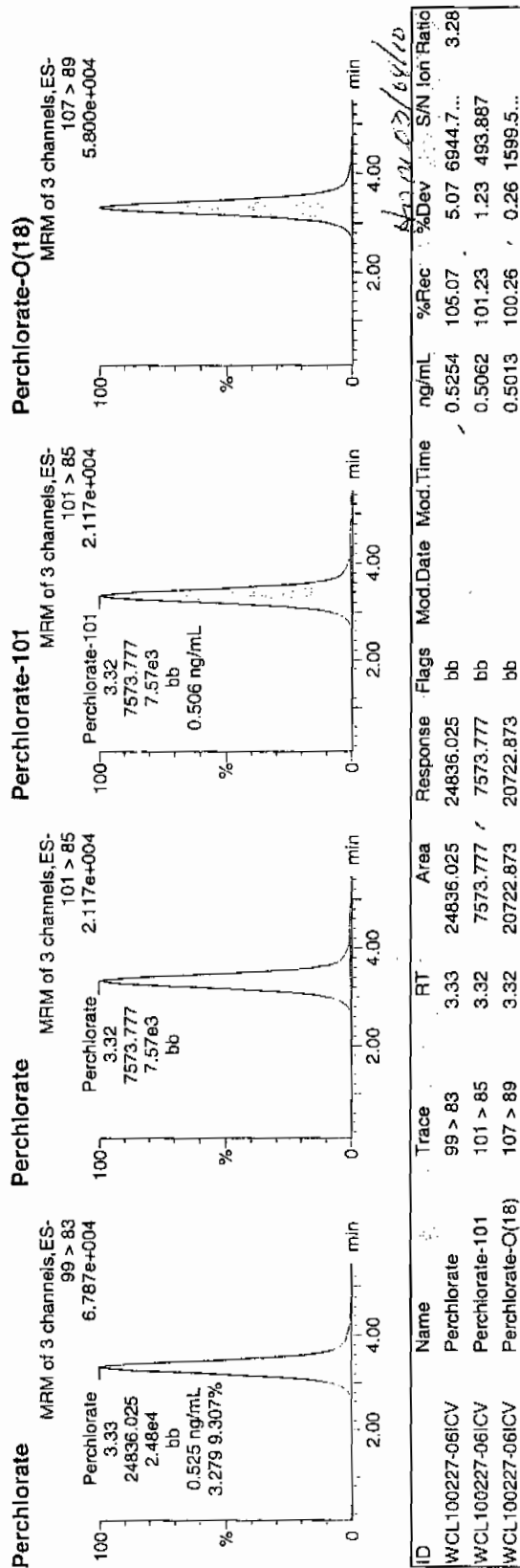
Date: 02-Mar-2010

Time: 20:18:36

ID: WCL100227-06ICV

Vial: 1:2,A

Per
0.525
0.506



Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1912

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.48	02-MAR-10 22:01	per0302021a
Perchlorate Isotope Ratio		3.08		02-MAR-10 22:01	per0302021a
Perchlorate-101	.5	.52	104.12	02-MAR-10 22:01	per0302021a
Perchlorate	.5	.51	102.33	02-MAR-10 23:35	per0302032a
Perchlorate Isotope Ratio		3.17		02-MAR-10 23:35	per0302032a
Perchlorate-101	.5	.51	102	02-MAR-10 23:35	per0302032a
Perchlorate	.5	.53	106.95	03-MAR-10 01:09	per0302043a
Perchlorate Isotope Ratio		3.08		03-MAR-10 01:09	per0302043a
Perchlorate-101	.5	.55	109.69	03-MAR-10 01:09	per0302043a
Perchlorate	.5	.52	104.6	03-MAR-10 02:53	per0302055a
Perchlorate Isotope Ratio		3.23		03-MAR-10 02:53	per0302055a
Perchlorate-101	.5	.51	102.21	03-MAR-10 02:53	per0302055a
Perchlorate	.5	.52	104.28	03-MAR-10 04:27	per0302066a

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.12		03-MAR-10 04:27	per0302066a
Perchlorate-101	.5	.53	105.61	03-MAR-10 04:27	per0302066a
Perchlorate	.5	.51	102.41	03-MAR-10 06:02	per0302077a
Perchlorate Isotope Ratio		3.08		03-MAR-10 06:02	per0302077a
Perchlorate-101	.5	.52	104.97	03-MAR-10 06:02	per0302077a
Perchlorate	.5	.51	101.97	03-MAR-10 07:45	per0302089a
Perchlorate Isotope Ratio		3.25		03-MAR-10 07:45	per0302089a
Perchlorate-101	.5	.5	99.28	03-MAR-10 07:45	per0302089a
Perchlorate	.5	.5	99.47	03-MAR-10 09:20	per0302100a
Perchlorate Isotope Ratio		3.13		03-MAR-10 09:20	per0302100a
Perchlorate-101	.5	.5	100.28	03-MAR-10 09:20	per0302100a

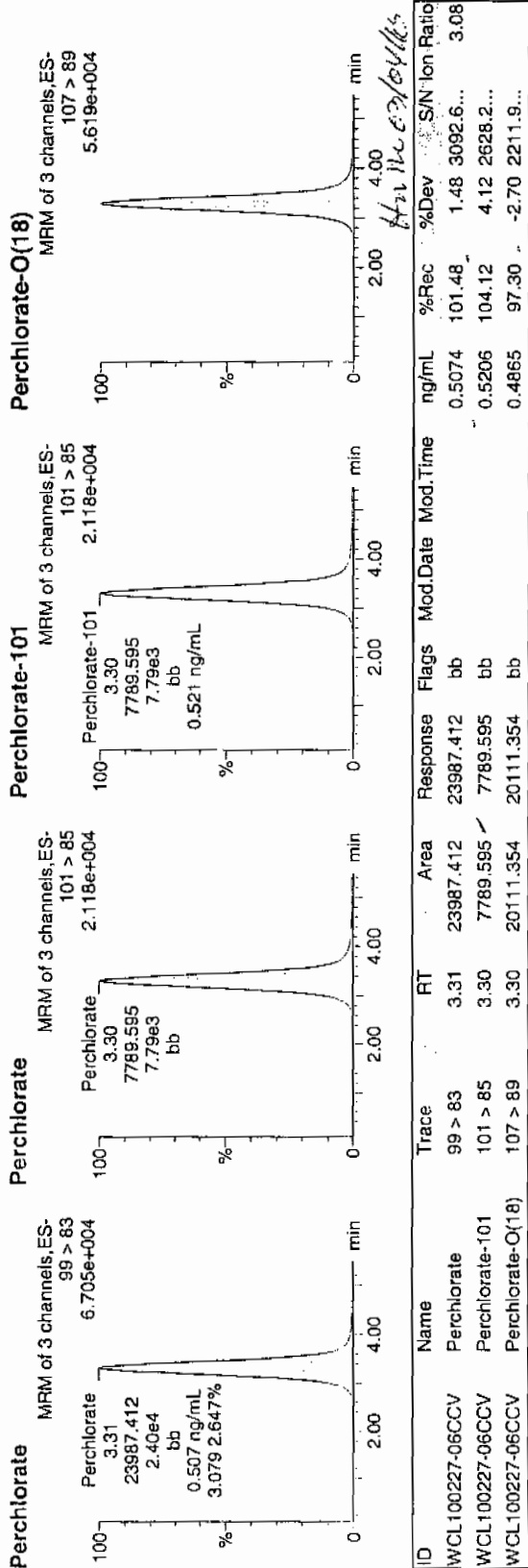
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

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

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

Name: per0302021a
Date: 02-Mar-2010
Time: 22:01:21
ID: WCL100227-06CCV
Vial: 1:2,A

Perchlorate-101



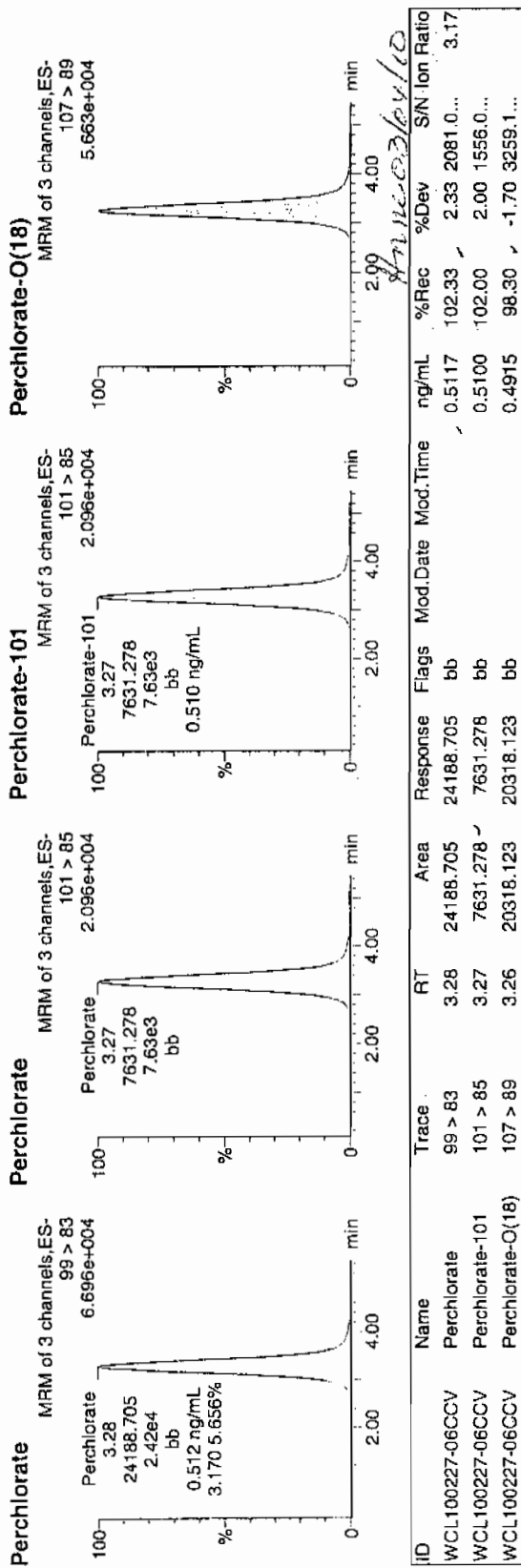
Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Per
03-03-10



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

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

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

Sample Name: per0302043a

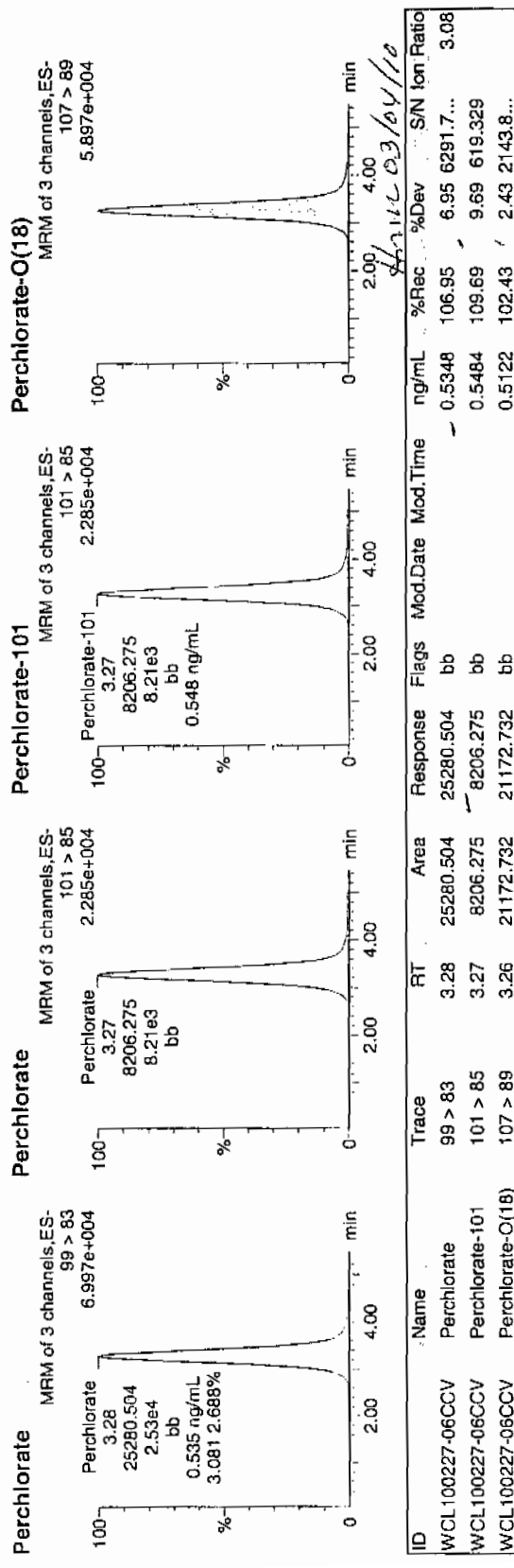
Date: 03-Mar-2010

Time: 01:09:59

ID: WCL100227-06CCV

Vial: 1:2,A

Perchlorate
03-03-10



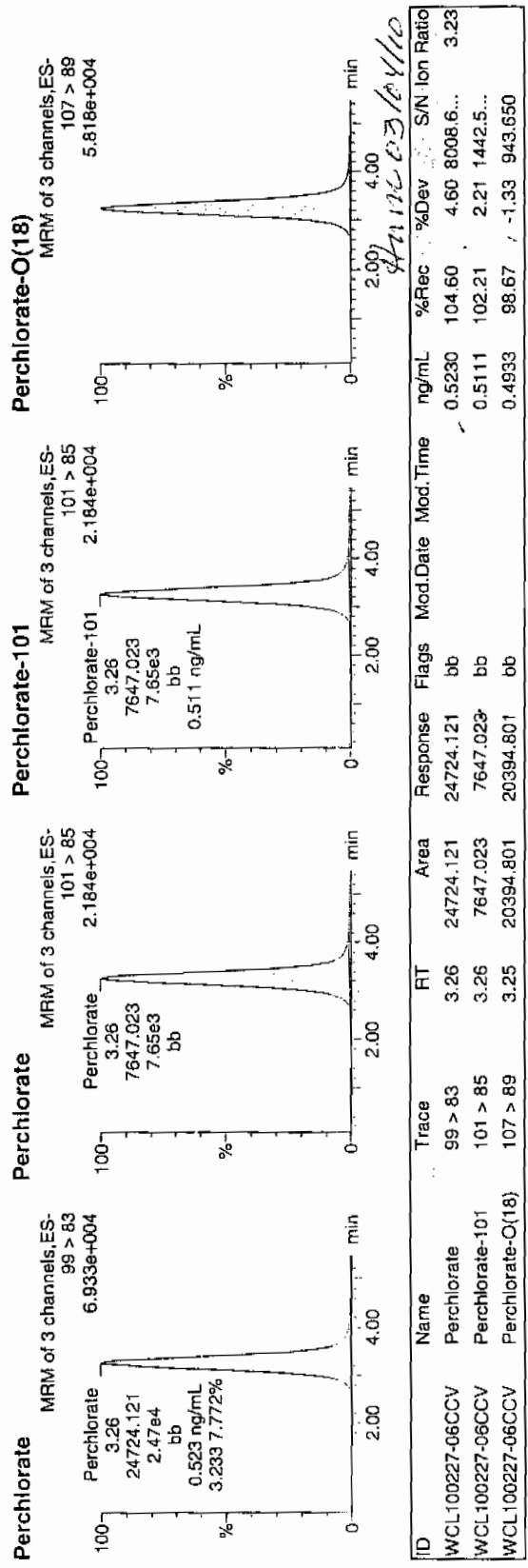
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

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

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

Name: per0302055a
Date: 03-Mar-2010
Time: 02:53:10
ID: WCL100227-06CCV
Vial: 1:2,A

Perchlorate
03-03-10



Quantify Sample Report MassLynx 4.0 SP4

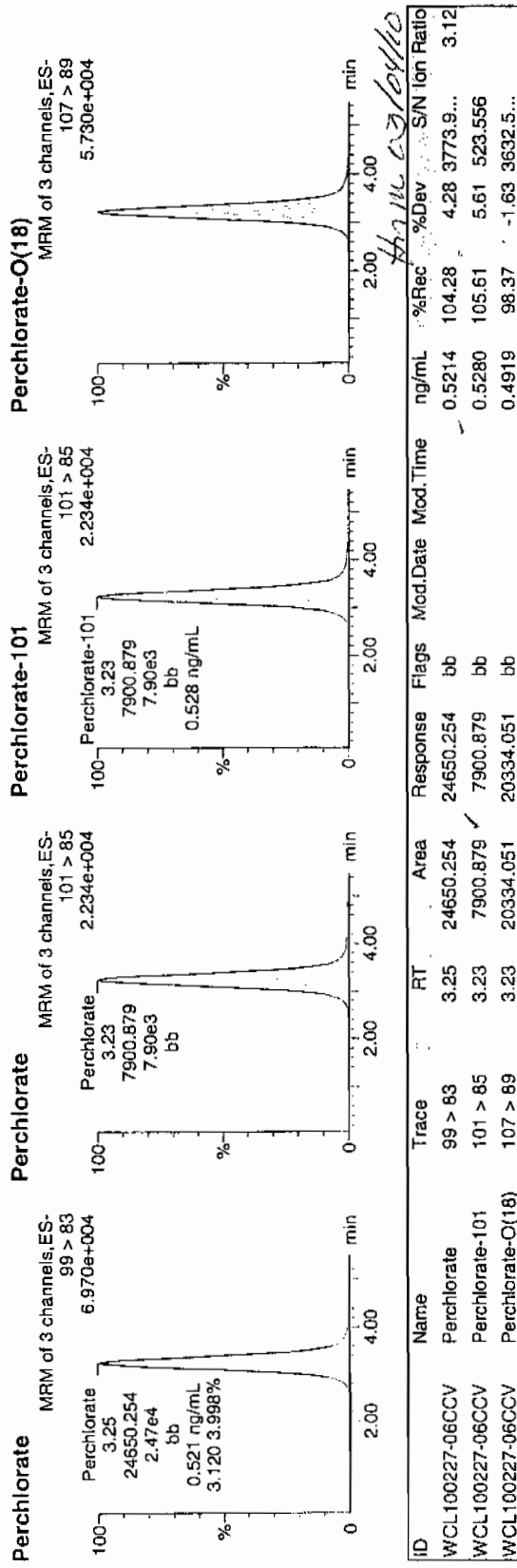
The GEL Group, LLC Analyst: Charles W. Wilson

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

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

Name: per0302066a
 Date: 03-Mar-2010
 Time: 04:27:35
 ID: WCL100227-06CCV
 Vial: 1:2,A

*Perchlorate
 03-03-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.25	24650.254	24650.254	bb			0.5214	104.28	4.28	3773.9...	3.12
WCL100227-06CCV	Perchlorate-101	101 > 85	3.23	7900.879	7900.879	bb			0.5280	105.61	5.61	523.556	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.23	20334.051	20334.051	bb			0.4919	98.37	-1.63	3632.5...	

Page 88 of 108

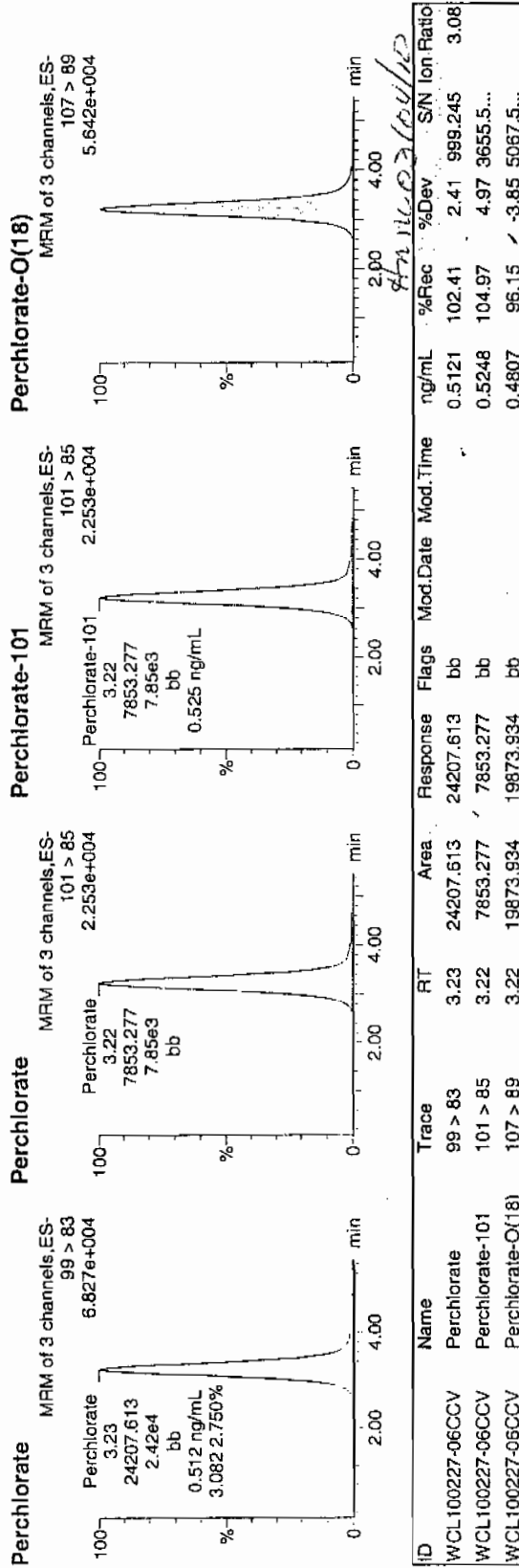
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302077a
Date: 03-Mar-2010
Time: 06:02:12
ID: WCL100227-06CCV
Vial: 1;2,A

Perchlorate
03-03-10



Quantify Sample Report MassLynx 4.0 SP4

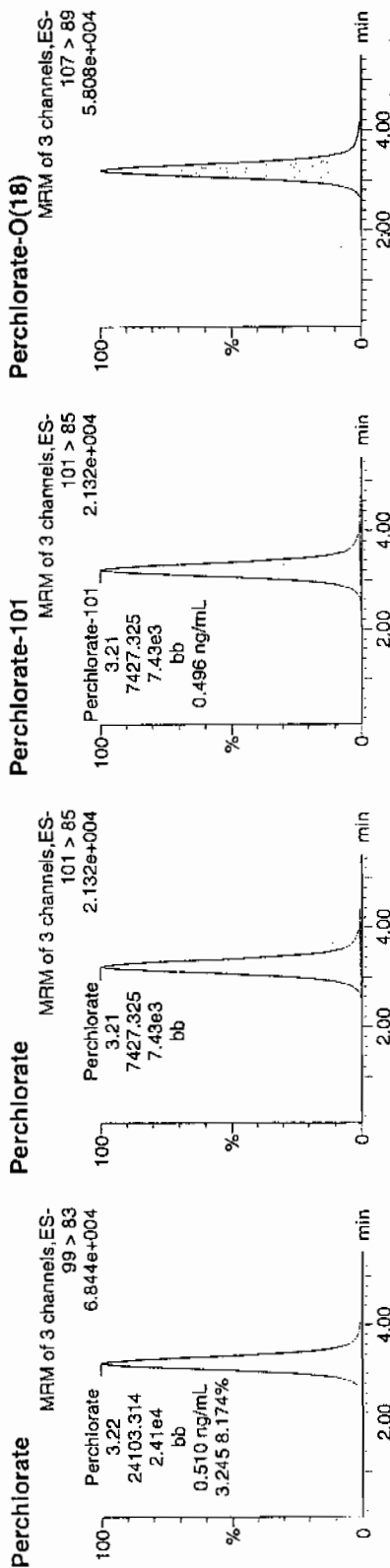
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302089a
 Date: 03-Mar-2010
 Time: 07:45:33
 ID: WCL100227-06CCV
 Vial: 1:2,A

Perchlorate-101
 03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.22	24103.314	24103.314	bb			0.5099	101.97	1.97	1801.4...	3.25
WCL100227-06CCV	Perchlorate-101	101 > 85	3.21	7427.325	7427.325	bb			0.4964	99.28	-0.72	1594.1...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.20	20459.615	20459.615	bb			0.4949	98.98	-1.02	9162.0...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

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

Name: per0302100a

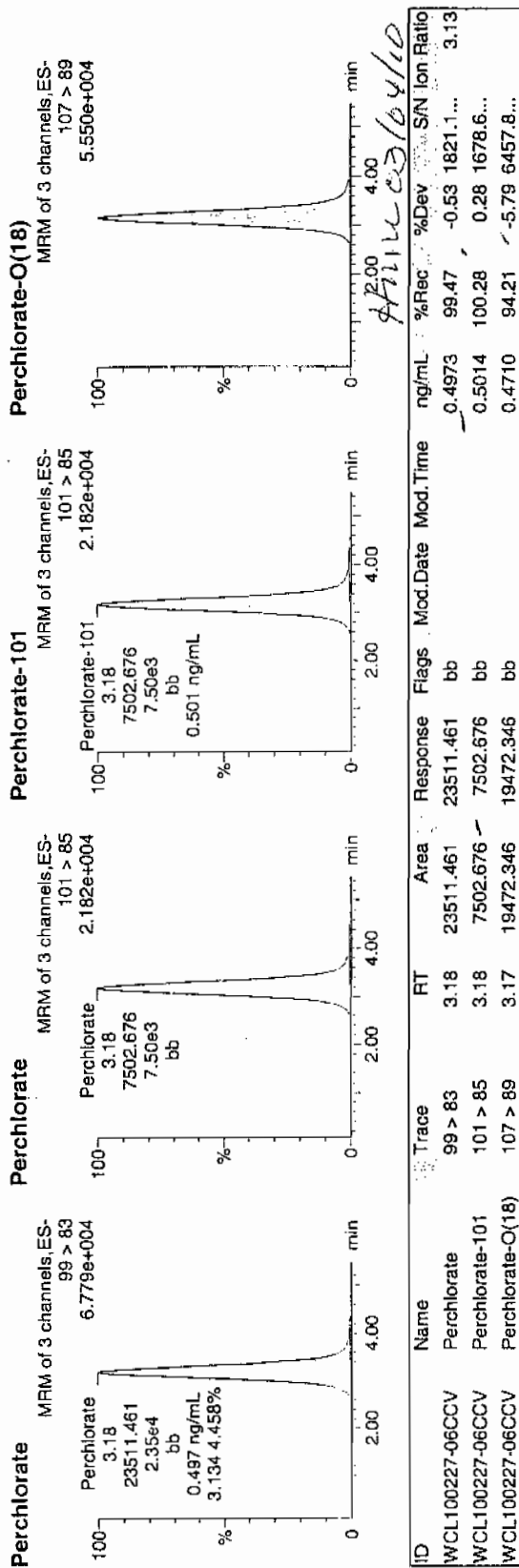
Date: 03-Mar-2010

Time: 09:20:14

ID: WCL100227-06CCV

Vial: 1:2,A

Perchlorate
03-03-10



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Reporting Units: ug/kg

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

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	105.83	03-MAR-10 01:27	per0302045a
Perchlorate	.05	.05	98.34	03-MAR-10 03:10	per0302057a
Perchlorate Isotope Ratio		3.17		03-MAR-10 03:10	per0302057a
Perchlorate-101	.05	.05	97.96	03-MAR-10 03:10	per0302057a
Perchlorate	.05	.05	92.68	03-MAR-10 04:45	per0302068a
Perchlorate Isotope Ratio		3.03		03-MAR-10 04:45	per0302068a
Perchlorate-101	.05	.05	96.57	03-MAR-10 04:45	per0302068a
Perchlorate	.05	.05	95.2	03-MAR-10 06:19	per0302079a
Perchlorate Isotope Ratio		2.87		03-MAR-10 06:19	per0302079a
Perchlorate-101	.05	.05	104.8	03-MAR-10 06:19	per0302079a
Perchlorate	.05	.05	93.37	03-MAR-10 08:02	per0302091a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.13		03-MAR-10 08:02	per0302091a
Perchlorate-101	.05	.05	94.23	03-MAR-10 08:02	per0302091a
Perchlorate	.05	.05	95.91	03-MAR-10 09:37	per0302102a
Perchlorate Isotope Ratio		3.08		03-MAR-10 09:37	per0302102a
Perchlorate-101	.05	.05	98.48	03-MAR-10 09:37	per0302102a

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

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

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

Name: per0302011a

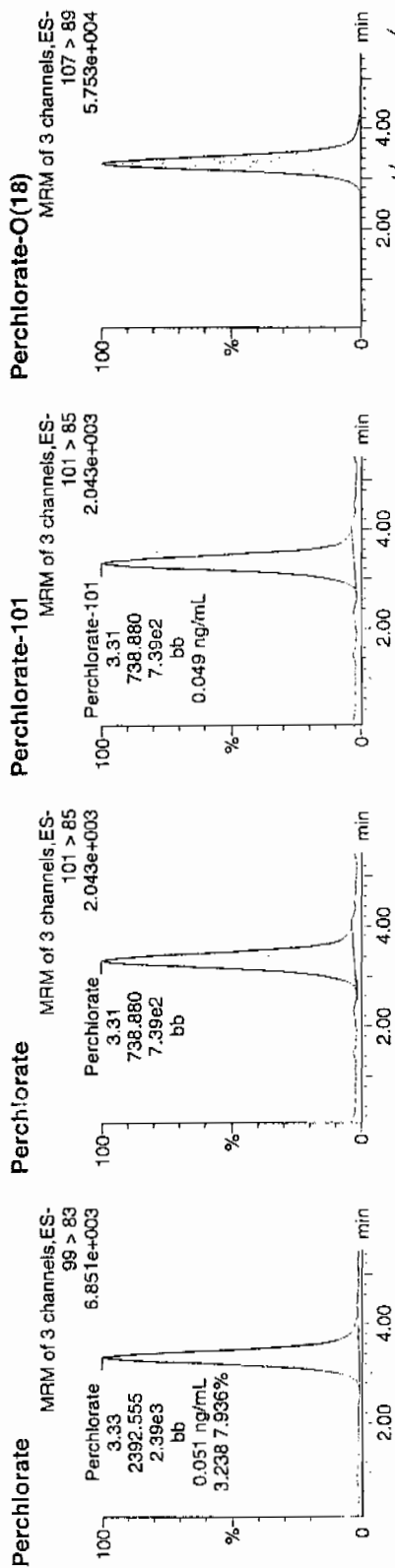
Date: 02-Mar-2010

Time: 20:35:41

ID: WCL100227-07CRI

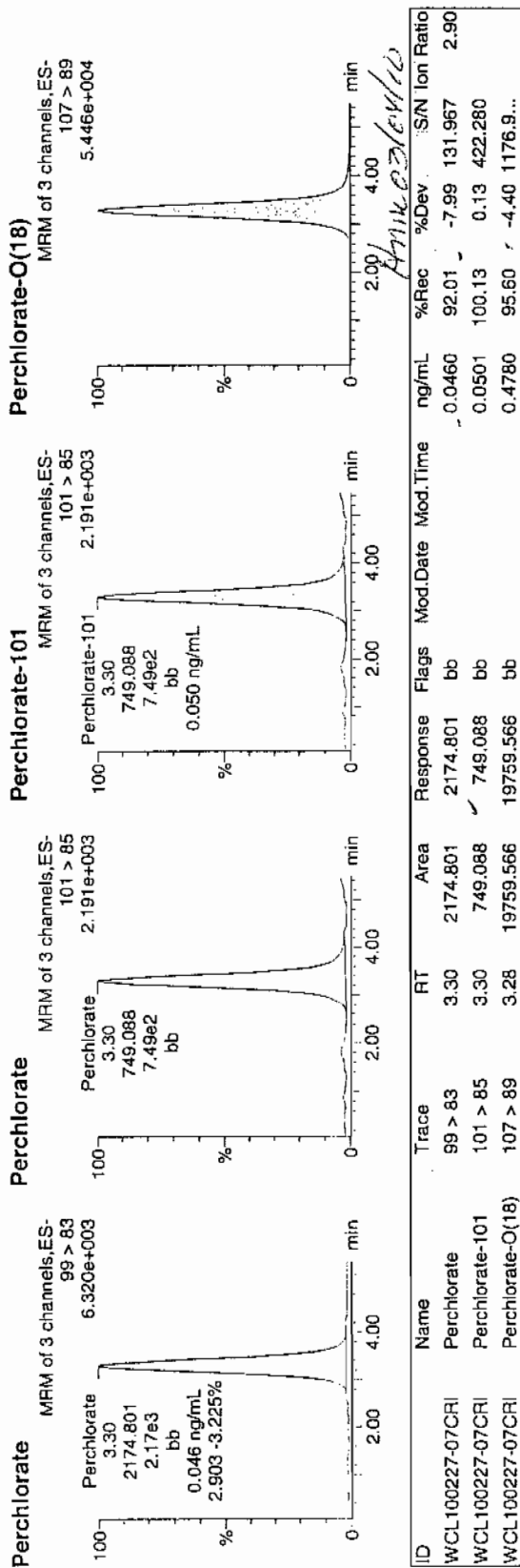
Vial: 1:2,B

03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.33	2392.555	2392.555	bb			0.0506	101.22	1.22	360.943	3.24
WCL100227-07CRI	Perchlorate-101	101 > 85	3.31	738.880	738.880	bb			0.0494	98.76	-1.24	58.109	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.31	20475.990	20475.990	bb			0.4953	99.06	-0.94	6968.6...	

Pure
 0.050 ng/mL
 0.003-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

Test Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time

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

Name: per0302034a

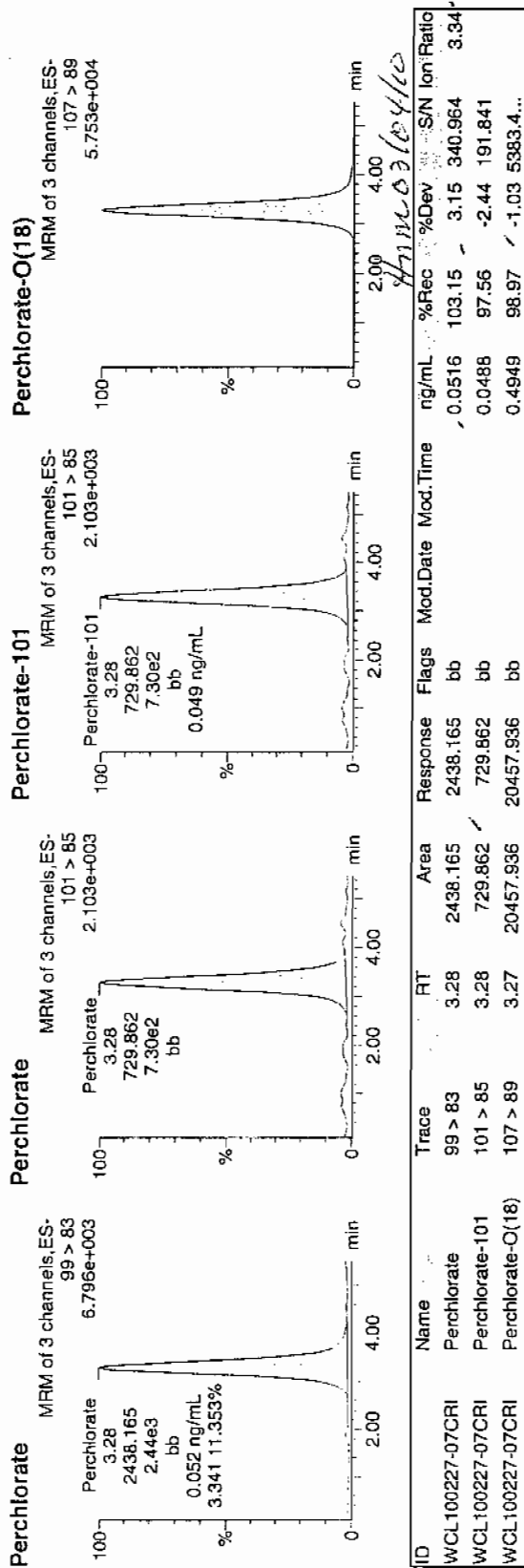
Date: 02-Mar-2010

Time: 23:52:47

ID: WCL100227-07CRI

Vial: 1:2,B

Per
03-03-10



Page 910

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

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

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

Name: per0302045a

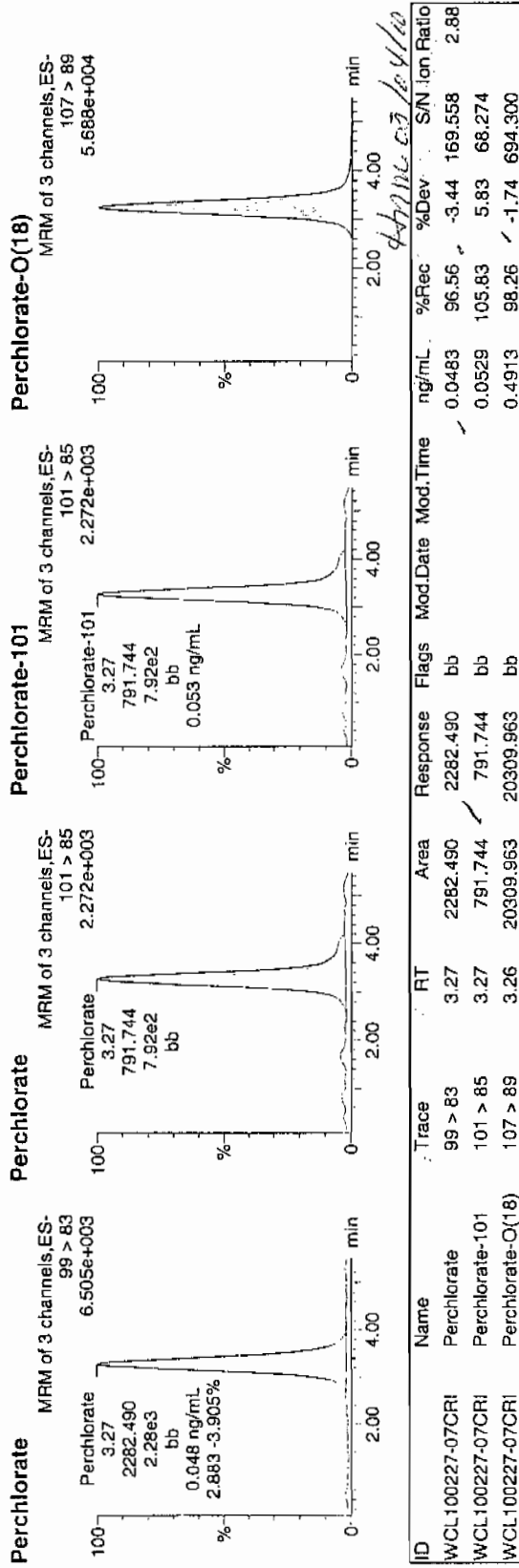
Date: 03-Mar-2010

Time: 01:27:19

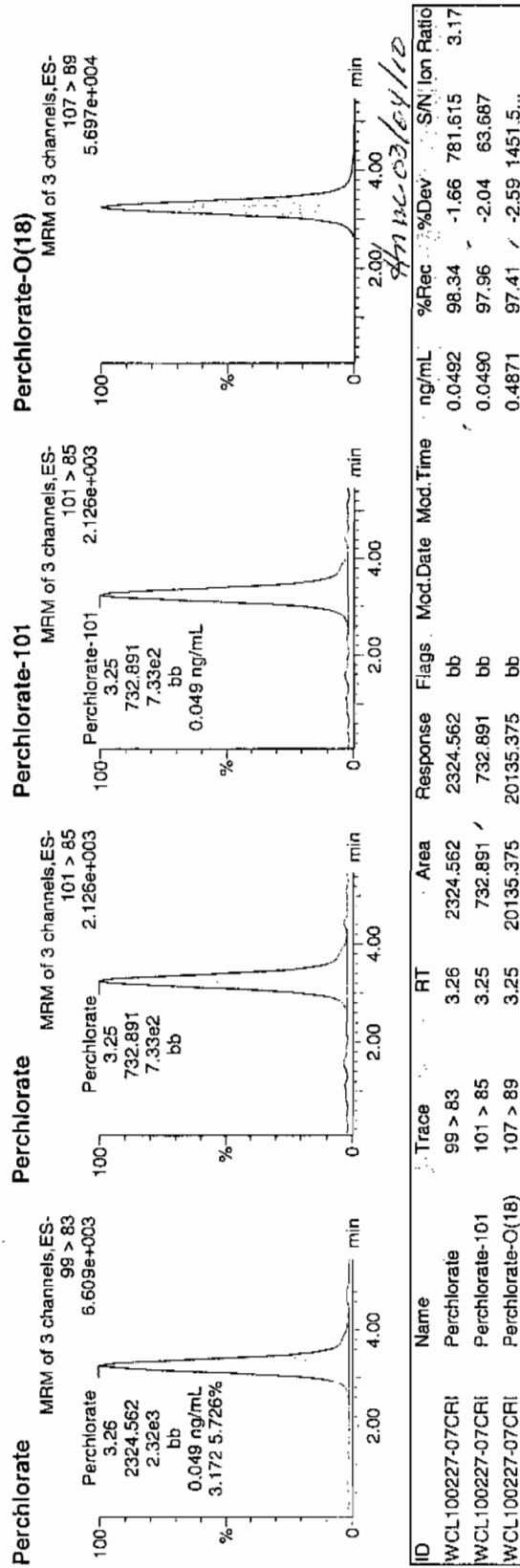
ID: WCL100227-07CRI

Vial: 1;2,B

Pure
6.505
03-03-10



Name: per0302057a
 Date: 03-Mar-2010
 Time: 03:10:29
 ID: WCL100227-07CRI
 Vial: 1:2,B



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

Test Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time

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

File Name: per0302068a

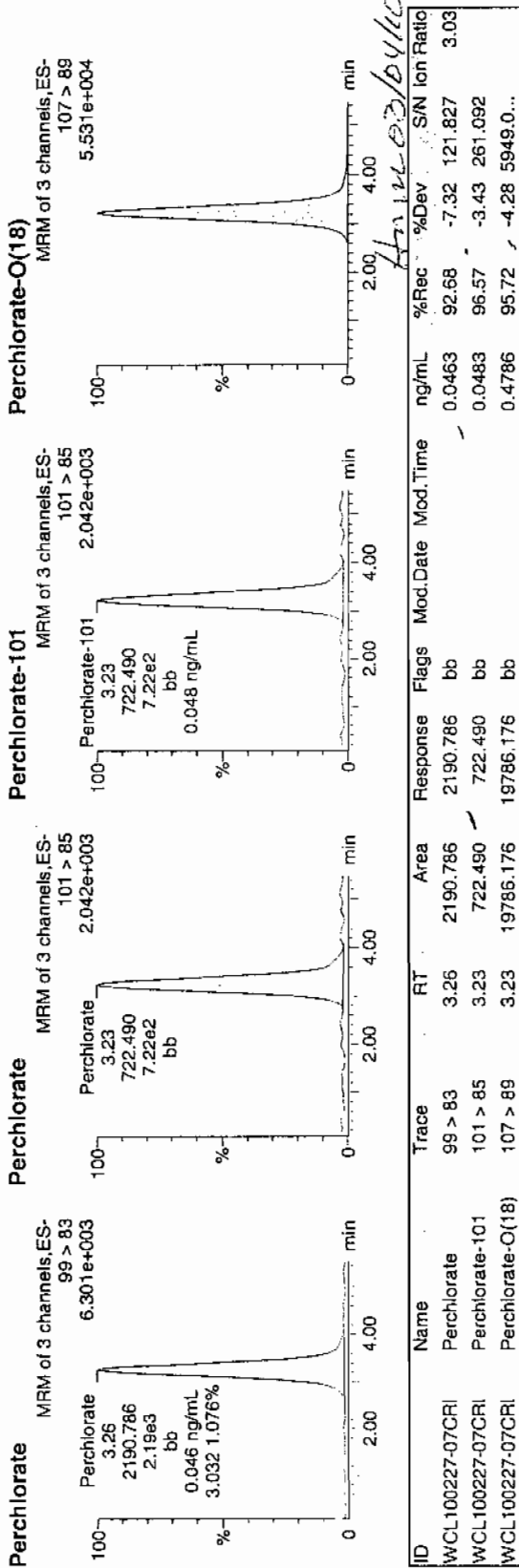
Date: 03-Mar-2010

Time: 04:45:01

ID: WCL100227-07CRI

Vial: 1:2,B

Per
GWS
03-03-10



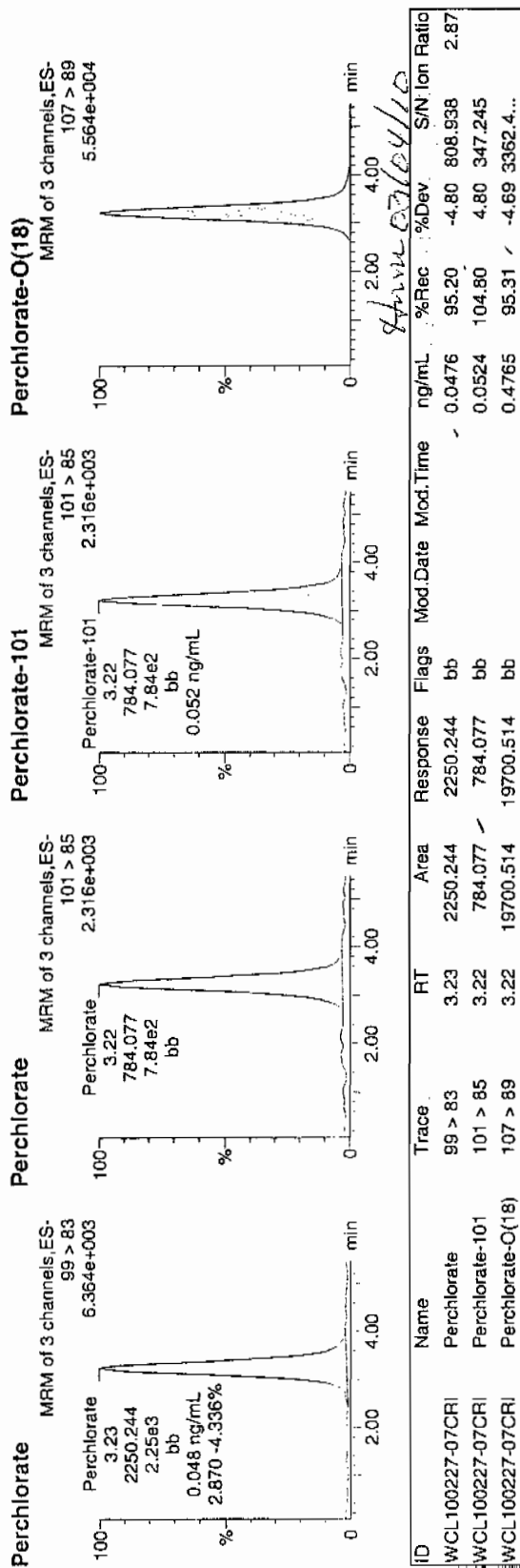
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

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

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

1 Name: per0302079a
2 Date: 03-Mar-2010
3 Time: 06:19:47
4 ID: WCL100227-07CRI
5 Vial: 1;2,B

Per
an
03-03-10



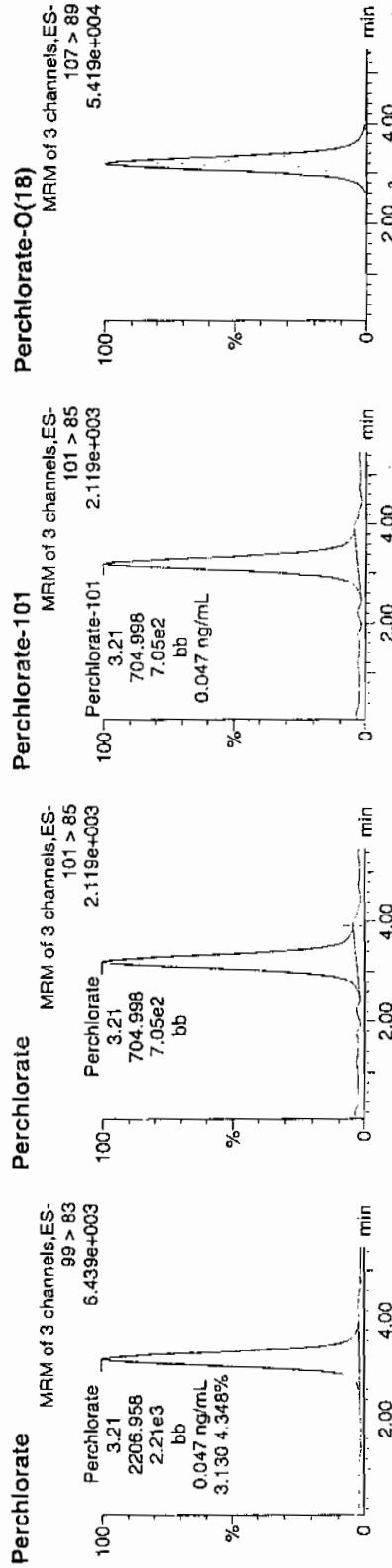
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

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

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

Name: per0302091a
Date: 03-Mar-2010
Time: 08:02:58
ID: WCL100227-07CRI
Vial: 1:2,B

Per
and
03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.21	2206.958	2206.958	bb			0.0467	93.37	-6.63	552.627	3.13
WCL100227-07CRI	Perchlorate-101	101 > 85	3.21	704.998	704.998	bb			0.0471	94.23	-5.77	194.612	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.20	18881.813	18881.813	bb			0.4567	91.35	-8.65	3126.0...	

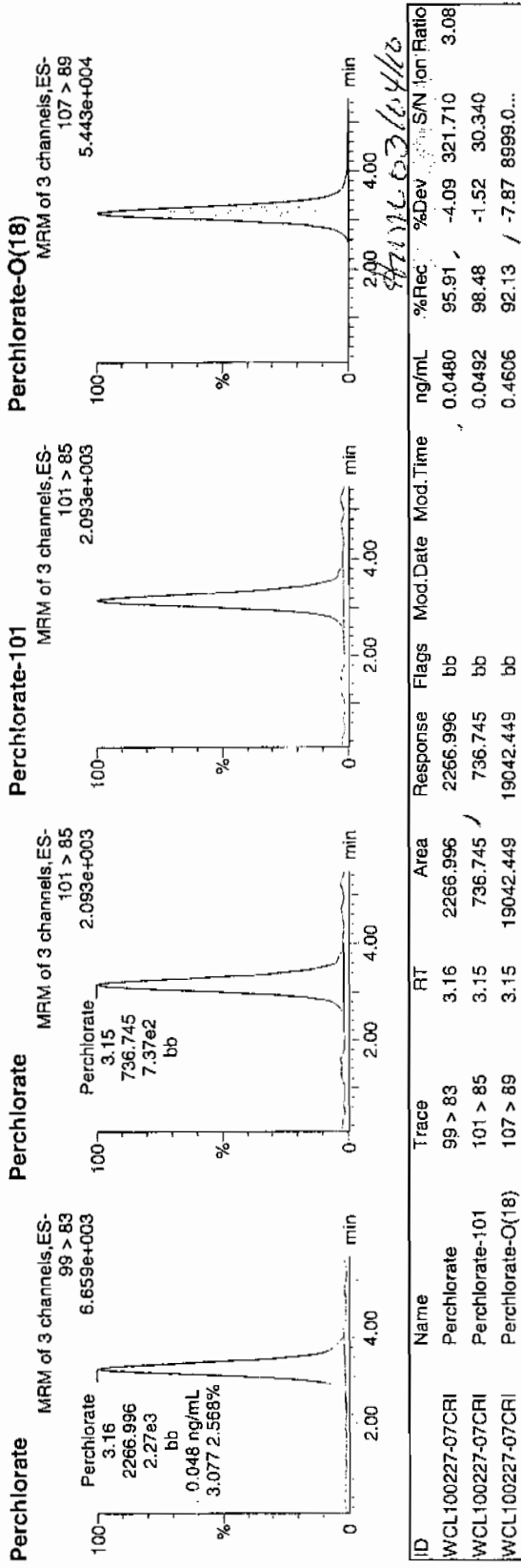
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

1 Name: per0302102a
2 Date: 03-Mar-2010
3 Time: 09:37:47
4 ID: WCL100227-07CRI
5 Vial: 1:2,B

Per
and
03-03-10



QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. MB
 Date Received: 26-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 1202054192
 Date Filtered: 26-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	03-MAR-10 06:28	per0302080a
	Perchlorate Isotope Ratio						1	03-MAR-10 06:28	per0302080a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	03-MAR-10 06:28	per0302080a
	Perchlorate-O(18)			4.79	ug/kg		1	03-MAR-10 06:28	per0302080a

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

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

Name: per0302080a

Date: 03-Mar-2010

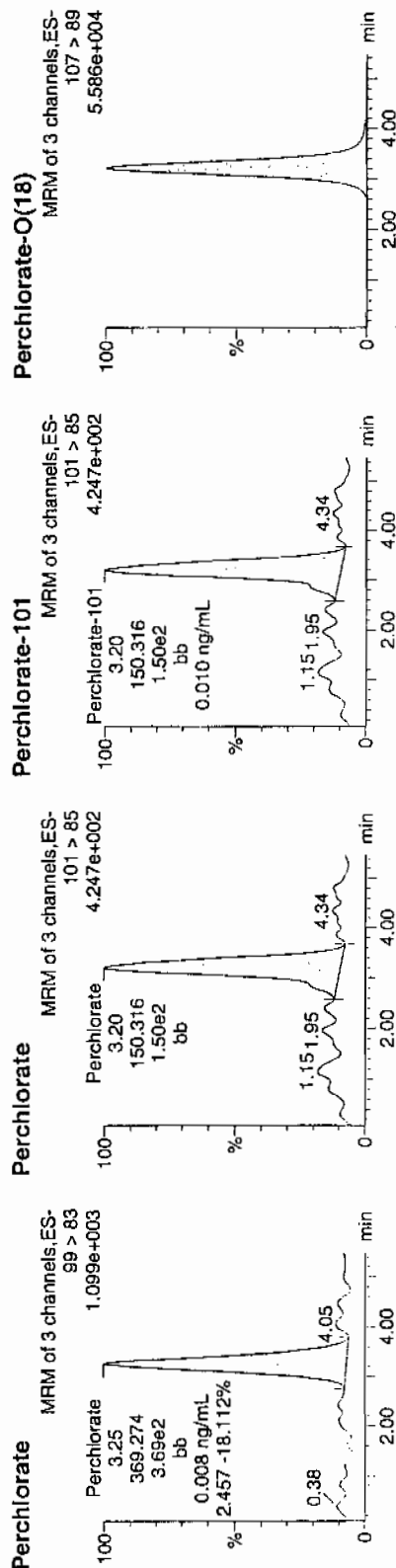
Time: 06:28:21

ID: 1202054199

Vial: 3:1,A

03-03-10

1202054199 | 3020 | M03 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054199	Perchlorate	99 > 83	3.25	369.274	369.274	bb			0.0078			60.268	2.46
1202054199	Perchlorate-101	101 > 85	3.20	150.316	150.316	bb			0.0100			62.753	
1202054199	Perchlorate-O(18)	107 > 89	3.22	19787.299	19787.299	bb			0.4786	95.73	-4.27	5305.1...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 26-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 1202054200

Date Filtered: 26-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	2.46	ug/kg		1	03-MAR-10 06:37	per0302081a
	Perchlorate Isotope Ratio			3.14			1	03-MAR-10 06:37	per0302081a
14797-73-0	Perchlorate-101	.5	2	2.47	ug/kg		1	03-MAR-10 06:37	per0302081a
	Perchlorate-O(18)			5.18	ug/kg		1	03-MAR-10 06:37	per0302081a

[^] 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

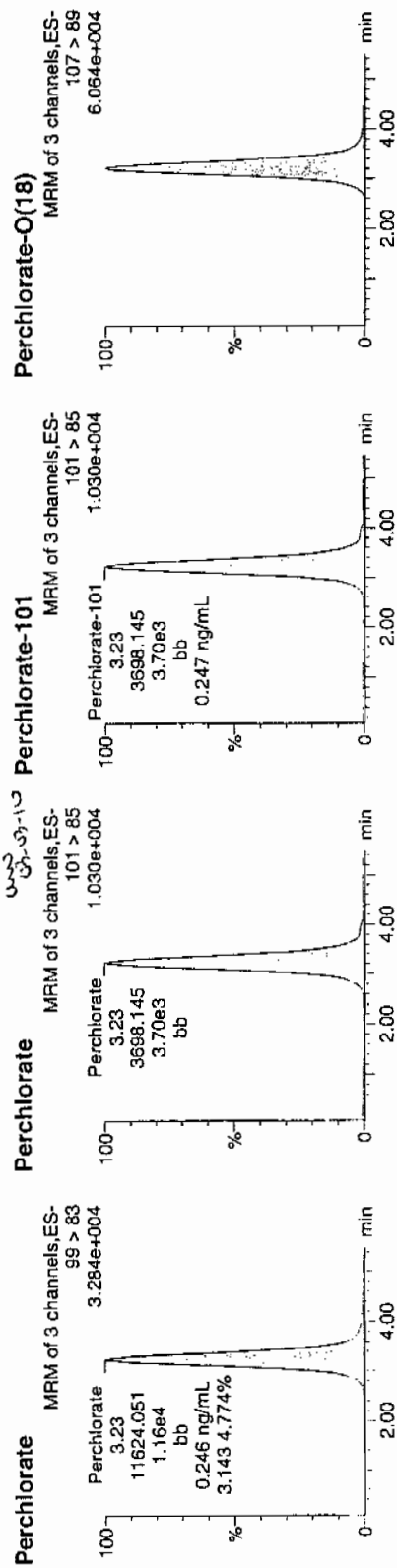
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Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302081a
Date: 03-Mar-2010
Time: 06:37:13
ID: 1202054200
Vial: 3:1,B

LANL | 957929 | 5020 | 11

600
02-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054200	Perchlorate	99 > 83	3.23	11624.051	11624.051	bb			0.2459	122.94	22.94	1310.3...	3.14
1202054200	Perchlorate-101	101 > 85	3.23	3698.145	3698.145	bb			0.2472	123.58	23.58	573.420	
1202054200	Perchlorate-O(18)	107 > 89	3.22	21424.080	21424.080	bb			0.5182	103.65	3.65	2840.9...	

11624.051
47275
= 0.2459
47275/194/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957927

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8245MS

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912

GEL Sample ID: 1202054201

Date Filtered: 26-FEB-10

Injection Volume (uL): 20

%Solids: 99.05

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.505	2.02	2.37	ug/kg		1	03-MAR-10 07:11	per0302085a
	Perchlorate Isotope Ratio			3.07			1	03-MAR-10 07:11	per0302085a
14797-73-0	Perchlorate-101	.505	2.02	2.44	ug/kg		1	03-MAR-10 07:11	per0302085a
	Perchlorate-O(18)			5.03	ug/kg		1	03-MAR-10 07:11	per0302085a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

Name: per0302085a

Date: 03-Mar-2010

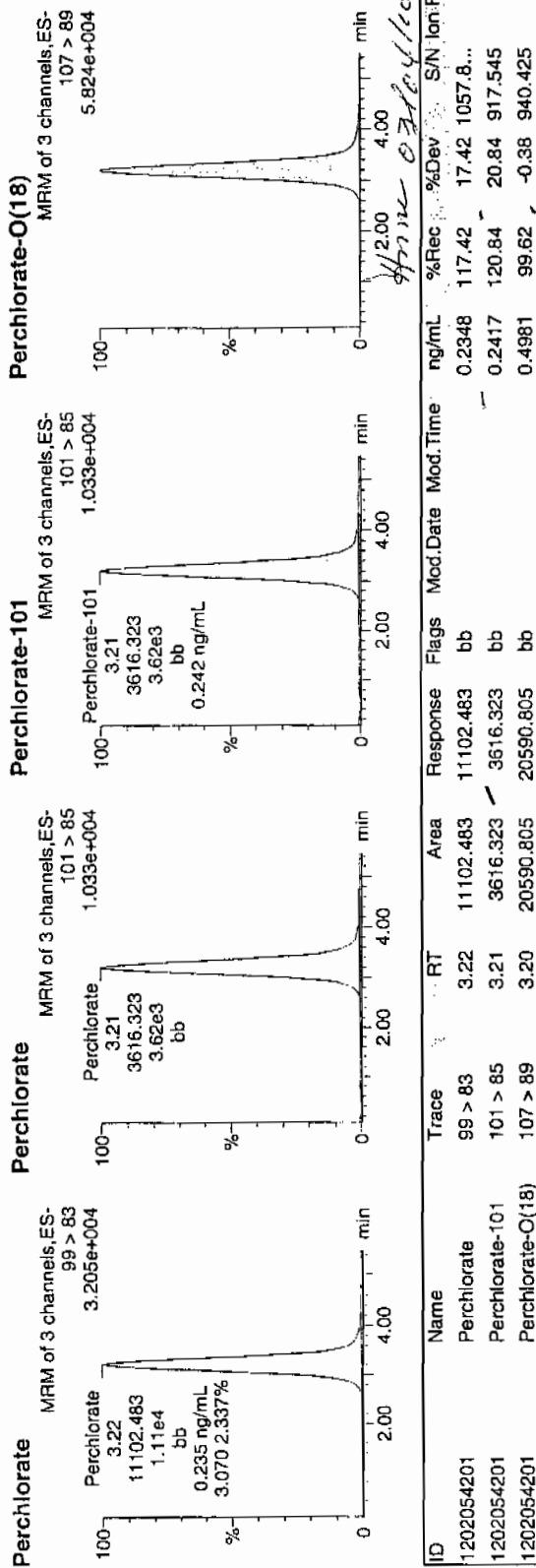
Time: 07:11:25

ID: 1202054201

Vial: 3:1,F

03-03-10

1202054201 | 5070 | MS | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054201	Perchlorate	99 > 83	3.22	11102.483	11102.483	bb			0.2348	117.42	17.42	1057.8...	3.07
1202054201	Perchlorate-101	101 > 85	3.21	3616.323	3616.323	bb			0.2417	120.84	20.84	917.545	
1202054201	Perchlorate-O(18)	107 > 89	3.20	20590.805	20590.805	bb			0.4981	99.62	-0.38	940.425	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 257927
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8245MSD
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1912
 GEL Sample ID: 1202054202
 Date Filtered: 26-FEB-10
 Injection Volume (uL): 20
 %Solids: 99.05

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.505	2.02	2.60	ug/kg		1	03-MAR-10 07:19	per0302086a
	Perchlorate Isotope Ratio			3.04			1	03-MAR-10 07:19	per0302086a
14797-73-0	Perchlorate-101	.505	2.02	2.70	ug/kg		1	03-MAR-10 07:19	per0302086a
	Perchlorate-O(18)			5.17	ug/kg		1	03-MAR-10 07:19	per0302086a

[^] 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

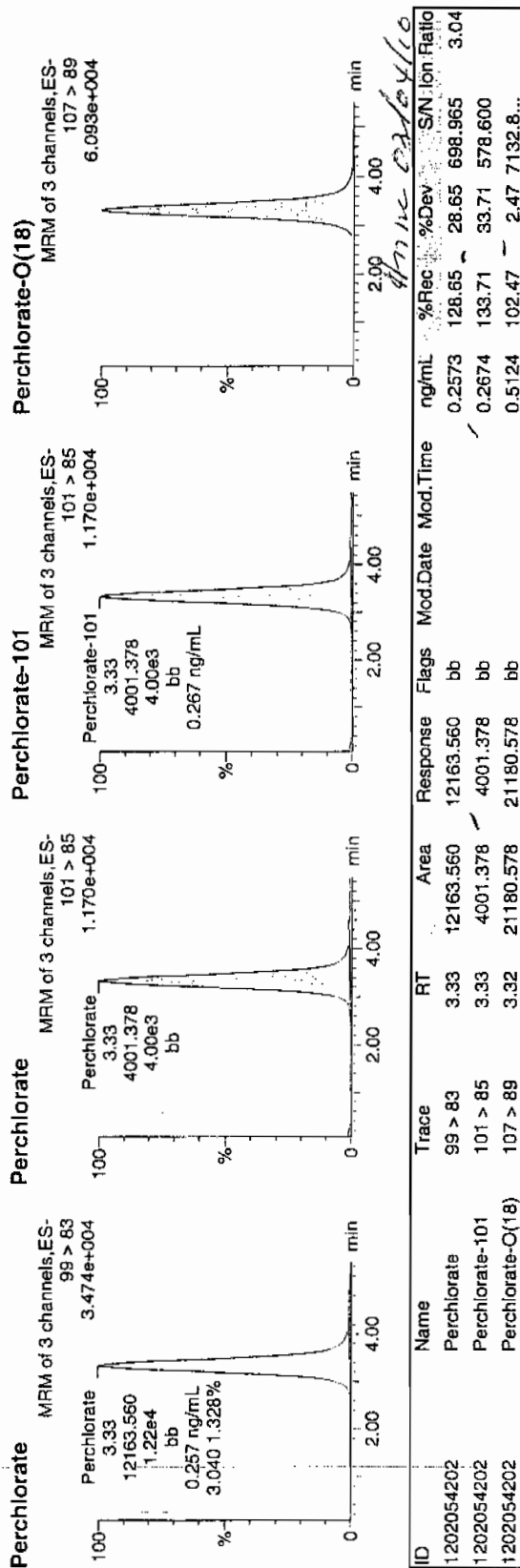
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Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302086a
Date: 03-Mar-2010
Time: 07:19:56
ID: 1202054202
Vial: 3:2,A

03-03-10

1202054202 | 957424 | 50020 | MSO | 11



MISCELLANEOUS DATA

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

Prep LogBook

Analyst: JXS5 Verified by: _____

Batch: 957927

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

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202054199		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
LCS	1202054200		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10	.4	mL
SAMPLE	247347001		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10	.4	mL
SAMPLE	247347002		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10	.4	mL
MS	1202054201	247347002	SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10	.4	mL
MSD	1202054202	247347002	SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10	.4	mL
SAMPLE	247347003		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247347004		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247347005		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247347006		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247347007		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247347008		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247350001		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247350002		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247350003		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247350004		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247463001		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247463002		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247463003		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247463004		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247463005		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247463006		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247784002		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
SAMPLE	247855002		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		
ICS	1202054203		SW846 6850 Modified	26-FEB-2010 17:46	2 g	20 mL	10		

Comments Desalting cartridges used: BJ0003K0402 & BJ0005J0812

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/02/10
 Extr. Injection Volume: 20uL
 Sequence Number: per030210a
 Initial Calibration Date: 03/02/10

Method: EPA 6850-Modified
 Int. Std.: UCL100126-01
 Mobile Phase Lot#: 1269535, 1271949
 Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *hmc*
 Date: *2/2/10*
 SOP: GL-OA-E-067 Rev.6
 Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0302001a	IPB001	CWW	3/2/2010 19:10			1		USE	B
per0302002a	IPB001	CWW	3/2/2010 19:18			1		USE	B
per0302003a	WCLICAL-01	CWW	3/2/2010 19:27			1		USE	I
per0302004a	WCLICAL-02	CWW	3/2/2010 19:35			1		USE	I
per0302005a	WCLICAL-03	CWW	3/2/2010 19:44			1		USE	I
per0302006a	WCLICAL-04	CWW	3/2/2010 19:53			1		USE	I
per0302007a	WCLICAL-05	CWW	3/2/2010 20:01			1		USE	I
per0302008a	IPB002	CWW	3/2/2010 20:10			1		USE	B
per0302009a	WCLICV	CWW	3/2/2010 20:18			1		USE	C
per0302010a	IPB003	CWW	3/2/2010 20:27			1		USE	B
per0302011a	WCLCRI	CWW	3/2/2010 20:35			1		USE	C
per0302012a	1202042225	CWW	3/2/2010 20:44	952820	VARIOUS	1	LANL	USE	S
per0302013a	1202042226	CWW	3/2/2010 20:52	952820	VARIOUS	1	LANL	USE	S
per0302014a	1202042229	CWW	3/2/2010 21:01	952820	VARIOUS	1	LANL	USE	S
per0302015a	246325001	CWW	3/2/2010 21:10	952820	10-1603	1	LANL	USE	S
per0302016a	246325002	CWW	3/2/2010 21:18	952820	10-1603	1	LANL	USE	S
per0302017a	246325003	CWW	3/2/2010 21:27	952820	10-1603	1	LANL	USE	S
per0302018a	246325004	CWW	3/2/2010 21:35	952820	10-1603	1	LANL	USE	S
per0302019a	246325005	CWW	3/2/2010 21:44	952820	10-1603	1	LANL	USE	S
per0302020a	246325006	CWW	3/2/2010 21:52	952820	10-1603	1	LANL	USE	S
per0302021a	WCLCCV	CWW	3/2/2010 22:01			1		USE	C
per0302022a	IPB004	CWW	3/2/2010 22:09			1		USE	B
per0302023a	WCLCRI	CWW	3/2/2010 22:18			1		USE	C
per0302024a	246437001	CWW	3/2/2010 22:27	952820	10-1621-1	1	LANL	USE	S
per0302025a	1202042227	CWW	3/2/2010 22:35	952820	10-1621-1	1	LANL	USE	S
per0302026a	1202042228	CWW	3/2/2010 22:44	952820	10-1621-1	1	LANL	USE	S
per0302027a	246437002	CWW	3/2/2010 22:52	952820	10-1621-1	1	LANL	USE	S
per0302028a	246437003	CWW	3/2/2010 23:01	952820	10-1621-1	1	LANL	USE	S
per0302029a	246437004	CWW	3/2/2010 23:10	952820	10-1621-1	1	LANL	USE	S

per0302030a	246437005	CWW	3/2/2010 23:18	952820	10-1621-1	1	LANL	USE	S
per0302031a	246437006	CWW	3/2/2010 23:27	952820	10-1621-1	1	LANL	USE	S
per0302032a	WCLCCV	CWW	3/2/2010 23:35			1		USE	C
per0302033a	IPB005	CWW	3/2/2010 23:44			1		USE	B
per0302034a	WCLCRI	CWW	3/2/2010 23:52			1		USE	C
per0302035a	246437007	CWW	3/3/2010 0:01	952820	10-1621-1	1	LANL	USE	S
per0302036a	246437008	CWW	3/3/2010 0:09	952820	10-1621-1	1	LANL	USE	S
per0302037a	246437009	CWW	3/3/2010 0:18	952820	10-1621-1	1	LANL	USE	S
per0302038a	246437010	CWW	3/3/2010 0:27	952820	10-1621-1	1	LANL	USE	S
per0302039a	246437011	CWW	3/3/2010 0:35	952820	10-1621-1	1	LANL	USE	S
per0302040a	246437012	CWW	3/3/2010 0:44	952820	10-1621-1	1	LANL	USE	S
per0302041a	246437013	CWW	3/3/2010 0:52	952820	10-1621-1	1	LANL	USE	S
per0302042a	246437014	CWW	3/3/2010 1:01	952820	10-1621-1	1	LANL	USE	S
per0302043a	WCLCCV	CWW	3/3/2010 1:09			1		USE	C
per0302044a	IPB006	CWW	3/3/2010 1:18			1		USE	B
per0302045a	WCLCRI	CWW	3/3/2010 1:27			1		USE	C
per0302046a	1202058256	CWW	3/3/2010 1:35	959704	VARIOUS	1	LANL	USE	S
per0302047a	1202058257	CWW	3/3/2010 1:44	959704	VARIOUS	1	LANL	USE	S
per0302048a	1202058262	CWW	3/3/2010 1:53	959704	VARIOUS	1	LANL	USE	S
per0302049a	246574002	CWW	3/3/2010 2:01	959704	10-1679	2	LANL	USE	S
per0302050a	246598002	CWW	3/3/2010 2:10	959704	10-1696	2	LANL	USE	S
per0302051a	246690002	CWW	3/3/2010 2:18	959704	10-1722	1	LANL	USE	S
per0302052a	1202058258	CWW	3/3/2010 2:27	959704	10-1722	1	LANL	USE	S
per0302053a	1202058259	CWW	3/3/2010 2:36	959704	10-1722	1	LANL	USE	S
per0302054a	246690003	CWW	3/3/2010 2:44	959704	10-1722	1	LANL	USE	S
per0302055a	WCLCCV	CWW	3/3/2010 2:53			1		USE	C
per0302056a	IPB007	CWW	3/3/2010 3:01			1		USE	B
per0302057a	WCLCRI	CWW	3/3/2010 3:10			1		USE	C
per0302058a	246853001	CWW	3/3/2010 3:19	959704	10-1753	1	LANL	USE	S
per0302059a	246860001	CWW	3/3/2010 3:27	959704	10-1756	1	LANL	USE	S
per0302060a	246862001	CWW	3/3/2010 3:36	959704	10-1780	1	LANL	USE	S
per0302061a	246871001	CWW	3/3/2010 3:44	959704	10-1759	1	LANL	USE	S
per0302062a	246877001	CWW	3/3/2010 3:53	959704	10-1774	1	LANL	USE	S
per0302063a	246877004	CWW	3/3/2010 4:01	959704	10-1774	2	LANL	USE	S
per0302064a	246882001	CWW	3/3/2010 4:10	959704	10-1770	1	LANL	USE	S
per0302065a	246882002	CWW	3/3/2010 4:19	959704	10-1770	1	LANL	USE	S
per0302066a	WCLCCV	CWW	3/3/2010 4:27			1		USE	C

per0302104a	247463002	CWW	3/3/2010 9:55	957929	10-1941	1	LANL	USE	S
per0302105a	247463003	CWW	3/3/2010 10:03	957929	10-1941	1	LANL	USE	S
per0302106a	247463004	CWW	3/3/2010 10:12	957929	10-1941	1	LANL	USE	S
per0302107a	247463005	CWW	3/3/2010 10:20	957929	10-1941	1	LANL	USE	S
per0302108a	247463006	CWW	3/3/2010 10:29	957929	10-1941	1	LANL	USE	S
per0302109a	247784002	CWW	3/3/2010 10:37	957929	10-1979	1	LANL	USE	S
per0302110a	247855002	CWW	3/3/2010 10:46	957929	10-1978	1	LANL	USE	S
per0302111a	WCLCCV	CWW	3/3/2010 10:54			1		USE	C
per0302112a	IPB012	CWW	3/3/2010 11:03			1		USE	B
per0302113a	WCLCRI	CWW	3/3/2010 11:12			1		USE	C

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 798798

Revision No.: 1

DATA EXCEPTION REPORT

Mo. Day Yr. 03-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 6850 Modified	Matrix Type: Solid	Client Code: LANL
Batch ID: 957929	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 247347(10-1912),247359(10-1915),247463(10-1941),247784(10-1979),247855(10-1978)			
Application Issues: Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
<p>1. High recovery for Perchlorate-101 was observed in 1202054202 (MS). The recovery was 127% and the acceptance range is 75-125%.</p>		<p>1. The high recovery may be the result of the spike standard or extraction procedure since a similar, but passing recovery, was observed for the LCS.</p>	

Originator's Name:

Charles Wilson

03-MAR-10

Data Validator/Group Leader:

Herbert Maier

04-MAR-10

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1912-1**

Method/Analysis Information

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

Analytical Method: SW846 6850 Modified

Prep Method: SW846 6850 Modified

Analytical Batch Number: 955727

Prep Batch Number: 955726

Sample Analysis

Sample ID	Client ID
247350001	RE15-10-8270
1202049073	Interference Check Sample (ICS)
1202049069	Method Blank (MB)
1202049070	Laboratory Control Sample (LCS)
1202049071	247139001(RE16-10-3910) Matrix Spike (MS)
1202049072	247139001(RE16-10-3910) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

10-1912-1-PERLCMS

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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 247139001 (RE16-10-3910) from SDG 10-1854-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

10-1912-1-PERLCMS

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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

Due to instrument problems, sample 247350001 (RE15-10-8270) was analyzed one day after the QC for the SDG was analyzed.

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert M. Maurer Date: 03/12/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8270

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912-1

GEL Sample ID: 247350001

Date Filtered: 02-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	07-MAR-10 16:19	per0307014a
	Perchlorate Isotope Ratio						1	07-MAR-10 16:19	per0307014a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	07-MAR-10 16:19	per0307014a
	Perchlorate-O(18)			0.515	ug/L		1	07-MAR-10 16:19	per0307014a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1912-1

Extract Batch Code: 955726

Date Filtered: 02-MAR-10

Matrix: WATER

Sample ID: 1202049070

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.18	ug/L	90.1		85 - 115
Perchlorate Isotope Ratio		3.12				--
Perchlorate-101	0.200	.188	ug/L	93.9		85 - 115
Perchlorate-O(18)		.416	ug/L			--

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1912-1

Extract Batch Code: 955726

Date Filtered: 02-MAR-10

Matrix: WATER

Sample ID: 1202049073

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.163	ug/L	81.6		70 - 130
Perchlorate Isotope Ratio		2.98				
Perchlorate-101	0.200	.178	ug/L	89.2		70 - 130
Perchlorate-O(18)		.456	ug/L			

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305115a

Date: 06-Mar-2010

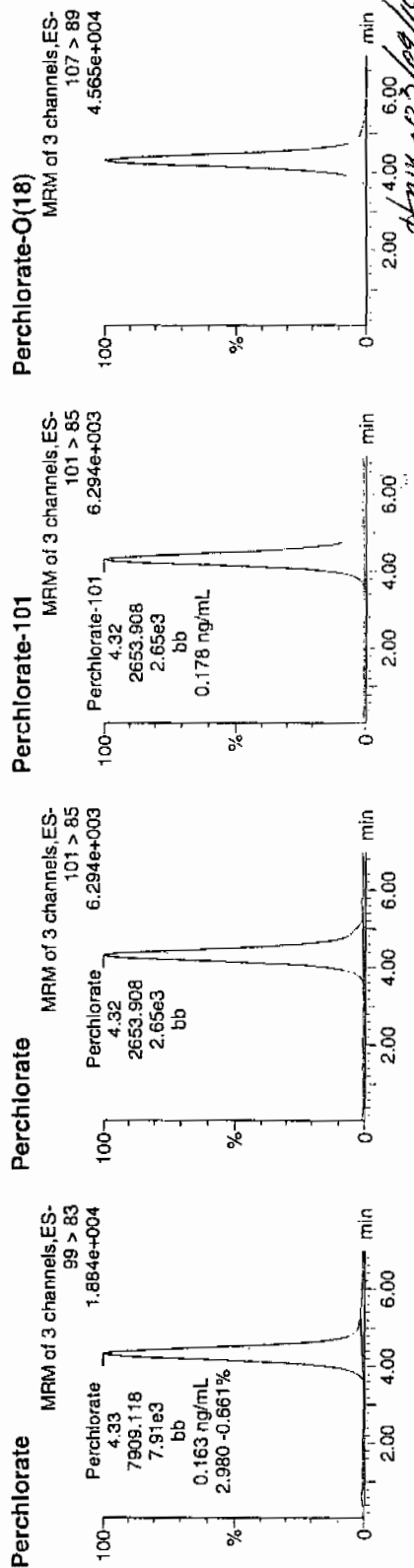
Time: 07:52:13

ID: 1202049073

Vial: 3:1,C

000
03-30-10

1202049073 | 1202049073 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049073	Perchlorate	99 > 83	4.33	7909.118	7909.118	bb			0.1631	81.55	-18.45	520.937	2.98
1202049073	Perchlorate-101	101 > 85	4.32	2653.908	2653.908	bb			0.1783	89.17	-10.83	114.573	
1202049073	Perchlorate-O(18)	107 > 89	4.32	19159.748	19159.748	bb			0.4555	91.11	-8.89	3028.5...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1912-1

Extract Batch Code: 955726

Date Extracted: 02-MAR-10

GEL MS/PS ID: 1202049071

Client ID: RE16-10-3910

GEL MSD/PSD ID: 1202049072

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00113	ug/L	0.176	87.6		.179	88.7		1.33		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.13			3.1			0			-
Perchlorate-101	0.200	0.00083	ug/L	0.184	91.4		.188	93.5		2.22		30	75 - 125
Perchlorate-O(18)	0	0.408	ug/L	0.414			.42			1.23			-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	05-MAR-10	per0305001a	IPB001
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305001a	IPB001
Perchlorate	0.00	0	NA	05-MAR-10	per0305002a	IPB001
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305002a	IPB001
Perchlorate	0.00	0	NA	07-MAR-10	per0307001a	IPB001
Perchlorate-101	0.00	0	NA	07-MAR-10	per0307001a	IPB001
Perchlorate	0.00	0	NA	07-MAR-10	per0307002a	IPB001
Perchlorate-101	0.00	0	NA	07-MAR-10	per0307002a	IPB001

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

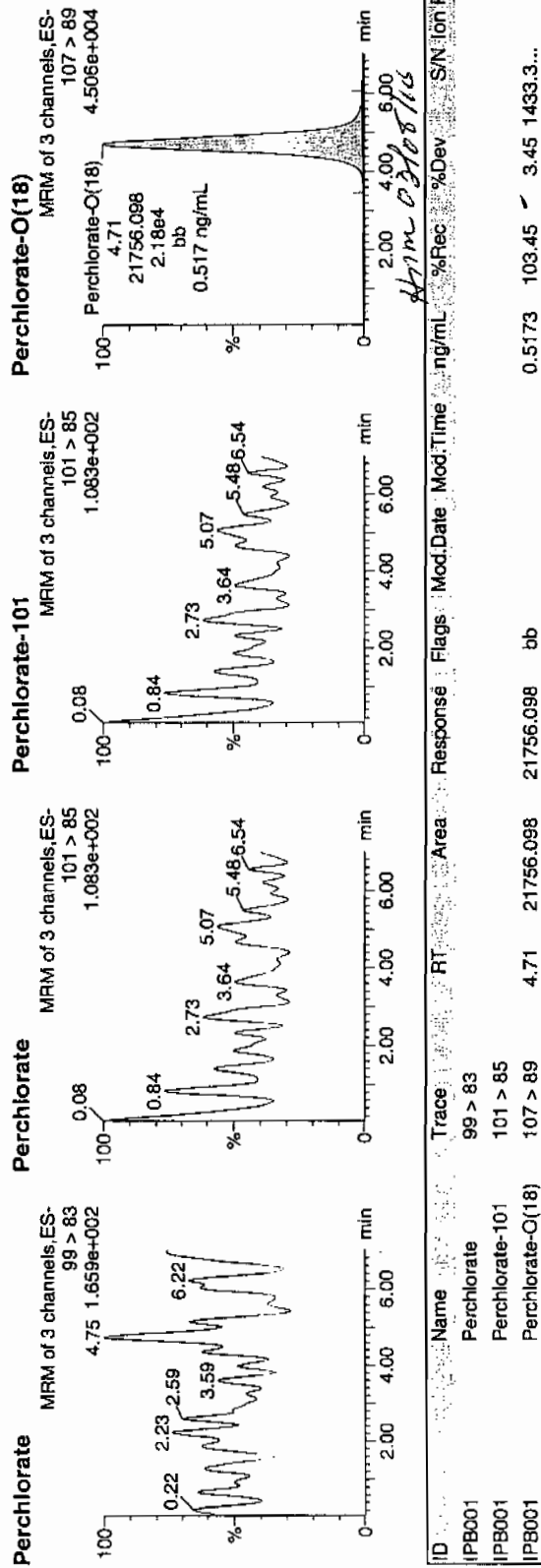
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

Name: per0305001a
Date: 05-Mar-2010
Time: 12:39:45
ID: IPB001
Vial: 1:1,A

030510



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.71	21756.098	21756.098	bb			0.5173	103.45	3.45	1433.3...	

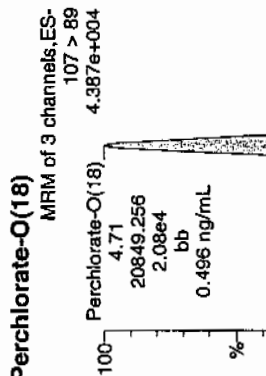
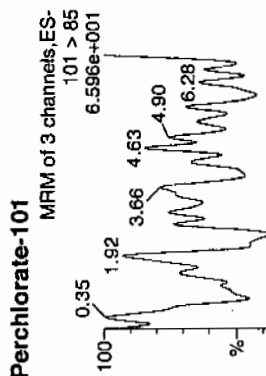
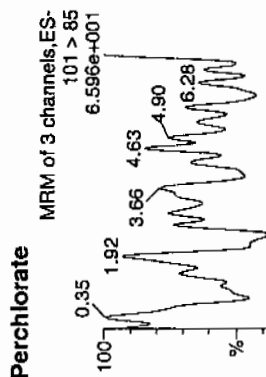
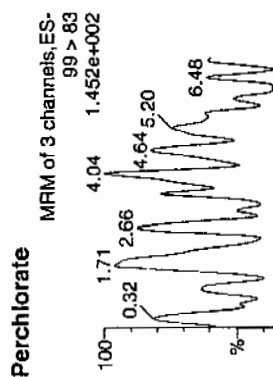
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305002a
Date: 05-Mar-2010
Time: 12:50:06
ID: IPB001
Vial: 1:1.A

03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB001	Perchlorate	99 > 83											
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.71	20849.256	20849.256	bb			0.4957	99.14	-0.86	1295.4...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030710a.mdb 08 Mar 2010 08:56:17
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030710a.cdb 08 Mar 2010 09:02:25

Name: per0307001a

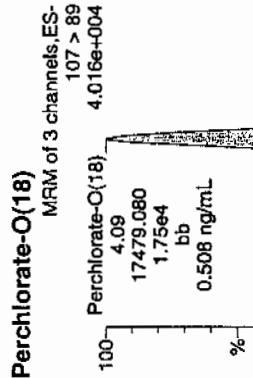
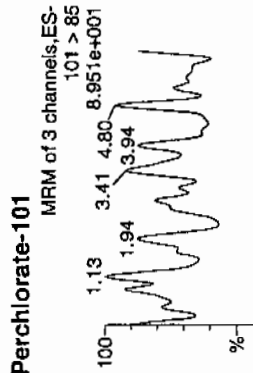
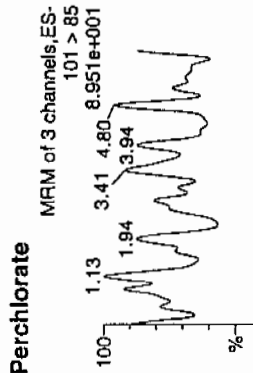
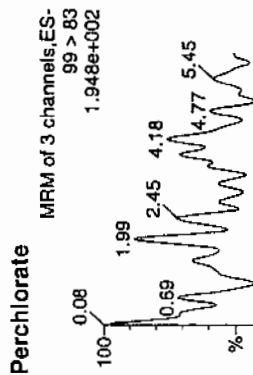
Date: 07-Mar-2010

Time: 14:21:49

ID: IPB001

Vial: 1:1,A

0308-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.09	17479.080	17479.080	bb			0.5082	101.64	1.64	3828.4...	

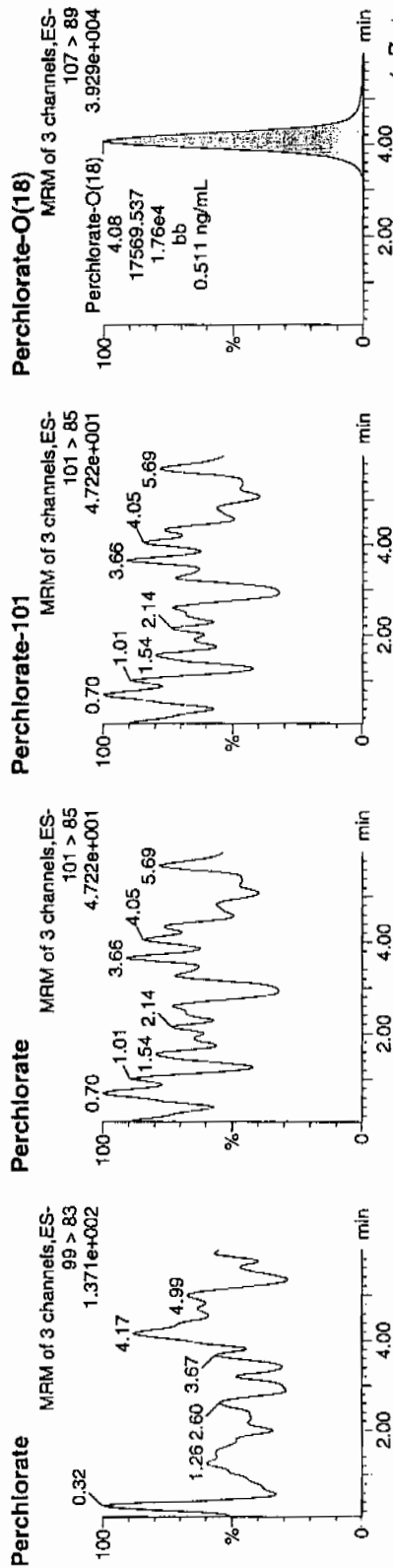
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

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Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307002a
Date: 07-Mar-2010
Time: 14:31:01
ID: IPB001
Vial: 1:1,A

03-08-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.08	17569.537	17569.537	bb			0.5108	102.17	2.17	1591.0...	

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	05-MAR-10	per0305008a	IPB002
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305008a	IPB002
Perchlorate	0.00	0	NA	05-MAR-10	per0305010a	IPB003
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305010a	IPB003
Perchlorate	0.00	0	NA	05-MAR-10	per0305023a	IPB004
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305023a	IPB004
Perchlorate	0.00	0	NA	05-MAR-10	per0305036a	IPB005
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305036a	IPB005
Perchlorate	0.00	0	NA	05-MAR-10	per0305062a	IPB008
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305062a	IPB008
Perchlorate	0.00	0	NA	06-MAR-10	per0305075a	IPB009
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305075a	IPB009
Perchlorate	0.00	0	NA	06-MAR-10	per0305079a	IPB010

Perchlorate Continuing Calibration Blank

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Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305079a	IPB010
Perchlorate	0.00	0	NA	06-MAR-10	per0305088a	IPB011
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305088a	IPB011
Perchlorate	0.00	0	NA	06-MAR-10	per0305099a	IPB012
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305099a	IPB012
Perchlorate	0.00	0	NA	06-MAR-10	per0305111a	IPB013
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305111a	IPB013
Perchlorate	0.00	0	NA	06-MAR-10	per0305124a	IPB014
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305124a	IPB014
Perchlorate	0.00	0	NA	07-MAR-10	per0307008a	IPB002
Perchlorate-101	0.00	0	NA	07-MAR-10	per0307008a	IPB002
Perchlorate	0.00	0	NA	07-MAR-10	per0307010a	IPB003
Perchlorate-101	0.00	0	NA	07-MAR-10	per0307010a	IPB003

Perchlorate Continuing Calibration Blank

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Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	07-MAR-10	per0307015a	IPB004
Perchlorate-101	0.00	0	NA	07-MAR-10	per0307015a	IPB004
Perchlorate	0.00	0	NA	07-MAR-10	per0307023a	IPB005
Perchlorate-101	0.00	0	NA	07-MAR-10	per0307023a	IPB005

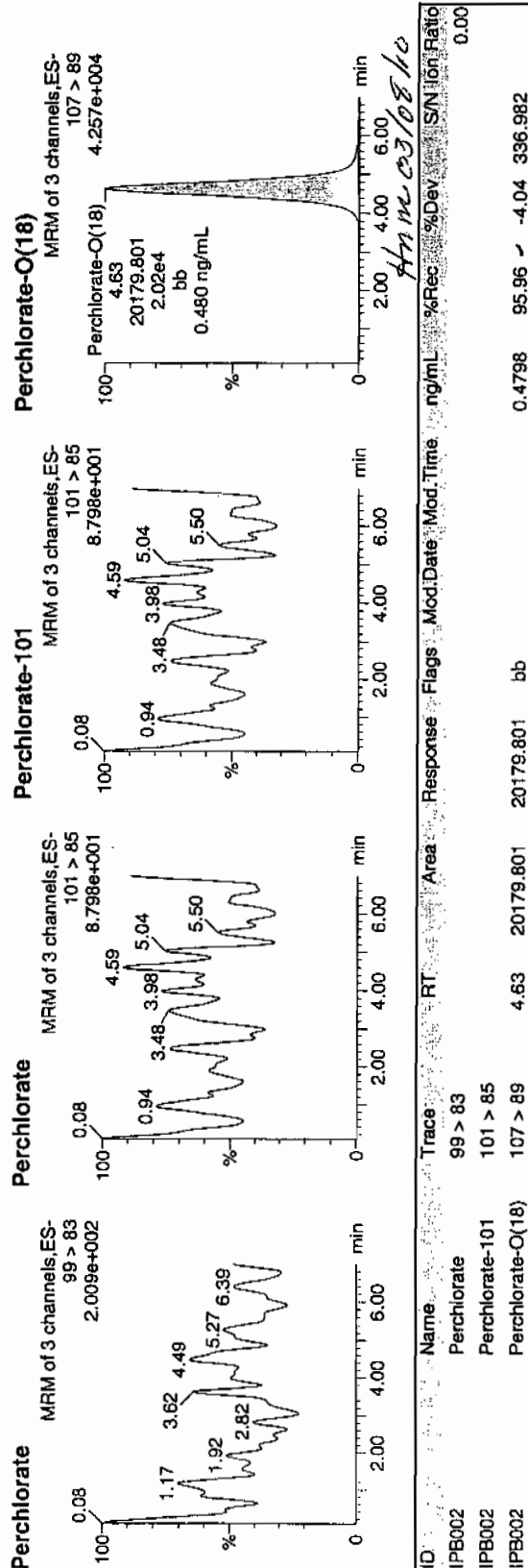
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305008a
Date: 05-Mar-2010
Time: 13:50:47
ID: IPB002
Vial: 1:1,A

03-06-10



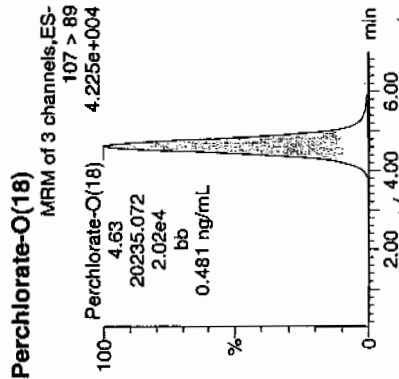
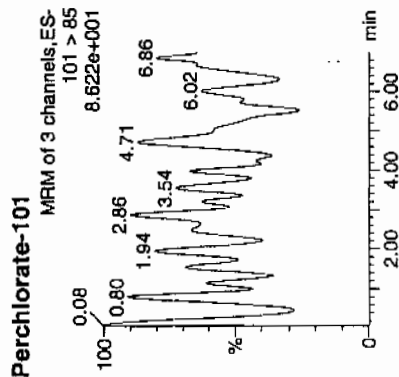
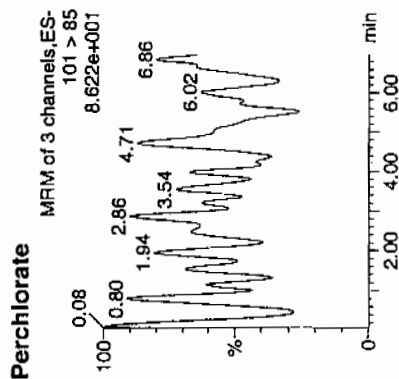
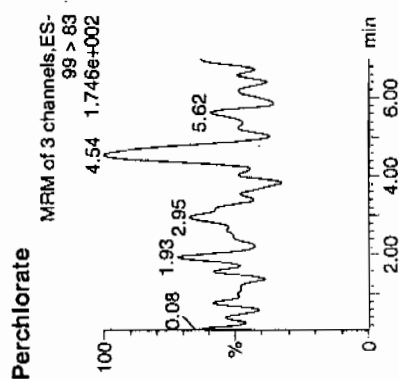
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305010a
Date: 05-Mar-2010
Time: 14:11:00
ID: IPB003
Vial: 1:1,A

0.481-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-Q(18)	107 > 89	4.63	20235.072	20235.072	bb			0.4811	96.22	-3.78	3040.0...	

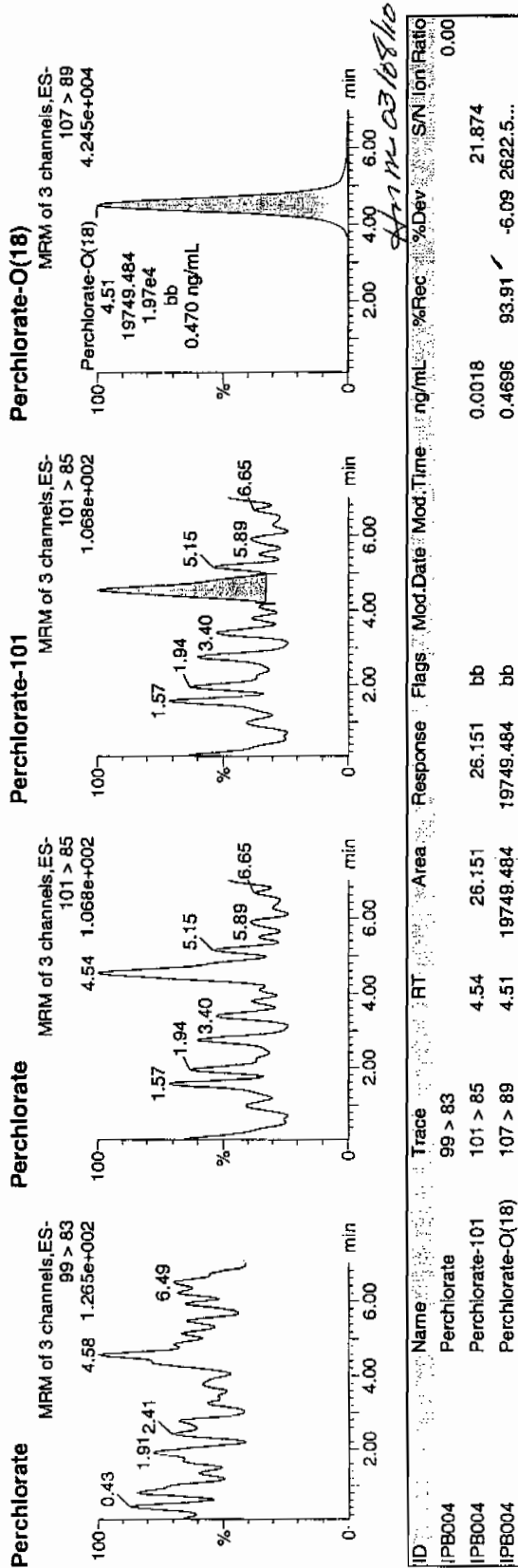
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305023a
Date: 05-Mar-2010
Time: 16:21:48
ID: IPB004
Vial: 1:1,A

CW
03-06-10



Quantify Sample Report MassLynx 4.0 SP4

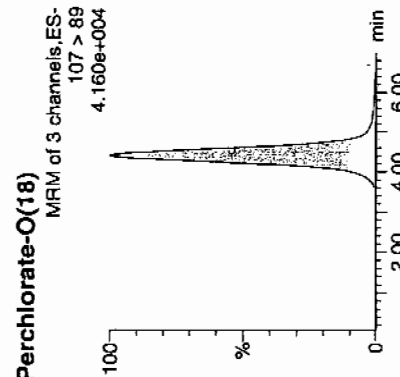
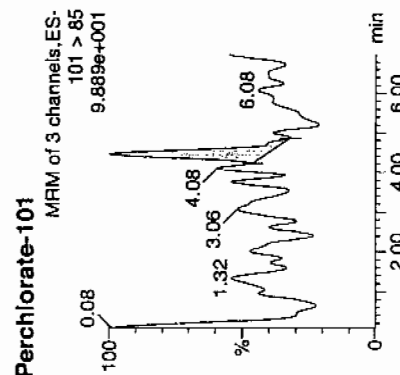
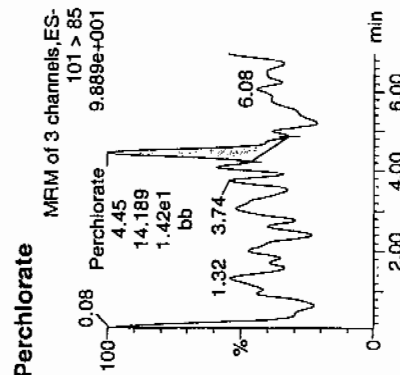
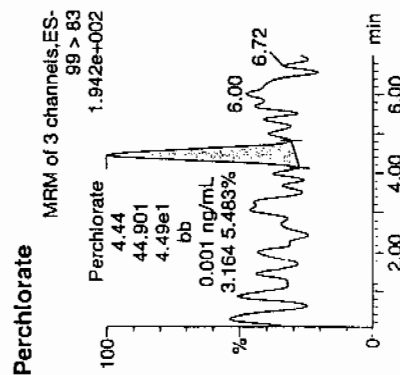
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
 Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305036a
 Date: 05-Mar-2010
 Time: 18:32:44
 ID: IPB005
 Vial: 1:1.A

03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	4.44	44.901	44.901	bb			0.0009	91.54	-8.46	3556.7	3.16
IPB005	Perchlorate-101	101 > 85	4.45	14.189	14.189	bb			0.0010	91.54	-8.46	3556.7	12.136
IPB005	Perchlorate-O(18)	107 > 89	4.41	19249.852	19249.852	bb			0.4577	91.54	-8.46	3556.7	9.442

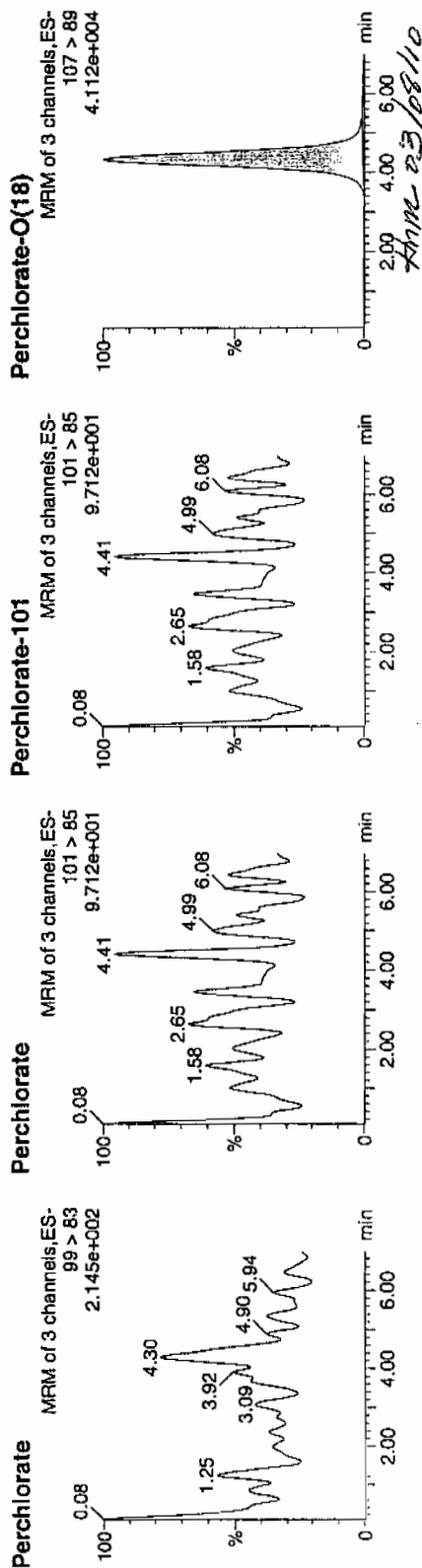
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305062a
Date: 05-Mar-2010
Time: 22:55:56
ID: IPB008
Vial: 1:1,A

03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83											0.00
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	4.34	18762.594	18762.594	bb			0.4461	89.22	-10.78	2075.7...	

Quantify Sample Report MassLynx 4.0 SP4

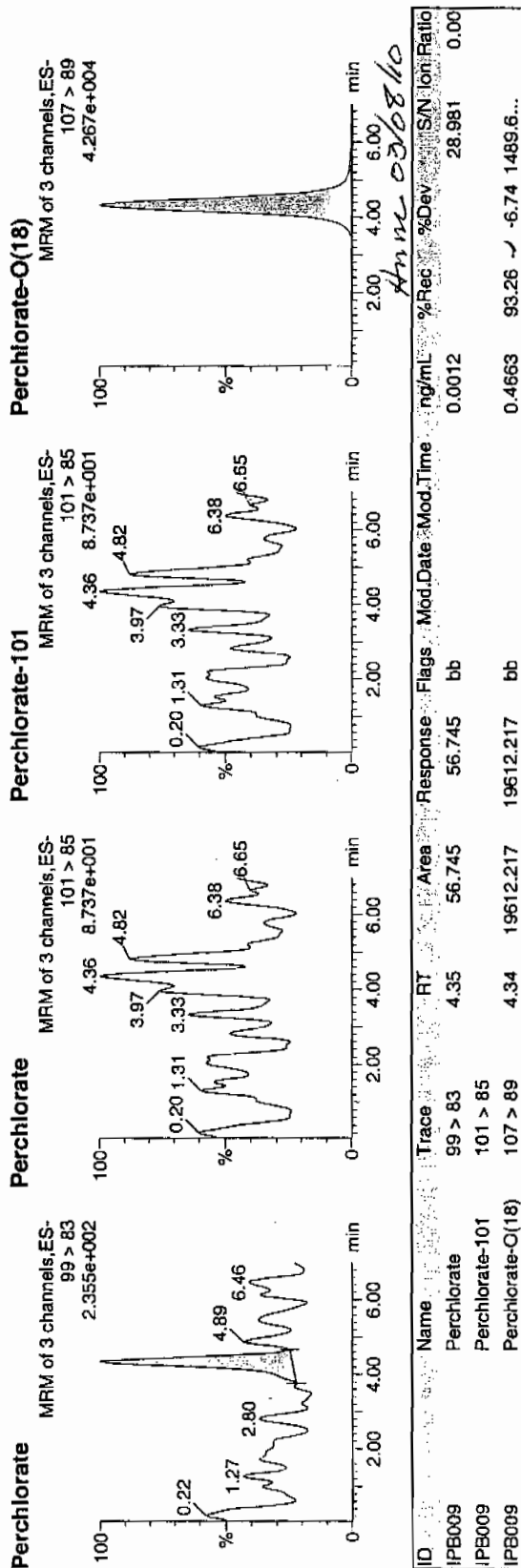
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305075a
Date: 06-Mar-2010
Time: 01:07:14
ID: IPB009
Vial: 1:1,A

03 06-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305079a

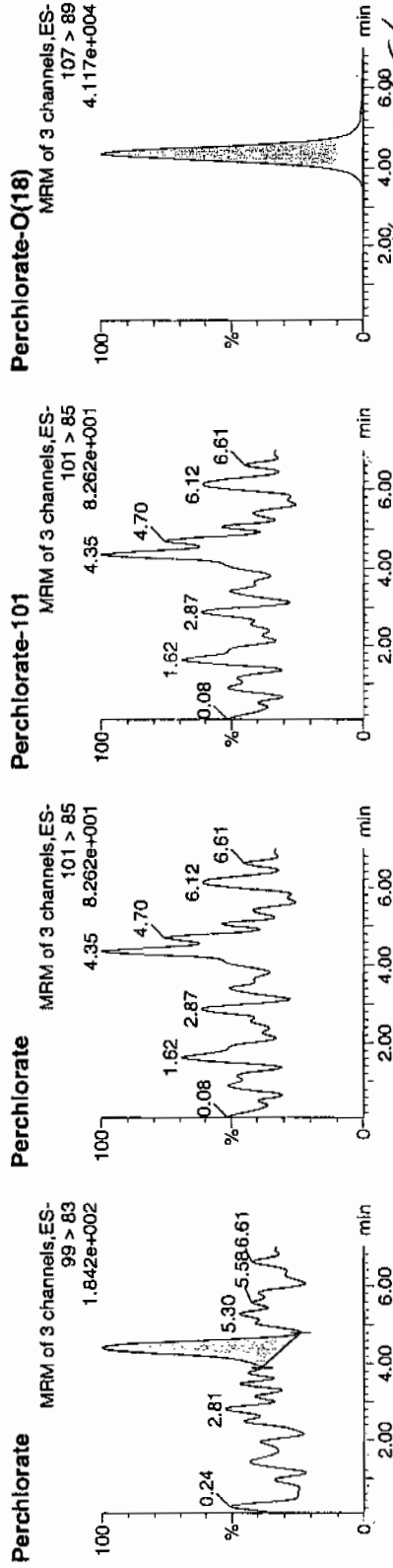
Date: 06-Mar-2010

Time: 01:47:51

ID: IPB010

Vial: 1:1,A

03-06-10



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IPB010	Perchlorate	99 > 83	4.41	52.090	52.090	bb			0.0011			12.083	0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	4.35	18875.709	18875.709	bb			0.4488	89.76	-10.24	3786.1...	

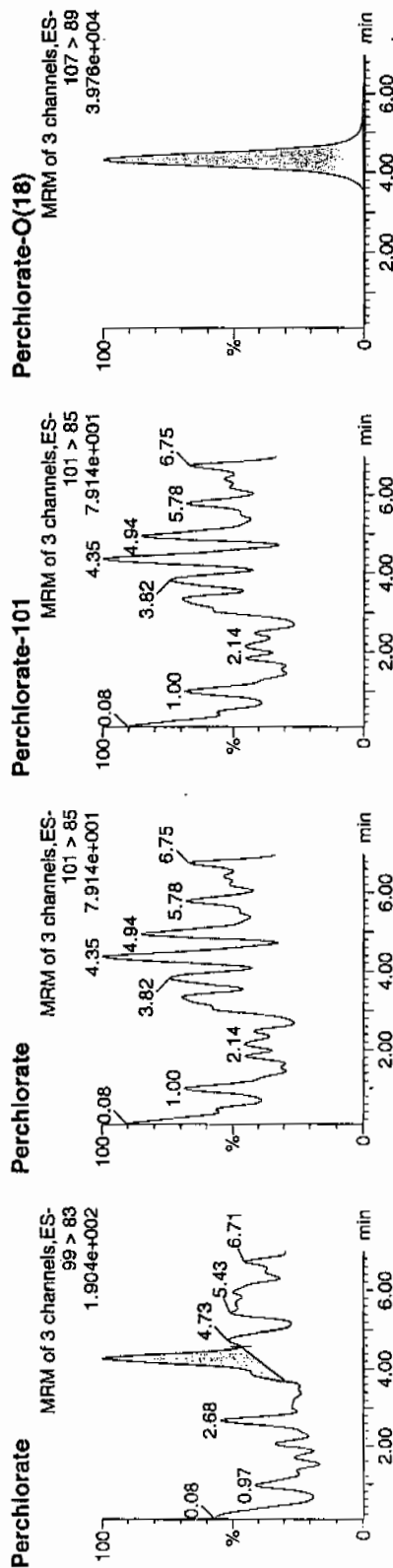
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305088a
Date: 06-Mar-2010
Time: 03:19:03
ID: IPB011
Vial: 1:1,A

03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB011	Perchlorate	99 > 83	4.27	38.645	38.645	bb			0.0008			9.935	0.00
IPB011	Perchlorate-101	101 > 85											
IPB011	Perchlorate-O(18)	107 > 89	4.32	18268.896	18268.896	bb			0.4344	86.87	-13.13	3328.6...	

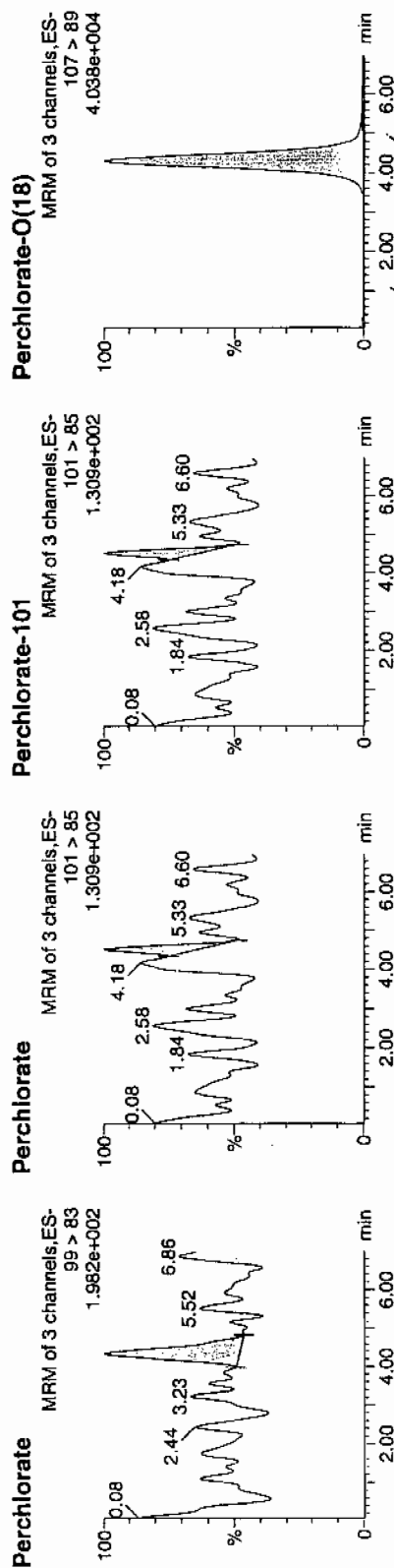
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305099a
Date: 06-Mar-2010
Time: 05:10:08
ID: IPB012
Vial: 1:1,A

03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod:Date	Mod:Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB012	Perchlorate	99 > 83	4.34	38.264	38.264	bb			0.0008			12.046	3.88
IPB012	Perchlorate-101	101 > 85	4.51	9.873	9.873	bb			0.0007			12.423	
IPB012	Perchlorate-O(18)	107 > 89	4.32	18361.596	18361.596	bb			0.4366	87.31	-12.69	1563.3...	

0.004
12.046

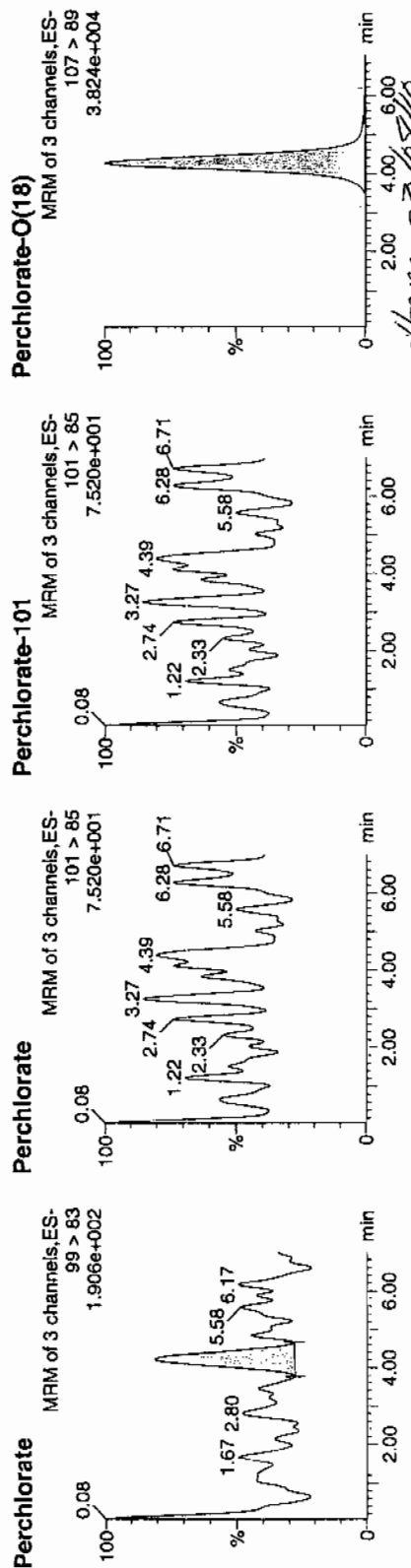
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305111a
Date: 06-Mar-2010
Time: 07:11:35
ID: IPB013
Vial: 1:1,A

SW
03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB013	Perchlorate	99 > 83	4.23	43.509	43.509	bb			0.0009			8.985	0.00
IPB013	Perchlorate-101	101 > 85											
IPB013	Perchlorate-O(18)	107 > 89	4.29	17616.211	17616.211	bb			0.4188	83.77	-16.23	3253.1...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305124a

Date: 06-Mar-2010

Time: 09:23:06

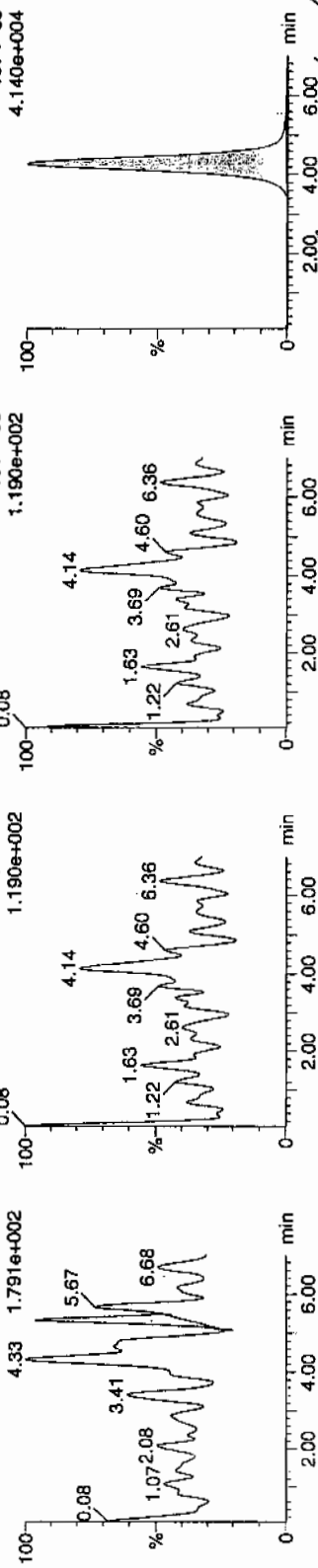
ID: IPB014

Vial: 1:1,A

Perchlorate MRM of 3 channels, ES- 99 > 83 1.791e+002 4.33 1.07 2.08 3.41 5.67 6.68

Perchlorate-101 MRM of 3 channels, ES- 101 > 85 1.190e+002 0.08 1.22 1.63 2.61 3.69 4.14 4.60 6.36

Perchlorate-O(18) MRM of 3 channels, ES- 107 > 89 4.140e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB014	Perchlorate	99 > 83	5.35	19.880	19.880	bb			0.0004	6.472	0.00		
IPB014	Perchlorate-101	101 > 85											
IPB014	Perchlorate-O(18)	107 > 89	4.28	18518.193	18518.193	bb			0.4403	88.06	-11.94	832.657	

Quantify Sample Report MassLynx 4.0 SP4

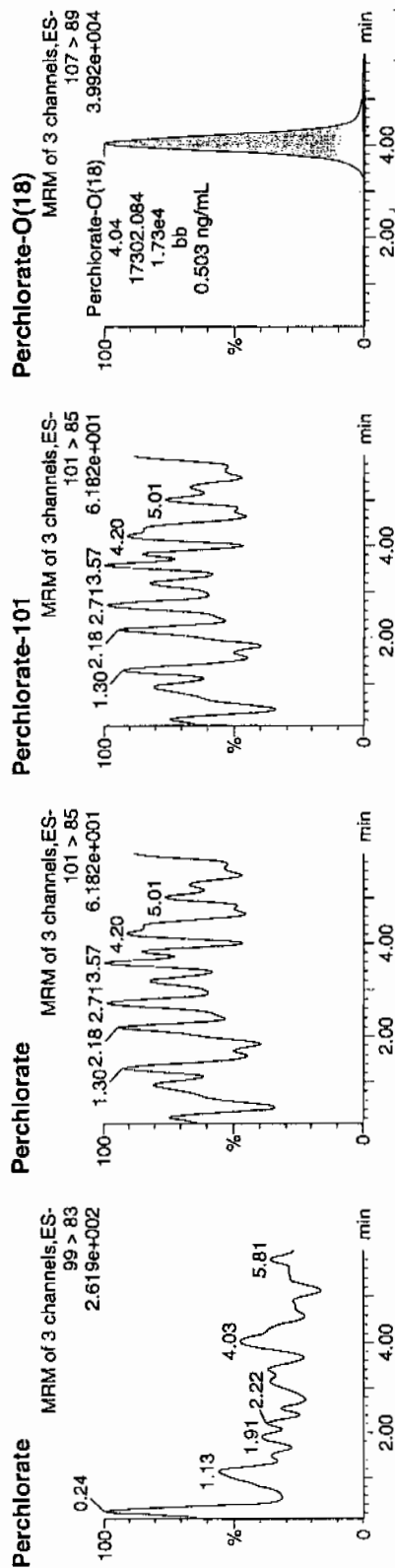
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

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Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

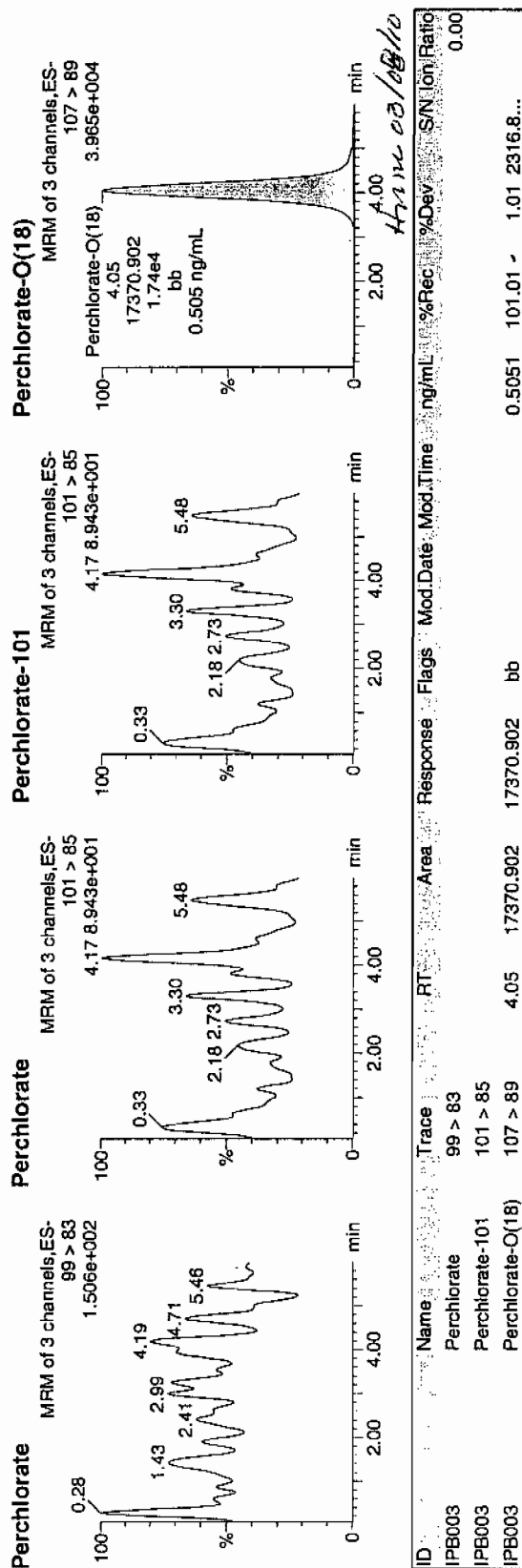
Name: per0307008a
Date: 07-Mar-2010
Time: 15:25:09
ID: IPB002
Vial: 1:1,A

0308-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	4.04	17302.084	17302.084	bb			0.5031	100.61	0.61	2799.1...	

0.505 ng/mL



Quantify Sample Report MassLynx 4.0 SP4

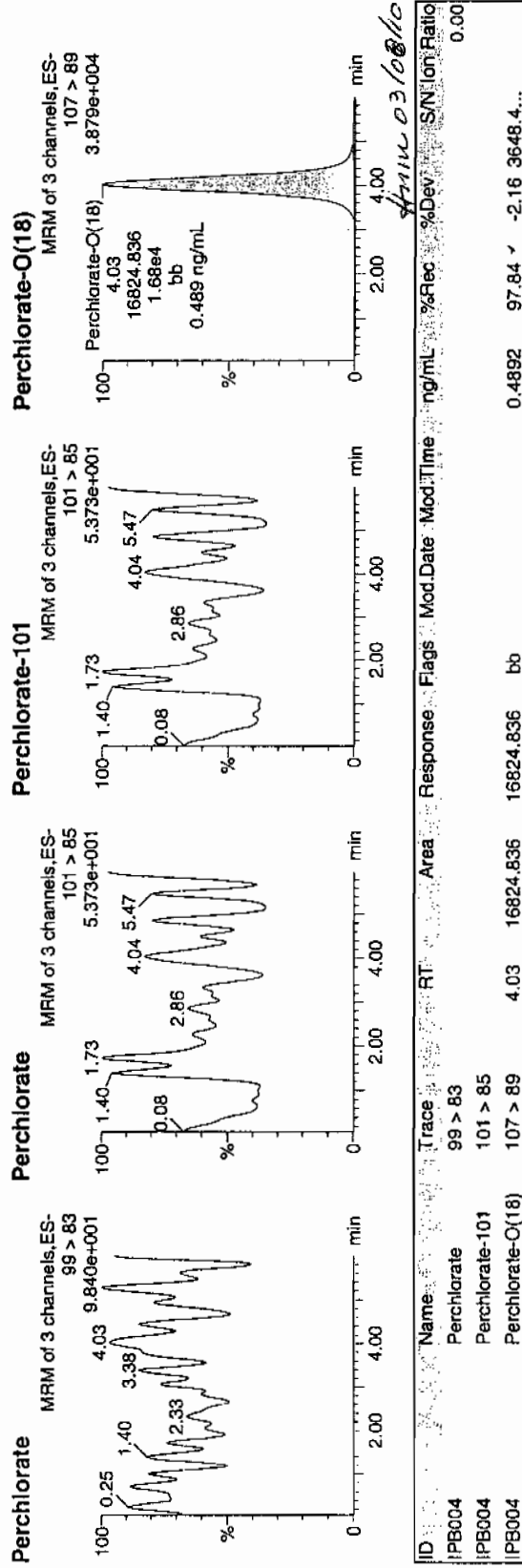
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307015a
Date: 07-Mar-2010
Time: 16:28:28
ID: IPB004
Vial: 1:1,A

03-08-10



03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	4.03	16824.836	16824.836	bb			0.4892	97.84	-2.16	3648.4...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

Page 23 of 109

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307023a

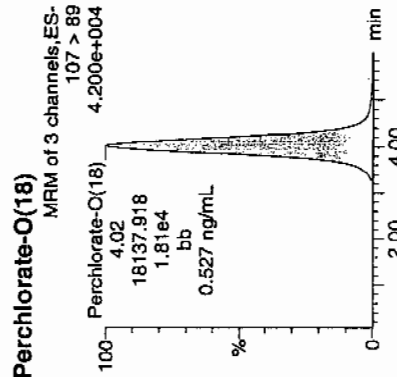
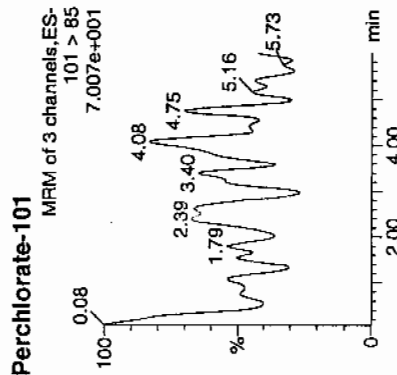
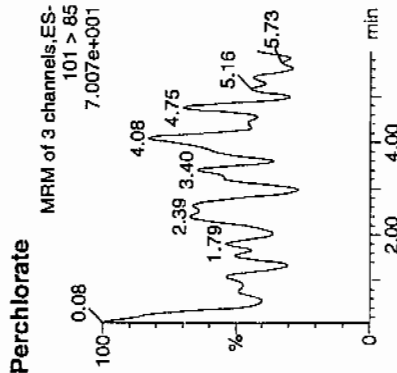
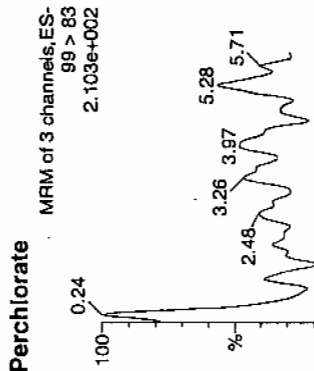
Date: 07-Mar-2010

Time: 17:40:47

ID: IPB005

Vial: 1:1,A

03-28-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB005	Perchlorate	99 > 83											
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	4.02	18137.918	18137.918	bb			0.5274	105.47	5.47	1500.1...	

Nairb.ref

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

Updated 20 April '95

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

QUANTO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

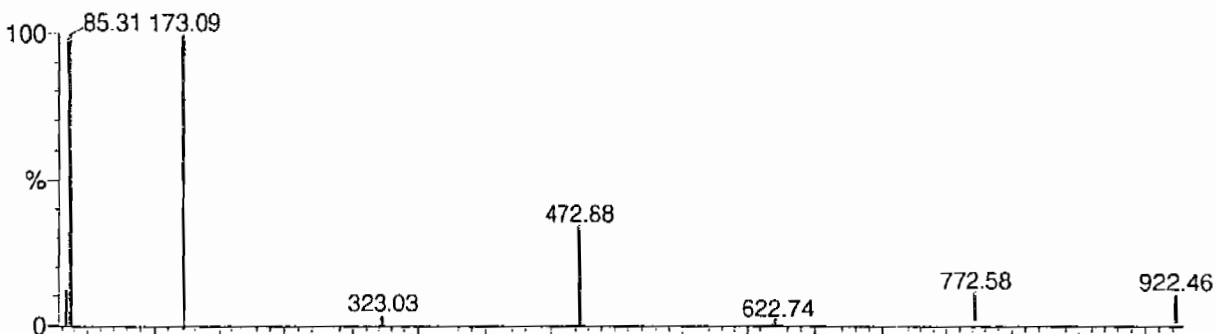
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

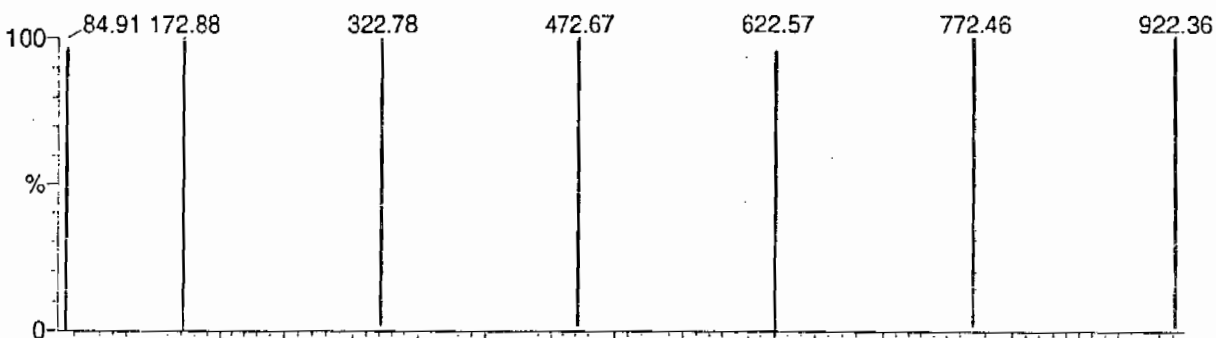
PEAKS HIGHLIGHTED BY GEL 01-07-03

Data file: STATMS1 - Uncalibrated

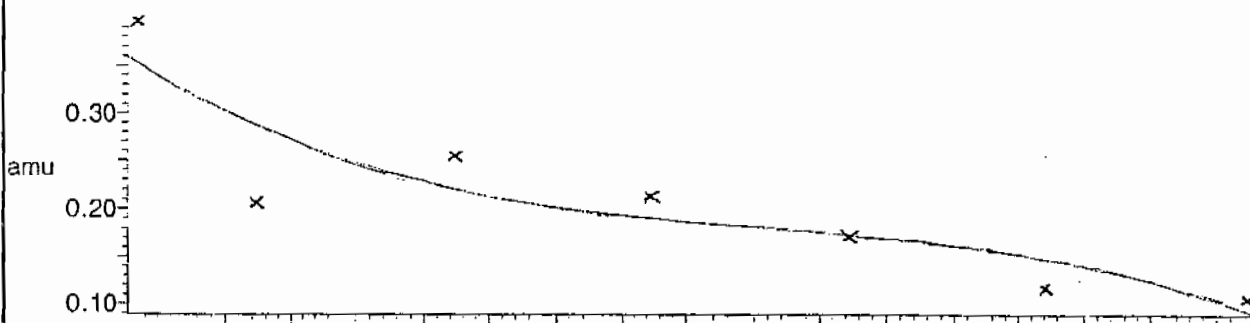
7 matches of 7 tested references



Reference file: Nairb

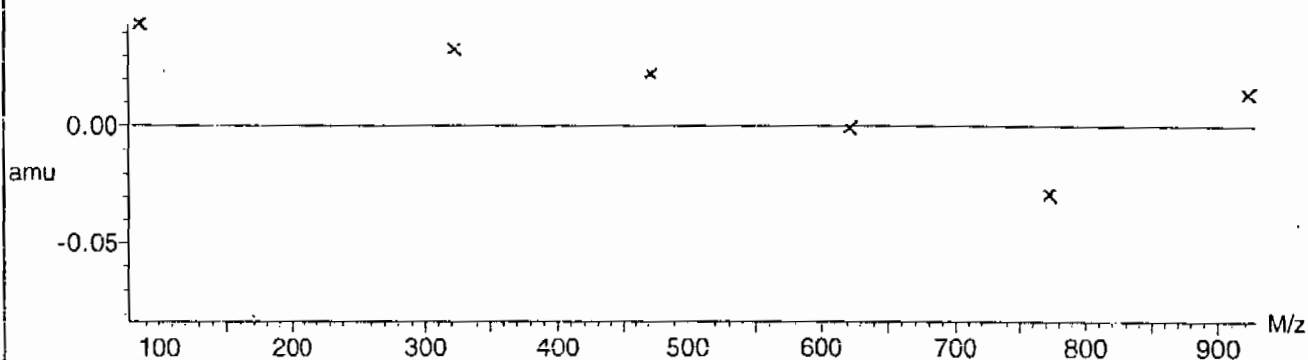


Mass difference (Raw - Ref mass)



Residuals

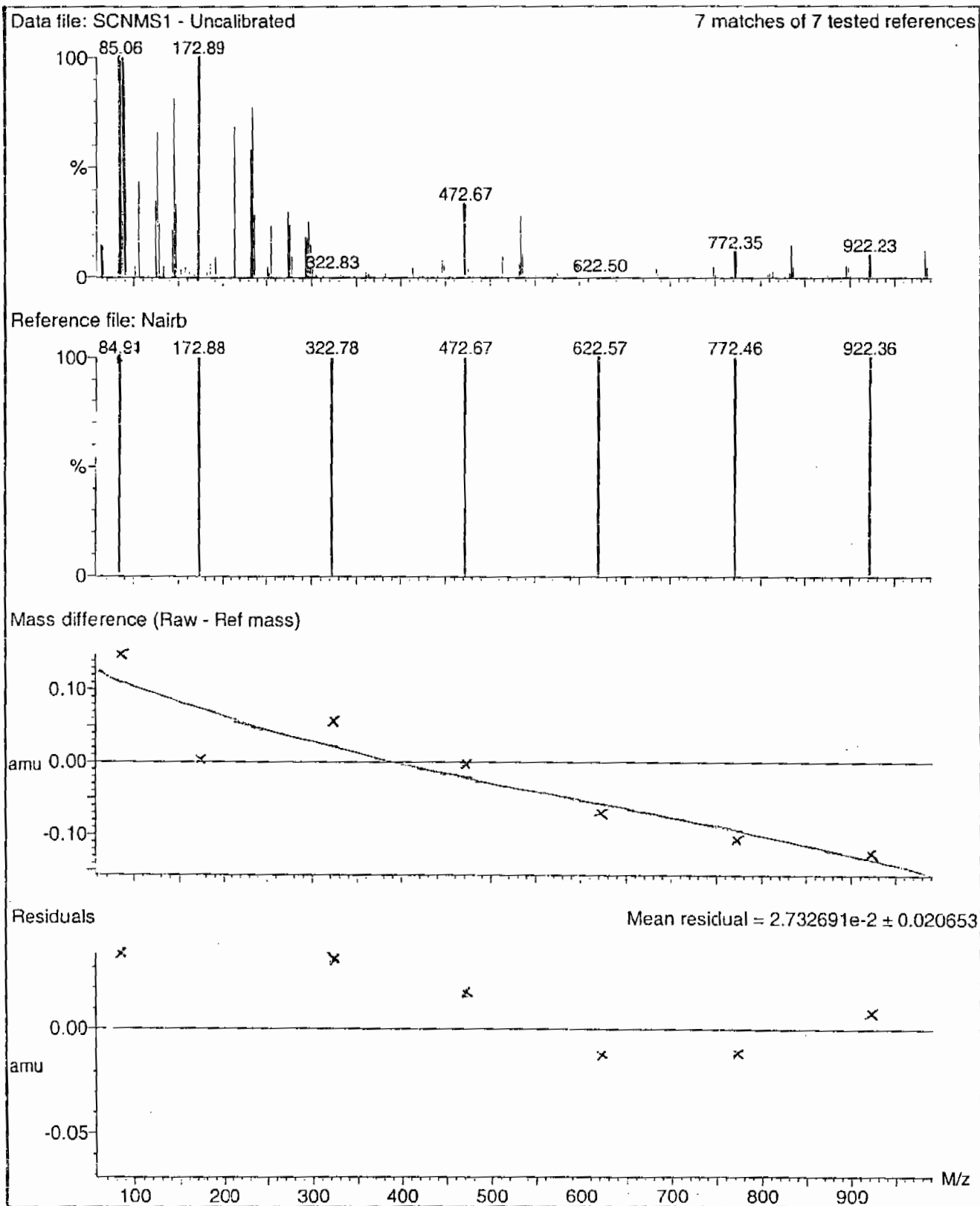
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:20:09 2008



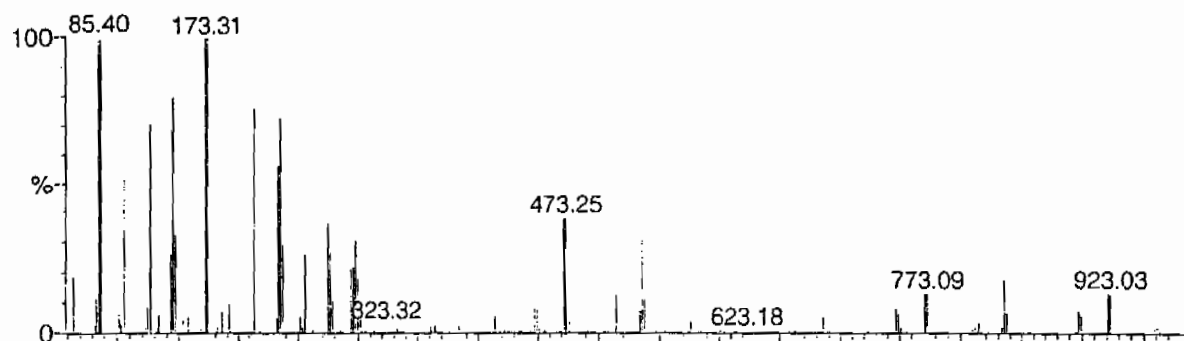
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

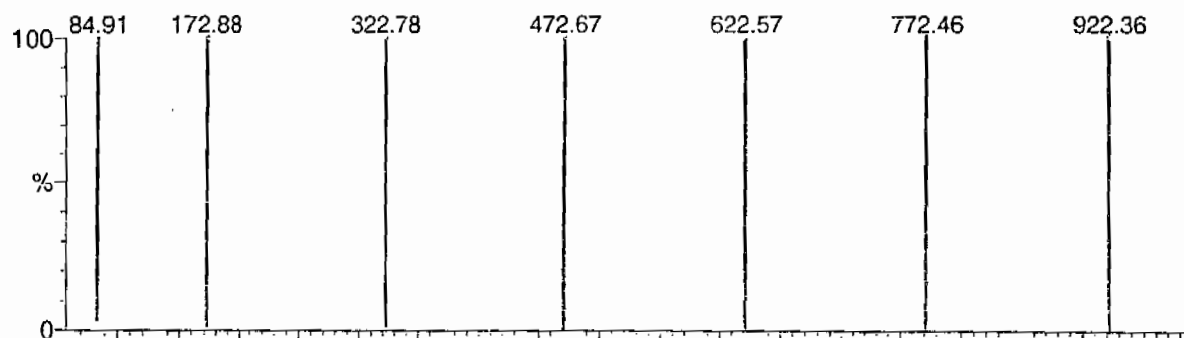
Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

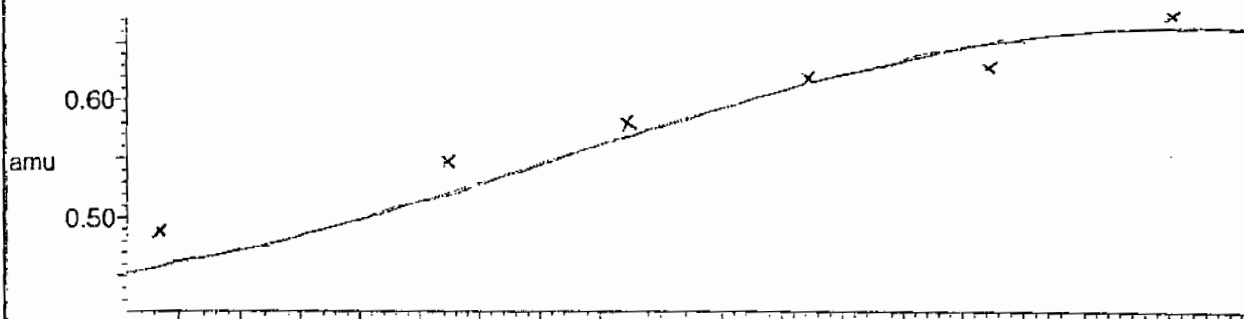
7 matches of 7 tested references



Reference file: Nairb

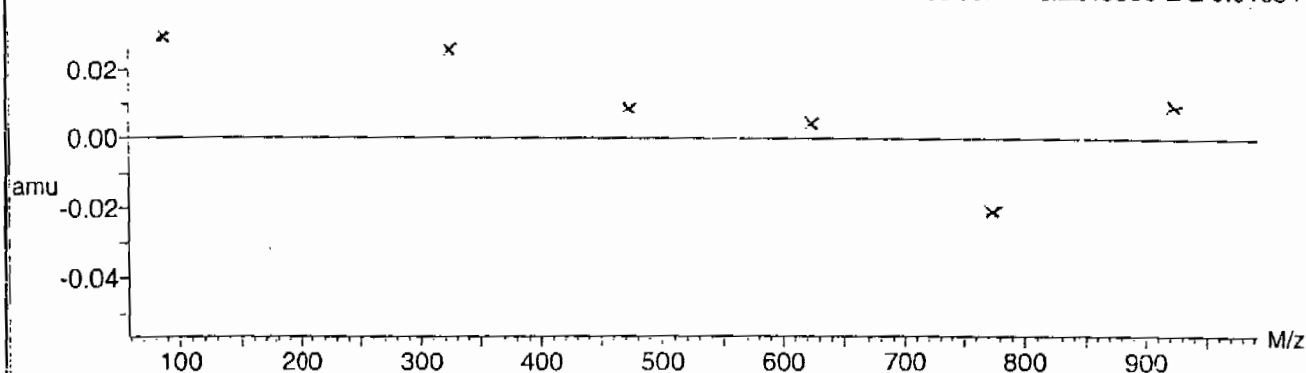


Mass difference (Raw - Ref mass)



Residuals

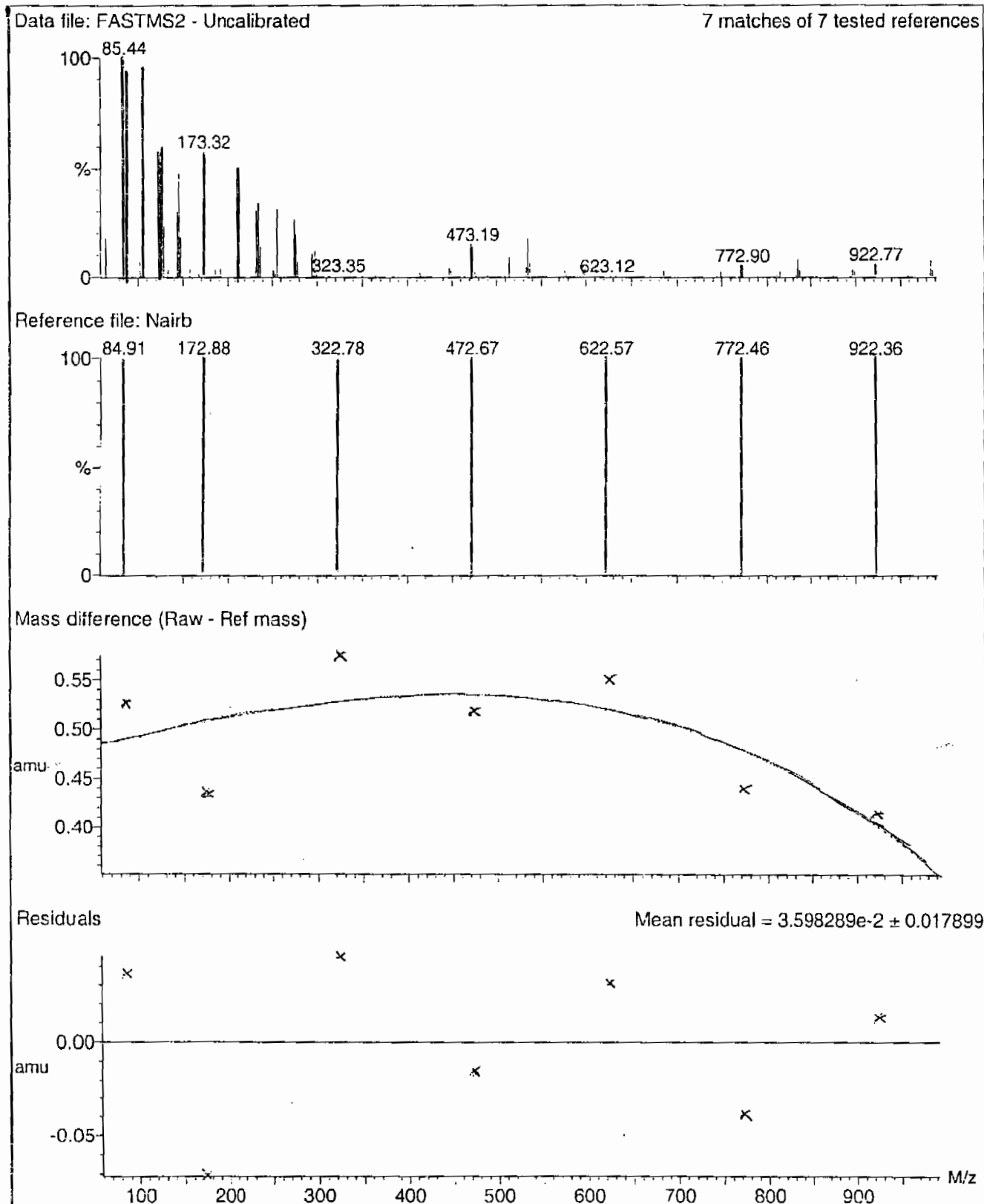
Mean residual = $2.224580 \times 10^{-2} \pm 0.016544$



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

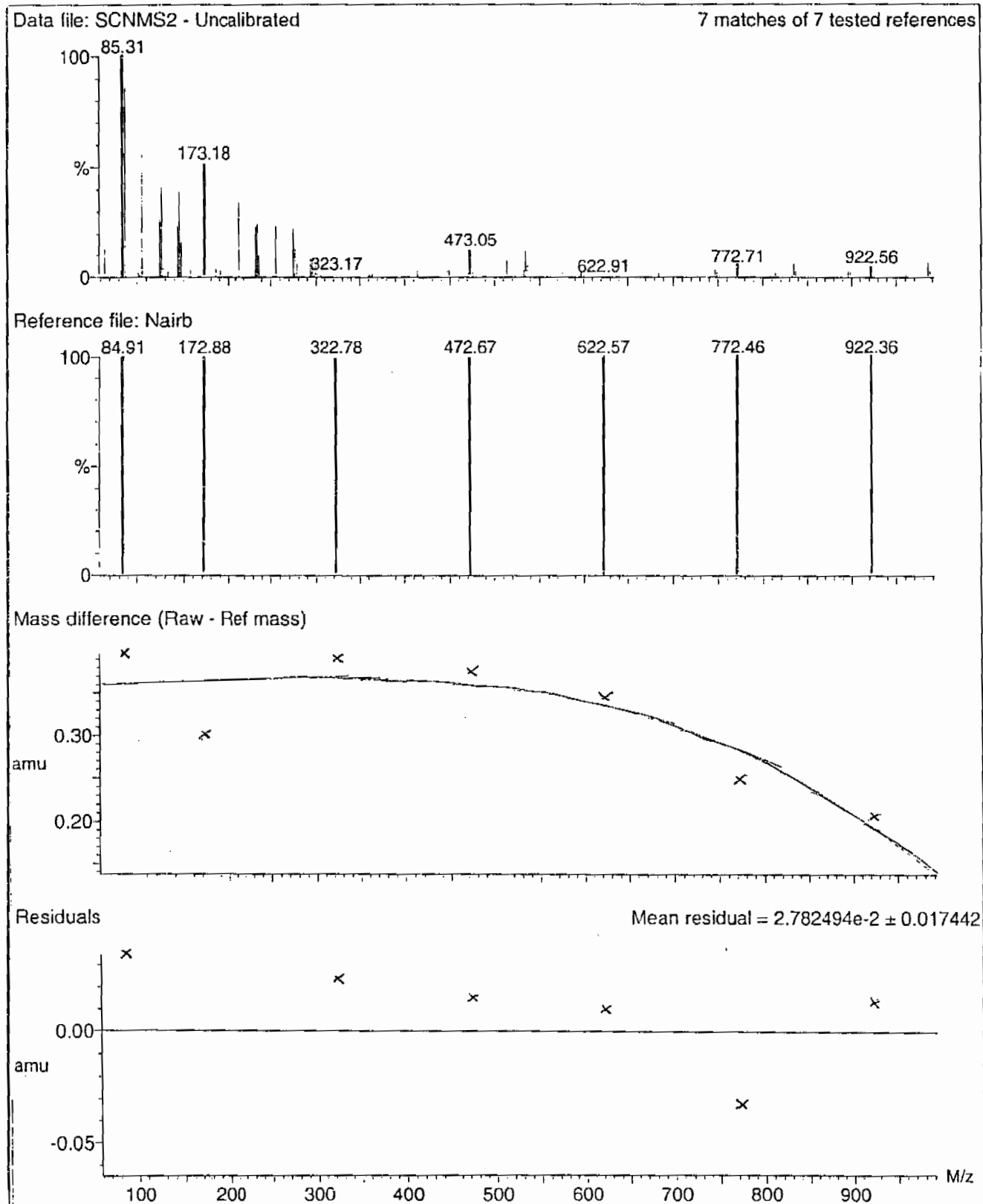
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



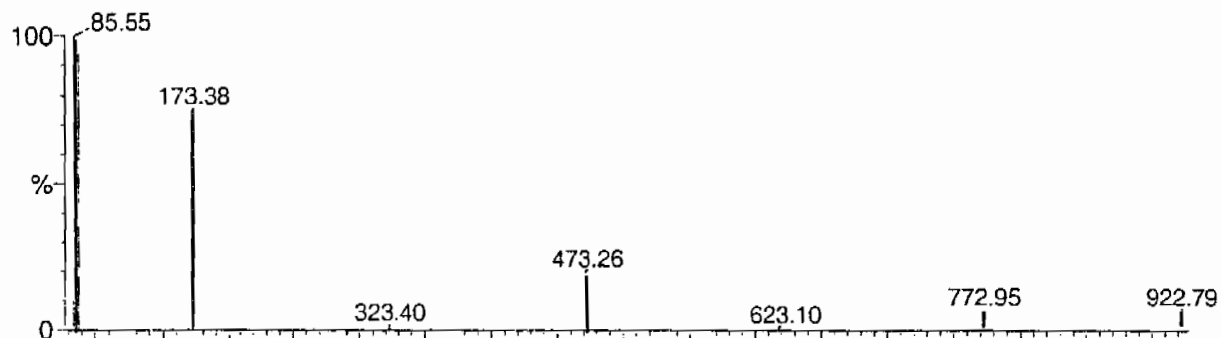
Calibration Report - MS2 Static

Page 1 of 1

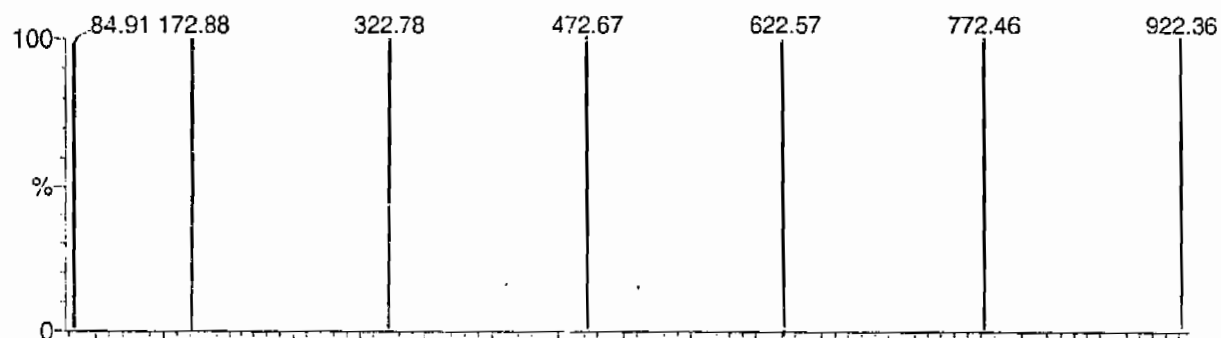
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

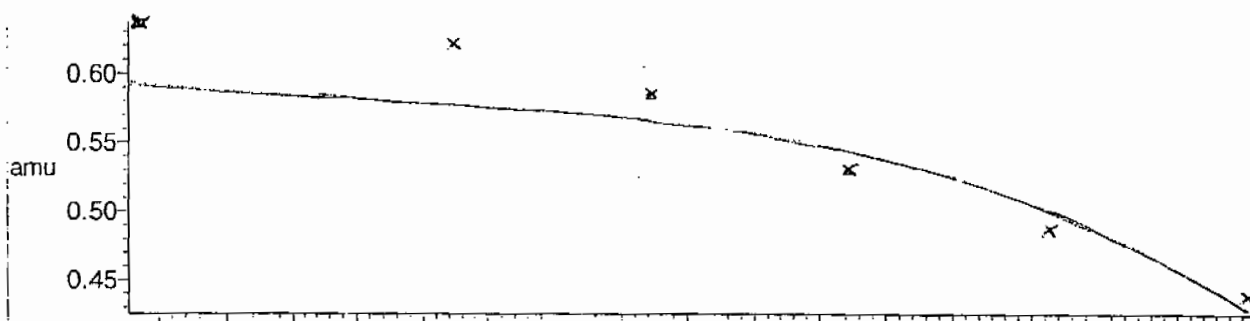
7 matches of 7 tested references



Reference file: Nairb

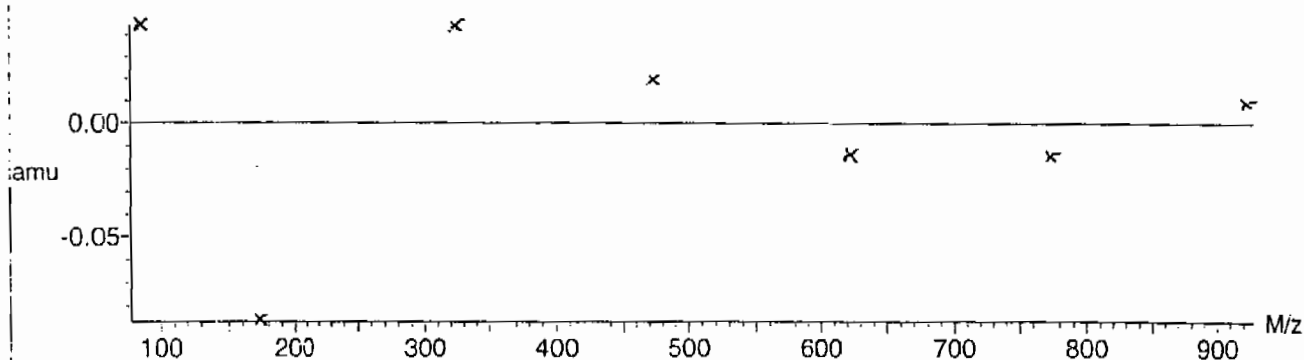


Mass difference (Raw - Ref mass)



Residuals

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



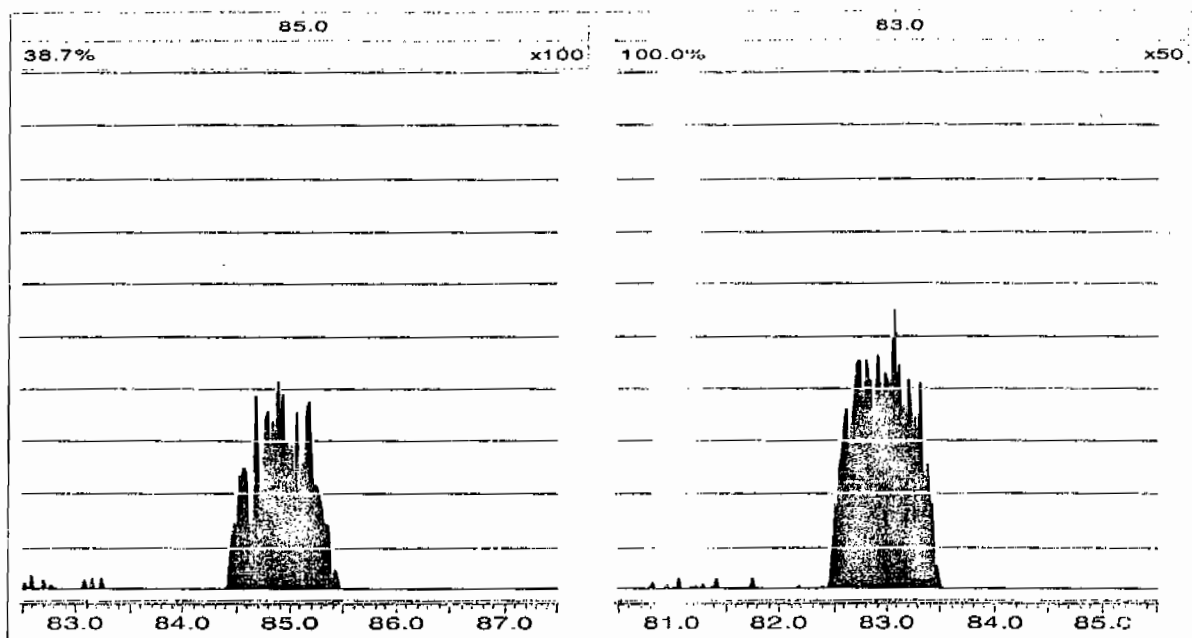
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PROVACQ\UDB\Perchlorate.IPR

Printed: Friday, March 05, 2010 10:31:47 Eastern Standard Time



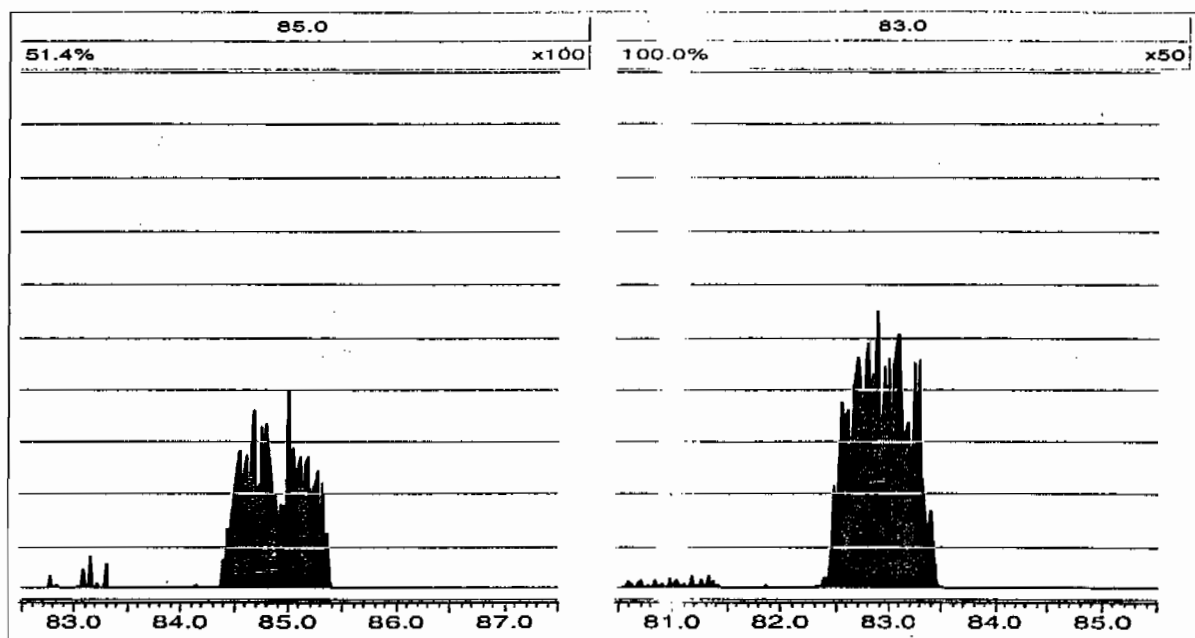
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Sunday, March 07, 2010 12:31:20 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1912-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0305006a	05-MAR-10	21416.7				
Lower Area Limit			10708.35				
Upper Area Limit			42833.4				
1202049069	per0305113a	06-MAR-10 07:31	18340.5	4.29	4.2778	.997	
1202049070	per0305114a	06-MAR-10 07:42	17497.8	4.29	4.30265	1.003	
1202049073	per0305115a	06-MAR-10 07:52	19159.7	4.32	4.3276	1.002	

Form 8

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1912-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16.2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0307006a	07-MAR-10	17446.9				
Lower Area Limit			8723.45				
Upper Area Limit			34893.8				
247350001	per0307014a	07-MAR-10 16:19	17699.8	4.03	4.06672	1.009	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAL

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8270

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1912-1

GEL Sample ID: 247350001

Date Filtered: 02-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	07-MAR-10 16:19	per0307014a
	Perchlorate Isotope Ratio						1	07-MAR-10 16:19	per0307014a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	07-MAR-10 16:19	per0307014a
	Perchlorate-O(18)			0.515	ug/L		1	07-MAR-10 16:19	per0307014a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307014a

Date: 07-Mar-2010

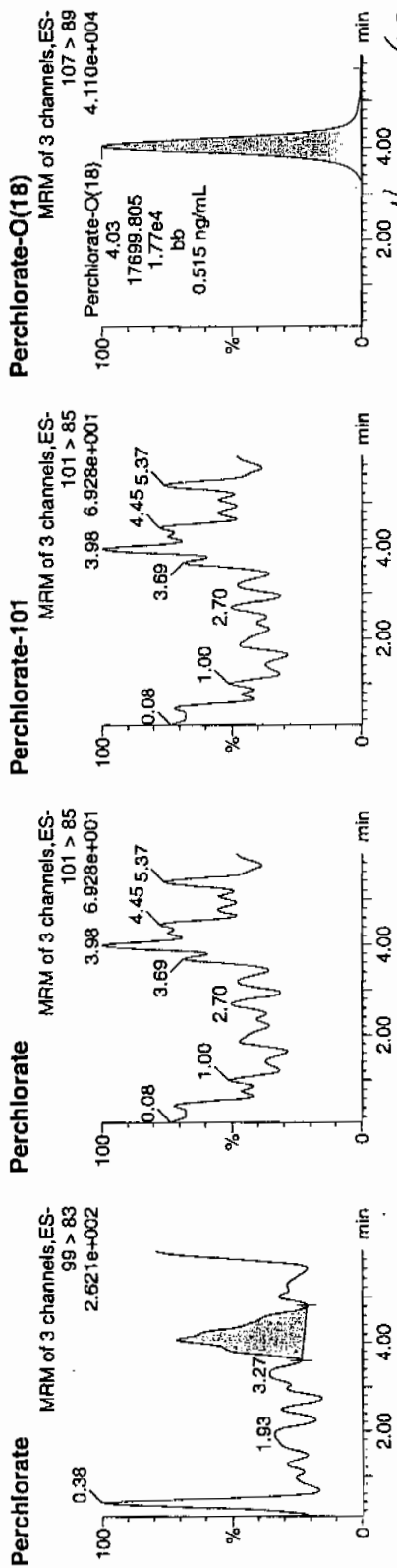
Time: 16:19:25

ID: 247350001

Vial: 1:3.C

0308-10

1422-955727-122-111A



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
247350001	Perchlorate	99 > 83	4.07	76.922	76.922	bb			0.0019			14.726	0.00
247350001	Perchlorate-101	101 > 85											
247350001	Perchlorate-O(18)	107 > 89	4.03	17699.805	17699.805	bb			0.5146	102.92	2.92	2732.5...	

STANDARDS DATA

Perchlorate Initial Calibration

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-MAR-10

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

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 48489.74

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-MAR-10

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

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

Parname Perchlorate-101

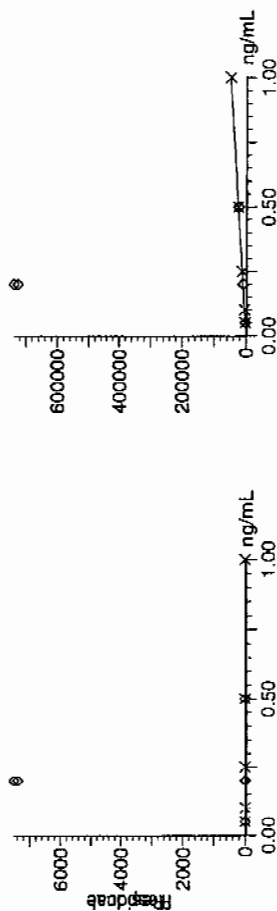
Coefficient of Determination:

Calibration Curve: 14881.82

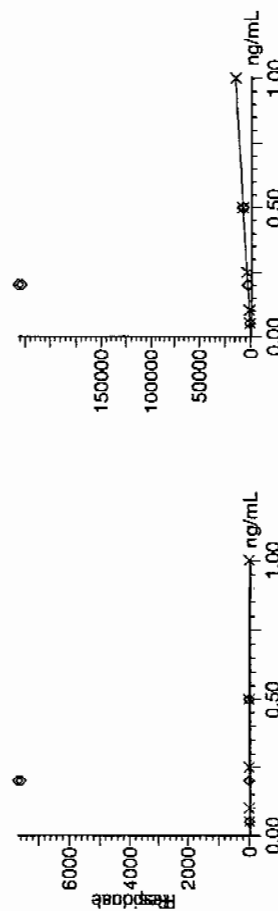
Response Type: External Standard

Curve Type: RF

Compound name: Perchlorate
 Response Factor: 48489.7
 RRF SD: 1243.24, % Relative SD: 2.56392
 Response type: External Std, Area
 Curve type: RF



Compound name: Perchlorate-101
 Response Factor: 14881.8
 RRF SD: 415.715, % Relative SD: 2.79344
 Response type: External Std, Area
 Curve type: RF



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
 Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

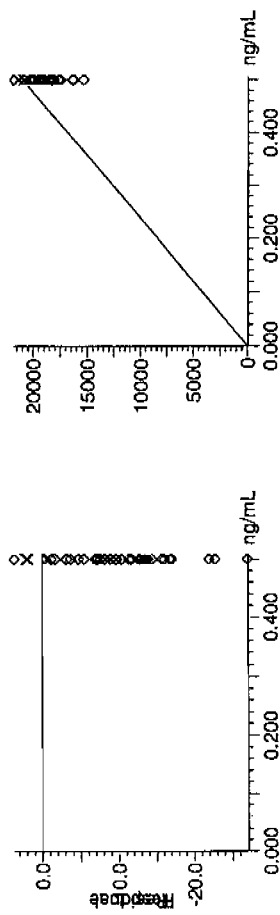
Compound name: Perchlorate-O(18)

Response Factor: 42059.8

RRF SD: 811.21, % Relative SD: 1.9287 ✓

Response type: External Std, Area

Curve type: RF ✓



Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 07-MAR-10

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

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 41369.18

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

Date Analyzed: 07-MAR-10

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

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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 13294.88

Response Type: External Standard

Curve Type: RF

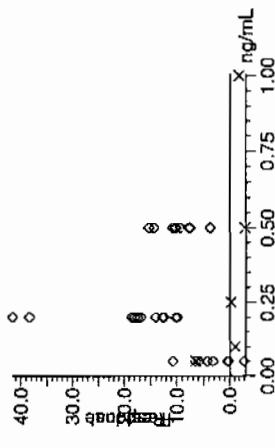
Quantify Calibration Report MassLynx 4.0 SP4 The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

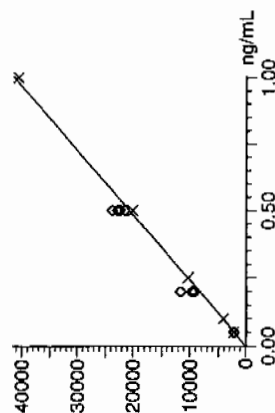
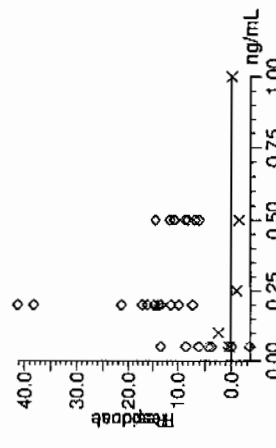
Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030710a.mdb 08 Mar 2010 08:56:17
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030710a.cdb 08 Mar 2010 09:02:25

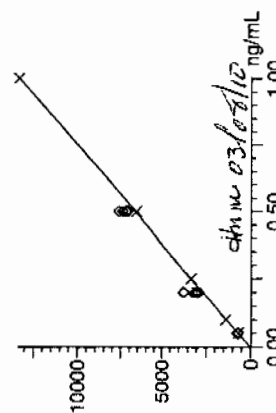
Compound name: Perchlorate
Response Factor: 41369.2
RRF SD: 1545.5, % Relative SD: 3.73586
Response type: External Std, Area
Curve type: RF ✓



Compound name: Perchlorate-101
Response Factor: 13294.9
RRF SD: 197.765, % Relative SD: 1.48753
Response type: External Std, Area
Curve type: RF ✓



0.03-10



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

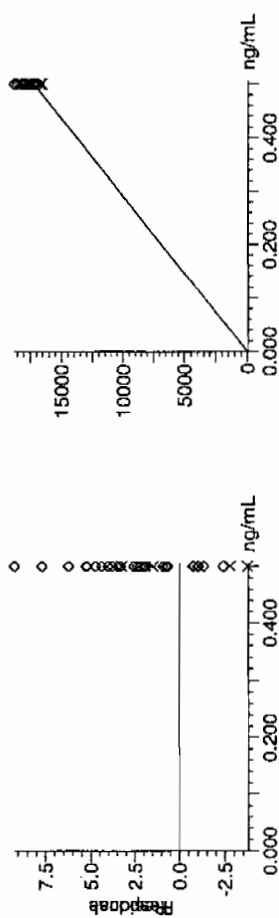
Compound name: Perchlorate-O(18)

Response Factor: 34394

RRF SD: 1057.98, % Relative SD: 3.07606

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.59	05-MAR-10 14:00	per0305009a
Perchlorate Isotope Ratio		3.02		05-MAR-10 14:00	per0305009a
Perchlorate-101	.5	.55	109.45	05-MAR-10 14:00	per0305009a
Perchlorate	.5	.52	103.74	07-MAR-10 15:34	per0307009a
Perchlorate Isotope Ratio		3.04		07-MAR-10 15:34	per0307009a
Perchlorate-101	.5	.53	106.02	07-MAR-10 15:34	per0307009a

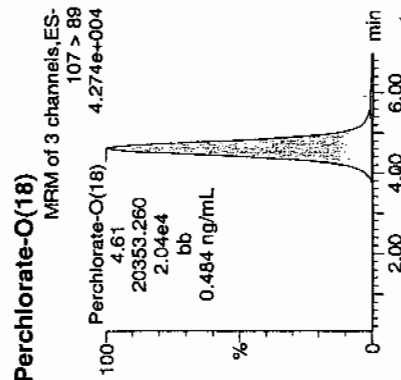
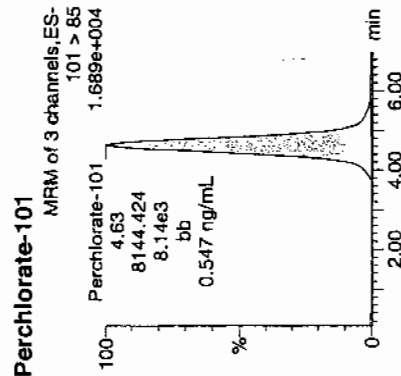
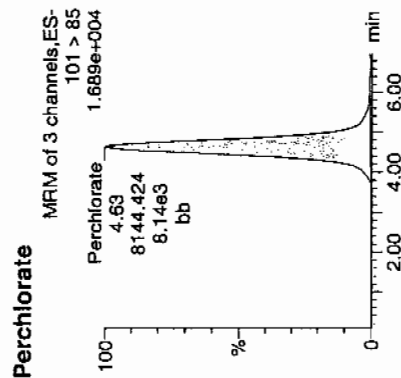
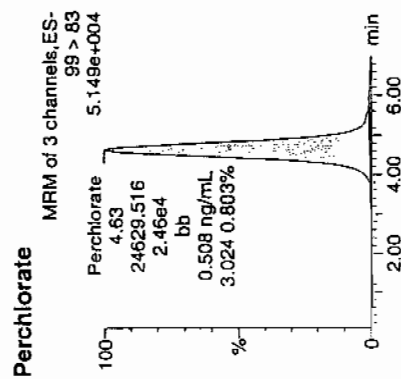
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305009a
Date: 05-Mar-2010
Time: 14:00:49
ID: WCL100227-06ICV
Vial: 1:2,A

*Per
and
03-06-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-06ICV	Perchlorate	99 > 83	4.63	24629.516	24629.516	bb			0.5079	101.59	1.59	3539.4...	3.02
WCL100227-06ICV	Perchlorate-101	101 > 85	4.63	8144.424	8144.424	bb			0.5473	109.45	9.45	2045.0...	
WCL100227-06ICV	Perchlorate-O(18)	107 > 89	4.61	20353.260	20353.260	bb			0.4839	96.78	-3.22	3845.3...	

HWL 03/08/10

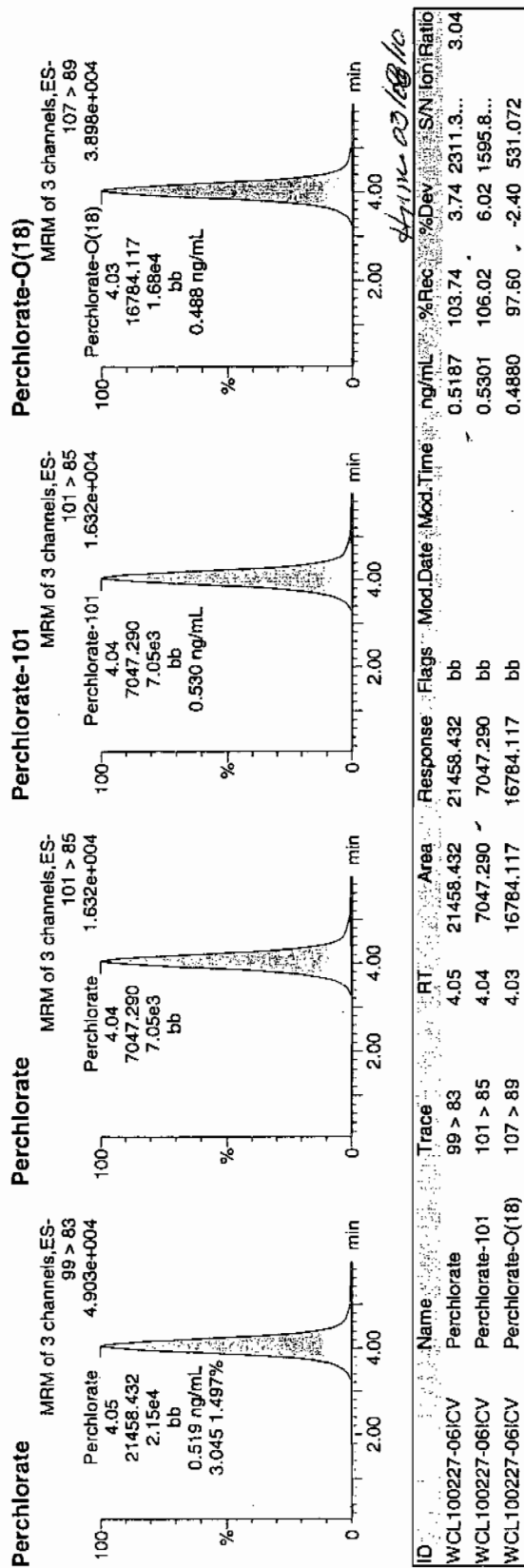
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307009a
Date: 07-Mar-2010
Time: 15:34:11
ID: WCL100227-06ICV
Vial: 1:2,A

Per
WCL
030810



Perchlorate Continuing Calibration Verification

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.84	05-MAR-10 16:11	per0305022a
Perchlorate Isotope Ratio		3.08		05-MAR-10 16:11	per0305022a
Perchlorate-101	.5	.53	106.73	05-MAR-10 16:11	per0305022a
Perchlorate	.5	.5	100.86	05-MAR-10 18:22	per0305035a
Perchlorate Isotope Ratio		3.15		05-MAR-10 18:22	per0305035a
Perchlorate-101	.5	.52	104.17	05-MAR-10 18:22	per0305035a
Perchlorate	.5	.49	97.76	05-MAR-10 22:45	per0305061a
Perchlorate Isotope Ratio		3.15		05-MAR-10 22:45	per0305061a
Perchlorate-101	.5	.51	101.05	05-MAR-10 22:45	per0305061a
Perchlorate	.5	.49	98.25	06-MAR-10 00:56	per0305074a
Perchlorate Isotope Ratio		3.17		06-MAR-10 00:56	per0305074a
Perchlorate-101	.5	.51	101.04	06-MAR-10 00:56	per0305074a
Perchlorate	.5	.47	93.47	06-MAR-10 03:08	per0305087a

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio			3.06		06-MAR-10 03:08	per0305087a
Perchlorate-101	.5		.5	99.39	06-MAR-10 03:08	per0305087a
Perchlorate	.5		.46	92.94	06-MAR-10 04:59	per0305098a
Perchlorate Isotope Ratio			3.07		06-MAR-10 04:59	per0305098a
Perchlorate-101	.5		.49	98.61	06-MAR-10 04:59	per0305098a
Perchlorate	.5		.47	93.15	06-MAR-10 07:01	per0305110a
Perchlorate Isotope Ratio			3.12		06-MAR-10 07:01	per0305110a
Perchlorate-101	.5		.49	97.44	06-MAR-10 07:01	per0305110a
Perchlorate	.5		.46	92.21	06-MAR-10 09:12	per0305123a
Perchlorate Isotope Ratio			3.1		06-MAR-10 09:12	per0305123a
Perchlorate-101	.5		.49	97.06	06-MAR-10 09:12	per0305123a
Perchlorate	.5		.55	109.36	07-MAR-10 17:31	per0307022a
Perchlorate Isotope Ratio			3.19		07-MAR-10 17:31	per0307022a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.5	.53	106.78	07-MAR-10 17:31	per0307022a
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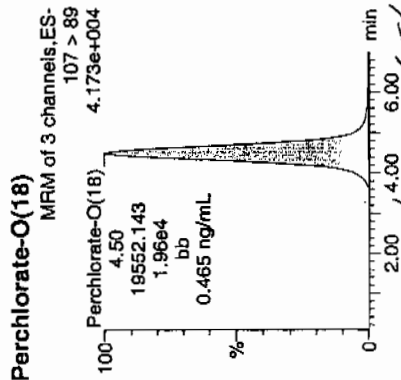
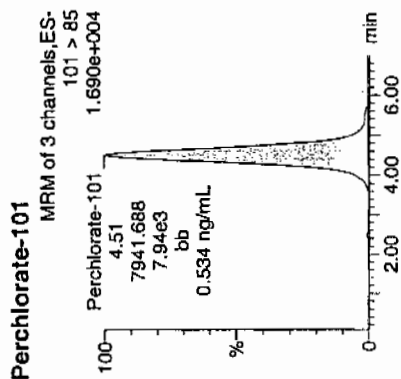
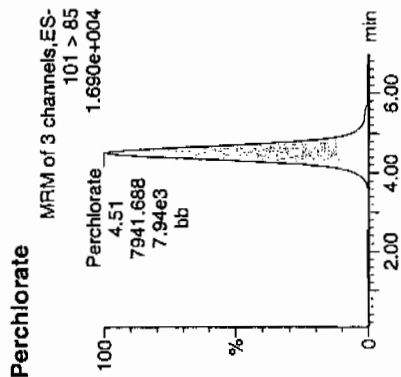
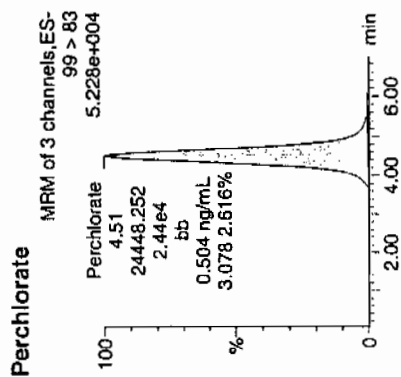
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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Time: 16:11:38
ID: WCL100227-06CCV
Vial: 1:2,A

Pure
and
0706-10



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WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.50	19552.143	19552.143	bb			0.4649	92.97	-7.03	2384.2...	

Annex 03/08/10

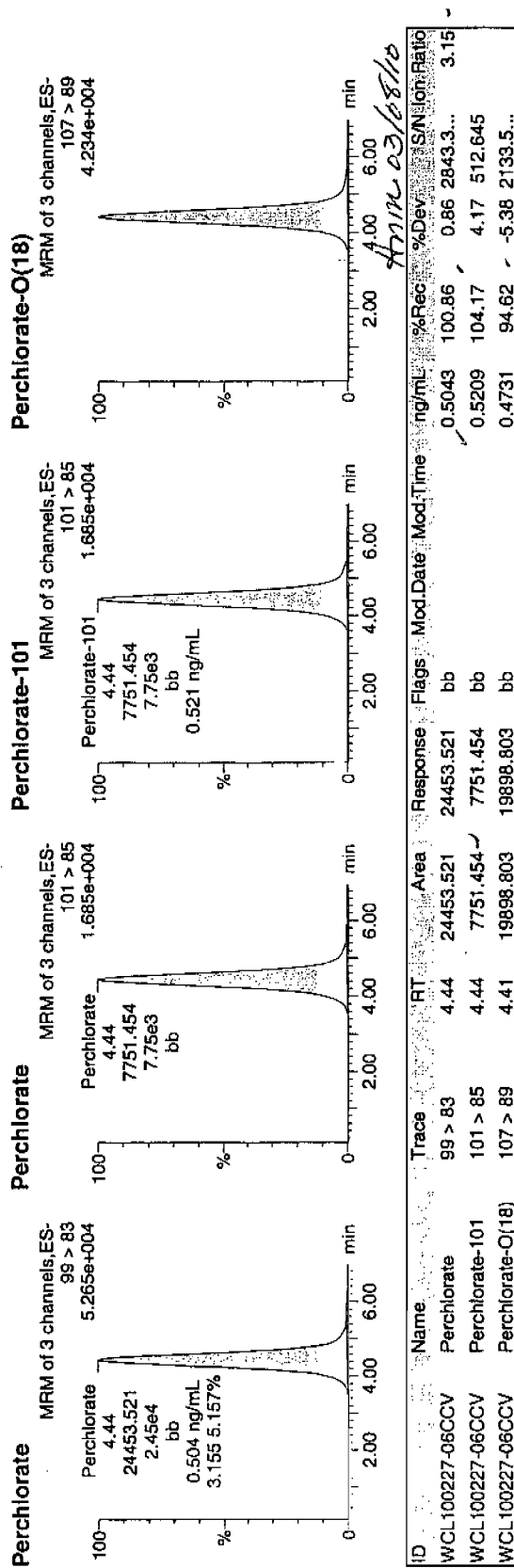
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The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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Time: 18:22:27
ID: WCL100227-06CCV
Vial: 1:2,A

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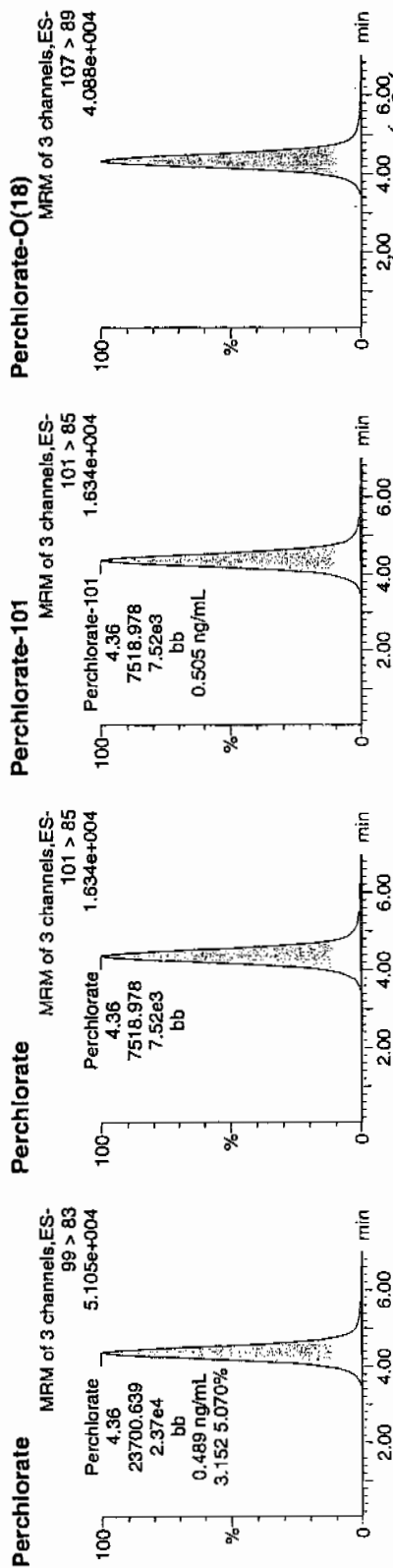
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The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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Time: 22:45:32
ID: WCL100227-06CCV
Vial: 1:2,A

Per
WCL
03-06-10



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WCL100227-06CCV	Perchlorate	99 > 83	4.36	23700.639	23700.639	bb			0.4888	97.76	-2.24	1855.8...	3.15
WCL100227-06CCV	Perchlorate-101	101 > 85	4.36	7518.978	7518.978	bb			0.5052	101.05	1.05	619.599	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.34	18982.309	18982.309	bb			0.4513	90.26	-9.74	1438.8...	

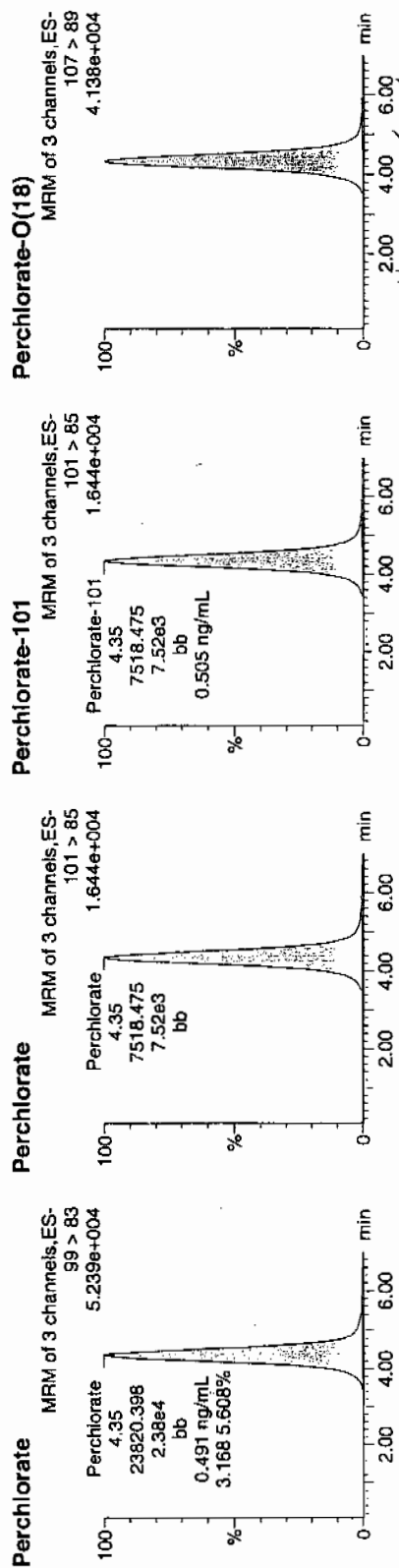
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The GEL Group, LLC Analyst: Charlers W. Wilson

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Vial: 1:2,A

Per 030610



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WCL100227-06CCV	Perchlorate-101	101 > 85	4.35	7518.475	7518.475	bb			0.5052	101.04	1.04	1244.3...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.34	18849.641	18849.641	bb			0.4482	89.63	-10.37	3023.5...	

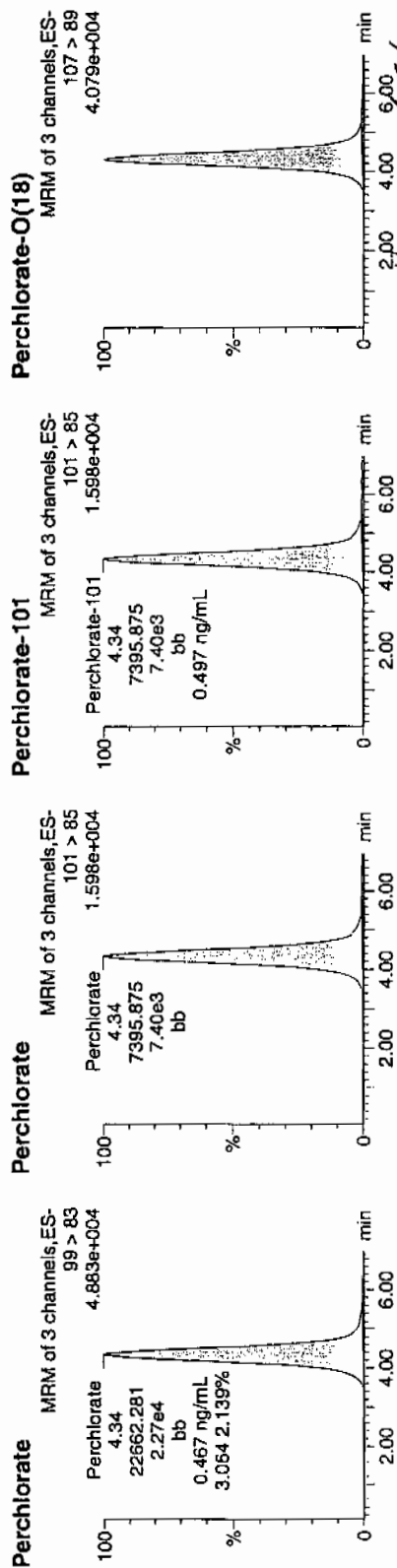
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The GEL Group, LLC Analyst: Charlers W. Wilson

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Vial: 1:2,A

Pure
03/06/10



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WCL100227-06CCV	Perchlorate	99 > 83	4.34	22662.281	22662.281	bb			0.4674	93.47	-6.53	1088.5...	3.06
WCL100227-06CCV	Perchlorate-101	101 > 85	4.34	7395.875	7395.875	bb			0.4970	99.39	-0.61	829.416	
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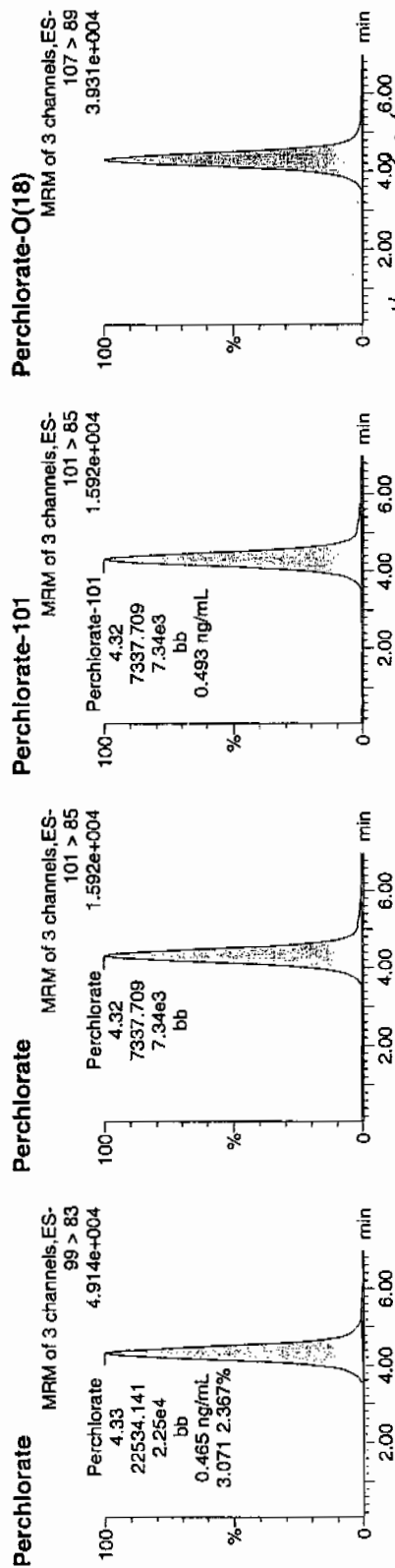
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The GEL Group, LLC Analyst: Charliers W. Wilson

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Time: 04:59:51
ID: WCL100227-06CCV
Vial: 1:2,A

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03-06-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.33	22534.141	22534.141	bb			0.4647	92.94	-7.06	255.249	3.07
WCL100227-06CCV	Perchlorate-101	101 > 85	4.32	7337.709	7337.709	bb			0.4931	98.61	-1.39	1249.7...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.30	18199.572	18199.572	bb			0.4327	86.54	-13.46	3457.1...	

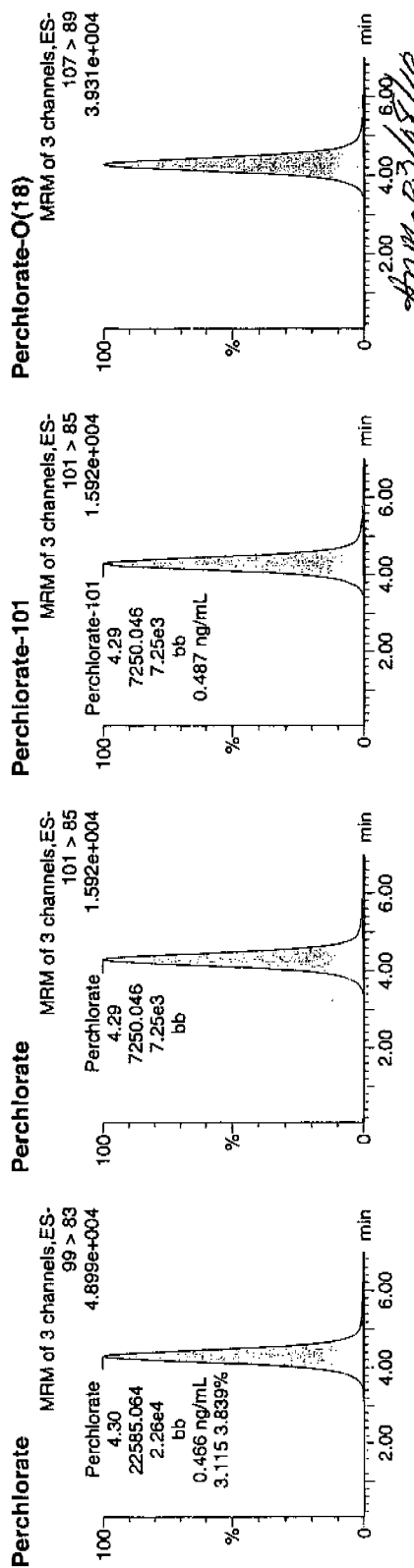
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The GEL Group, LLC Analyst: Charters W. Wilson

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Vial: 1:2,A

Pure
03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.30	22585.064	22585.064	bb			0.4658	93.15	-6.85	2395.1...	3.12
WCL100227-06CCV	Perchlorate-101	101 > 85	4.29	7250.046	7250.046	bb			0.4872	97.43	-2.57	732.143	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.28	18011.781	18011.781	bb			0.4282	85.65	-14.35	2249.1...	

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

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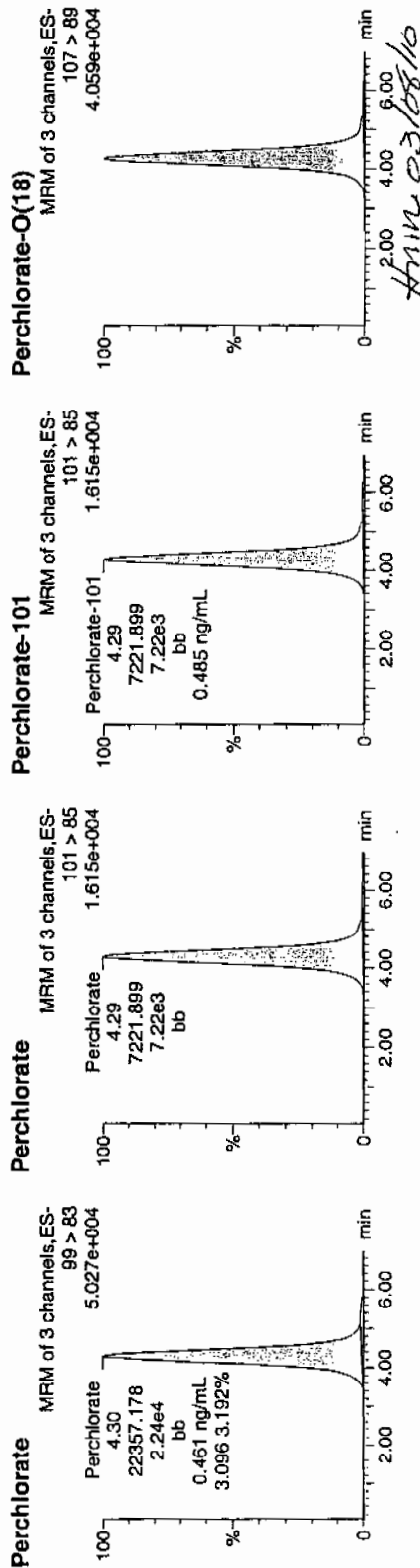
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Vial: 1:2,A

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03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.30	22357.178	22357.178	bb			0.4611	92.21	-7.79	2720.1...	3.10
WCL100227-06CCV	Perchlorate-101	101 > 85	4.29	7221.899	7221.899	bb			0.4853	97.06	-2.94	1629.7...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.28	18345.527	18345.527	bb			0.4362	87.24	-12.76	970.638	

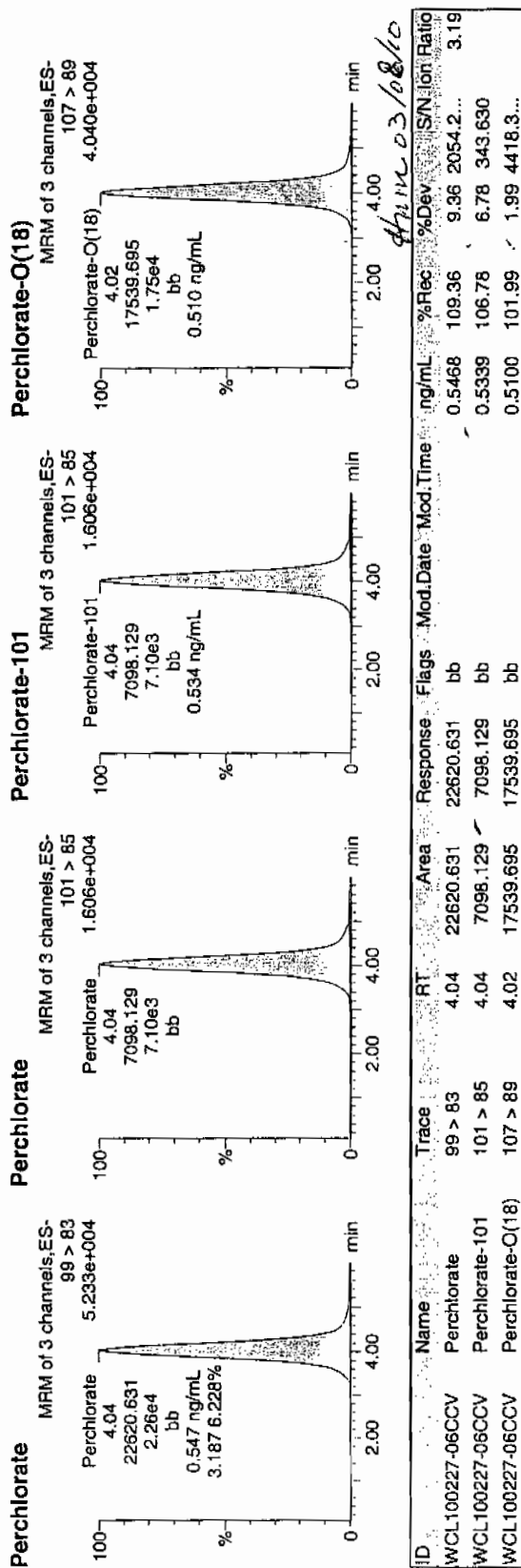
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The GEL Group, LLC Analyst: Charliers W. Wilson

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Vial: 1:2,A

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03-07-10



Perchlorate MDL Verification

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.42	05-MAR-10 14:21	per0305011a
Perchlorate Isotope Ratio		3.39		05-MAR-10 14:21	per0305011a
Perchlorate-101	.05	.05	93.73	05-MAR-10 14:21	per0305011a
Perchlorate	.05	.05	94.34	05-MAR-10 16:31	per0305024a
Perchlorate Isotope Ratio		2.94		05-MAR-10 16:31	per0305024a
Perchlorate-101	.05	.05	104.64	05-MAR-10 16:31	per0305024a
Perchlorate	.05	.04	88.33	05-MAR-10 18:42	per0305037a
Perchlorate Isotope Ratio		2.97		05-MAR-10 18:42	per0305037a
Perchlorate-101	.05	.05	96.82	05-MAR-10 18:42	per0305037a
Perchlorate	.05	.04	85.02	05-MAR-10 23:06	per0305063a
Perchlorate Isotope Ratio		3.14		05-MAR-10 23:06	per0305063a

Perchlorate MDL Verification

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.04	88.26	05-MAR-10 23:06	per0305063a
Perchlorate	.05	.04	89.21	06-MAR-10 01:17	per0305076a
Perchlorate Isotope Ratio		3.29		06-MAR-10 01:17	per0305076a
Perchlorate-101	.05	.04	88.45	06-MAR-10 01:17	per0305076a
Perchlorate	.05	.04	85.29	06-MAR-10 03:29	per0305089a
Perchlorate Isotope Ratio		3.36		06-MAR-10 03:29	per0305089a
Perchlorate-101	.05	.04	82.59	06-MAR-10 03:29	per0305089a
Perchlorate	.05	.04	88.04	06-MAR-10 05:20	per0305100a
Perchlorate Isotope Ratio		3.45		06-MAR-10 05:20	per0305100a
Perchlorate-101	.05	.04	83.27	06-MAR-10 05:20	per0305100a
Perchlorate	.05	.04	89.34	06-MAR-10 07:21	per0305112a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1912-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.08		06-MAR-10 07:21	per0305112a
Perchlorate-101	.05	.05	94.48	06-MAR-10 07:21	per0305112a
Perchlorate	.05	.05	90.32	06-MAR-10 09:33	per0305125a
Perchlorate Isotope Ratio		3.21		06-MAR-10 09:33	per0305125a
Perchlorate-101	.05	.05	91.78	06-MAR-10 09:33	per0305125a
Perchlorate	.05	.05	97.05	07-MAR-10 15:52	per0307011a
Perchlorate Isotope Ratio		2.9		07-MAR-10 15:52	per0307011a
Perchlorate-101	.05	.05	104.28	07-MAR-10 15:52	per0307011a
Perchlorate	.05	.05	105.91	07-MAR-10 17:49	per0307024a
Perchlorate Isotope Ratio		3.3		07-MAR-10 17:49	per0307024a
Perchlorate-101	.05	.05	99.98	07-MAR-10 17:49	per0307024a

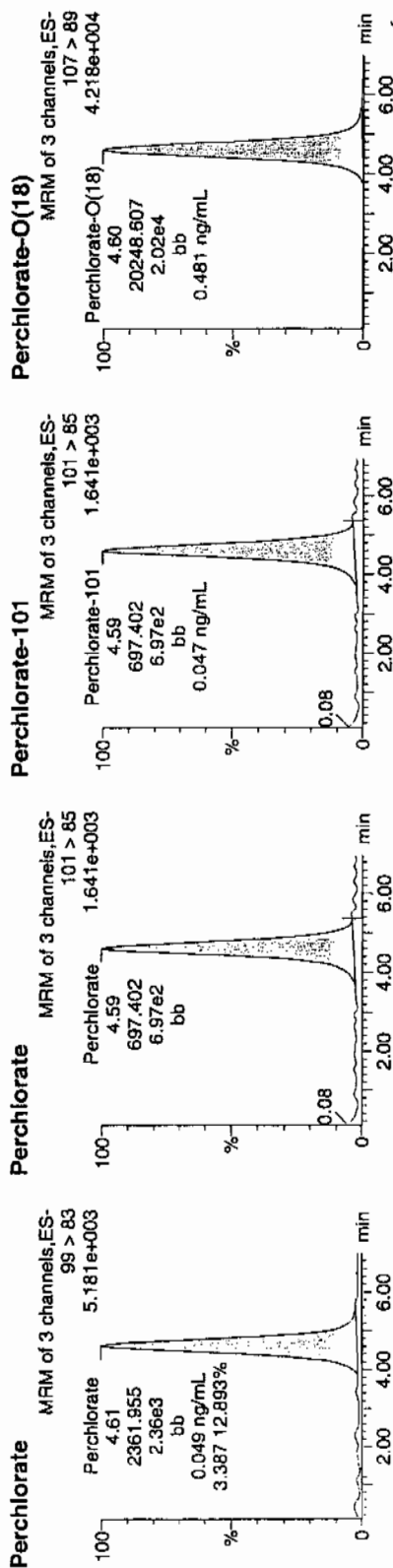
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The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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Time: 14:21:02
ID: WCL100227-07CRI
Vial: 1:2,B

Per
03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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WCL100227-07CRI	Perchlorate-101	101 > 85	4.59	697.402	697.402	bb			0.0469	93.73	-6.27	49.831	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.60	20248.607	20248.607	bb			0.4814	96.28	-3.72	305.789	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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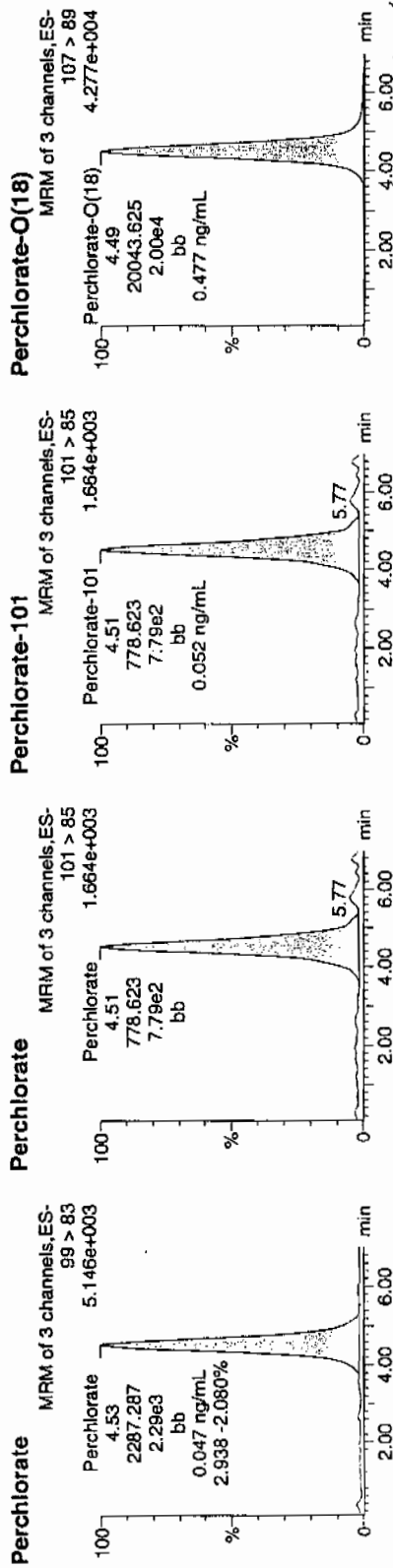
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Time: 16:31:58

ID: WCL100227-07CRI

Vial: 1:2,B

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and
03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.53	2287.287	2287.287	bb			0.0472	94.34	-5.66	193.383	2.94
WCL100227-07CRI	Perchlorate-101	101 > 85	4.51	778.623	778.623	bb			0.0523	104.64	4.64	32.800	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.49	20043.625	20043.625	bb			0.4766	95.31	-4.69	1708.4...	

Quantify Sample Report MassLynx 4.0 SP4

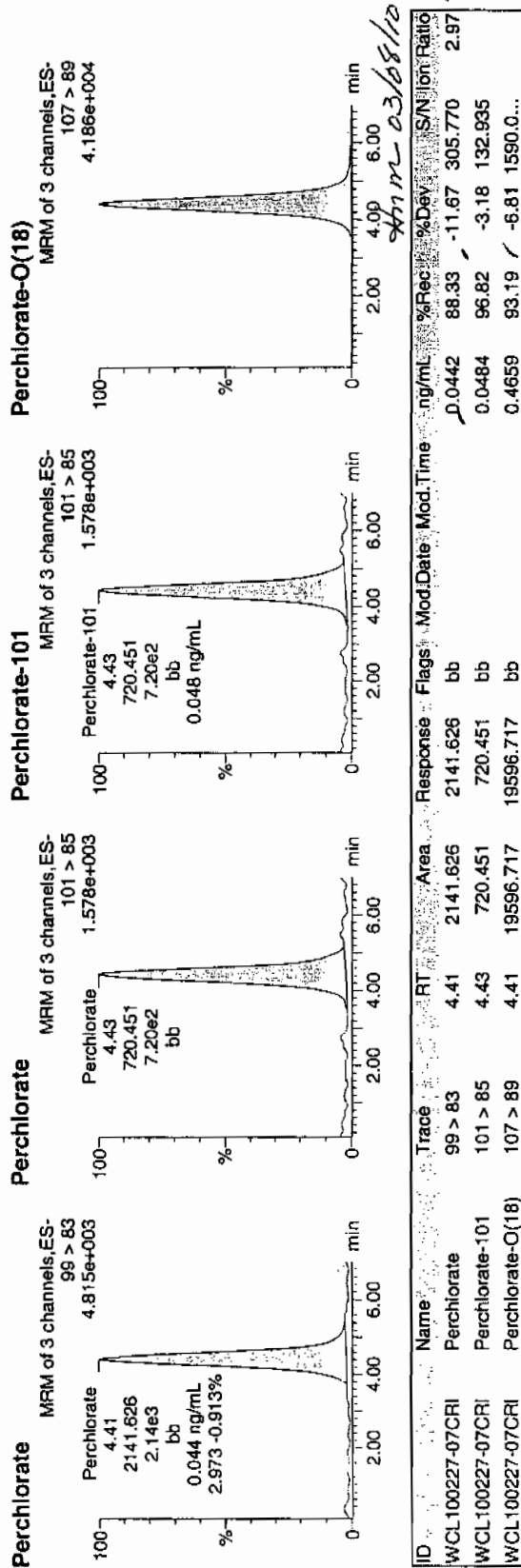
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Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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 Vial: 1:2,B

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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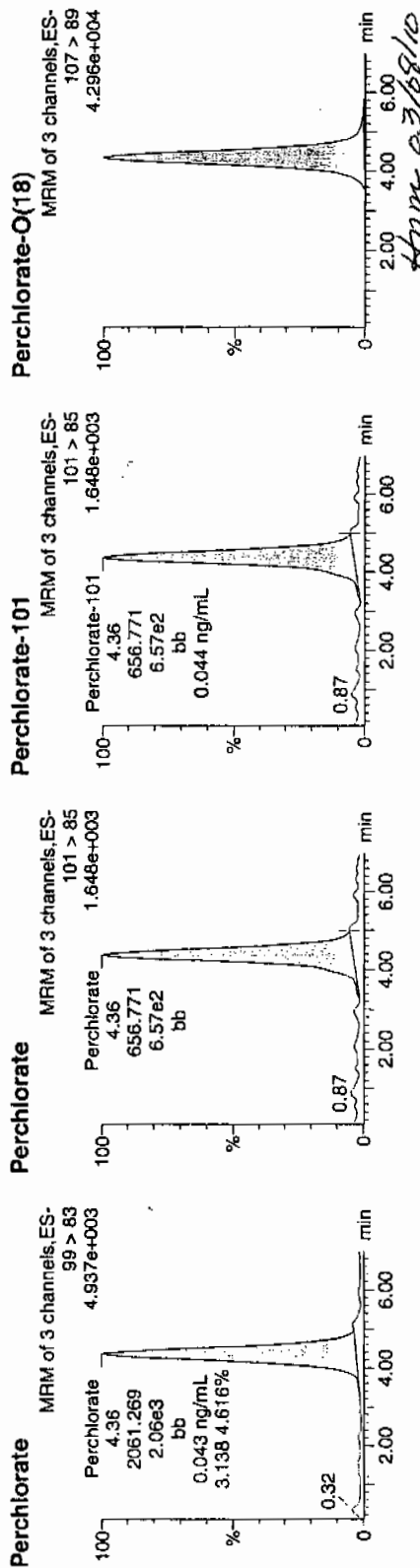
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Time: 23:06:06

ID: WCL100227-07CRI

Vial: 1:2,B

Per
33
03-06-10



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WCL100227-07CRI	Perchlorate-101	101 > 85	4.36	656.771	656.771	bb			0.0441	88.26	-11.74	112.286	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.34	19344.582	19344.582	bb			0.4599	91.99	-8.01	2975.6...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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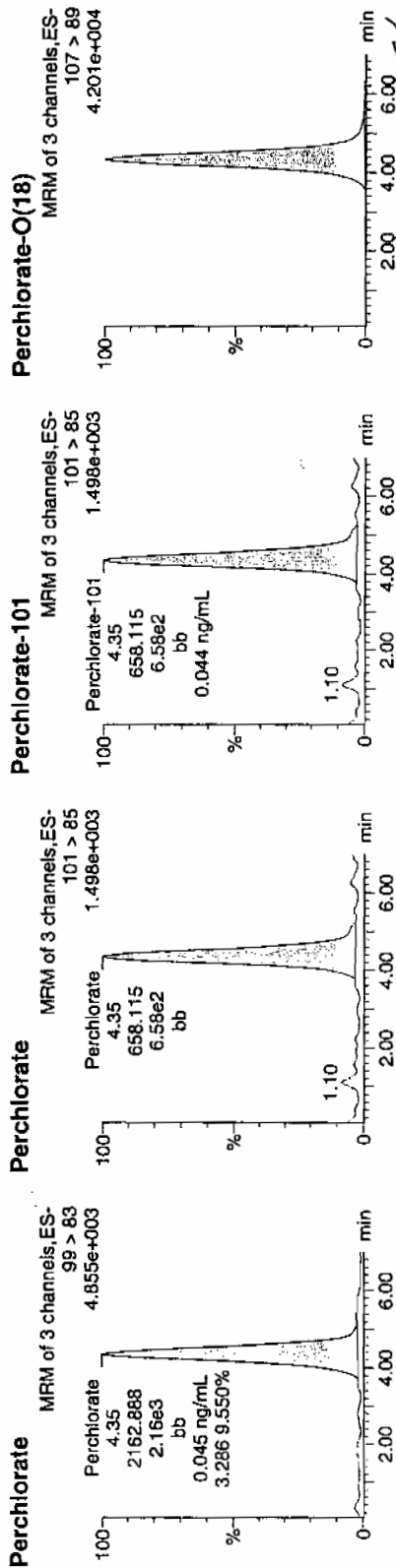
Date: 06-Mar-2010

Time: 01:17:24

ID: WCL100227-07CRI

Vial: 1:2,B

Perchlorate
on 06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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WCL100227-07CRI	Perchlorate-101	101 > 85	4.35	658.115	658.115	bb			0.0442	88.45	-11.55	76.826	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.34	19454.201	19454.201	bb			0.4625	92.51	-7.49	1996.1...	

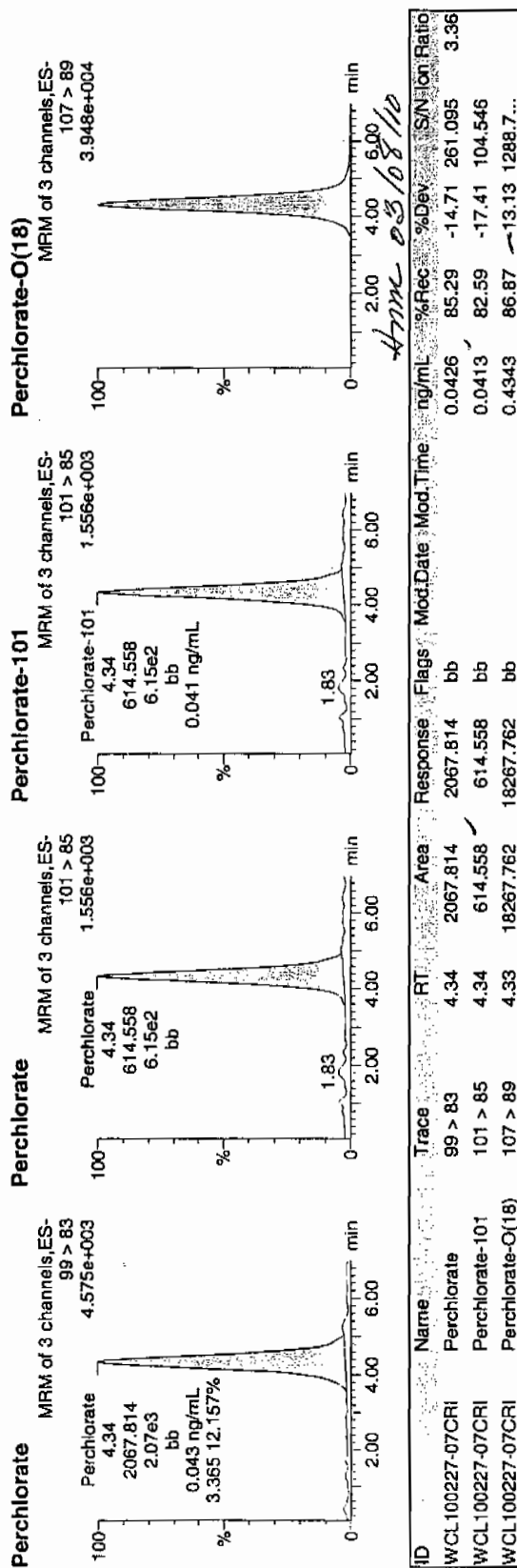
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305089a
Date: 06-Mar-2010
Time: 03:29:13
ID: WCL100227-07CRI
Vial: 1:2,B

03-06-10



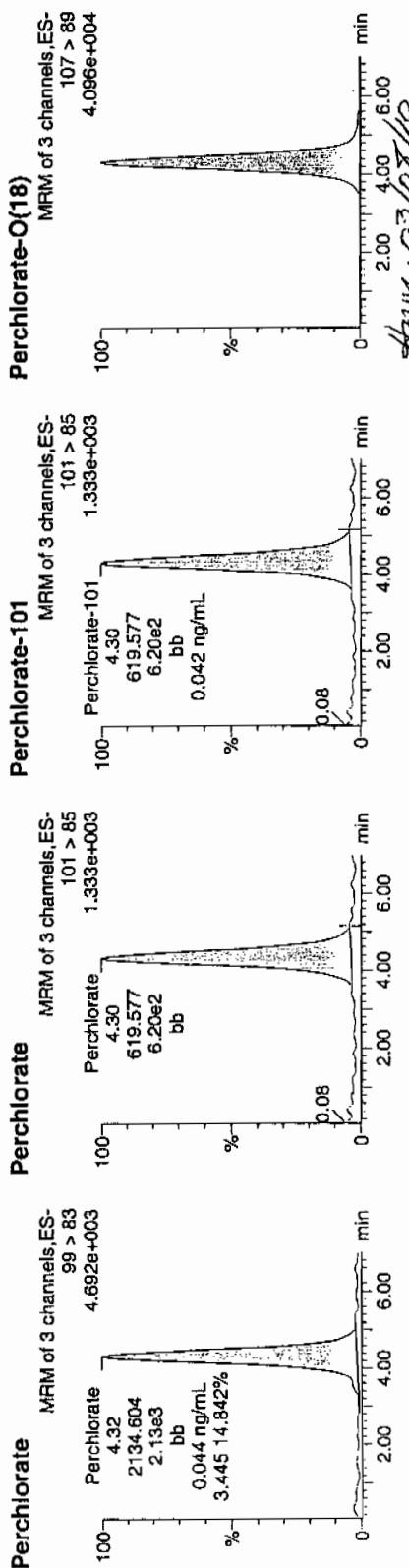
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305100a
Date: 06-Mar-2010
Time: 05:20:11
ID: WCL100227-07CRI
Vial: 1:2,B

Pure
and
03-06-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.32	2134.604	2134.604	bb			0.0440	88.04	-11.96	100.010	3.45
WCL100227-07CRI	Perchlorate-101	101 > 85	4.30	619.577	619.577	bb			0.0416	83.27	-16.73	22.917	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.30	18652.084	18652.084	bb			0.4435	88.69	-11.31	1487.4...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
 Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305112a

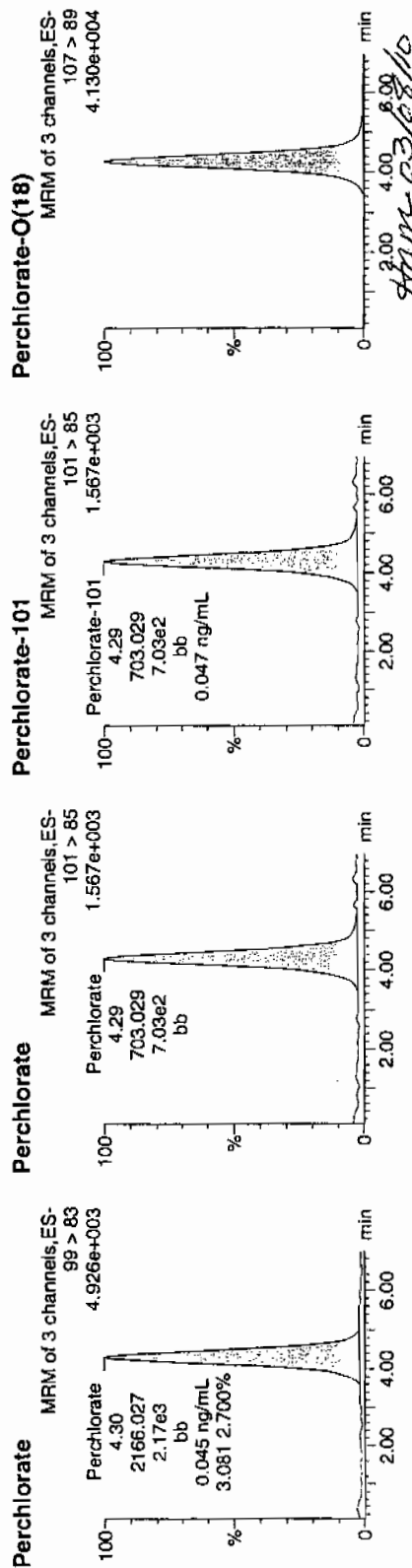
Date: 06-Mar-2010

Time: 07:21:38

ID: WCL100227-07CRI

Vial: 1:2,B

*Per
 030610*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.30	2166.027	2166.027	bb			0.0447	89.34	-10.66	111.737	3.08
WCL100227-07CRI	Perchlorate-101	101 > 85	4.29	703.029	703.029	bb			0.0472	94.48	-5.52	132.902	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.28	18598.717	18598.717	bb			0.4422	88.44	-11.56	2205.4...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305125a

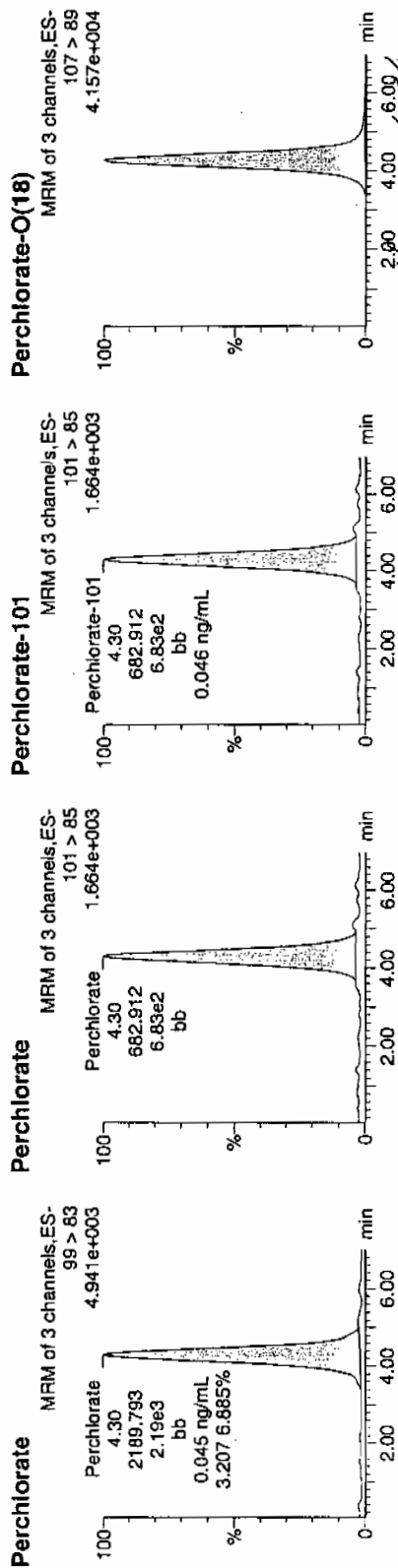
Date: 06-Mar-2010

Time: 09:33:16

ID: WCL100227-07CRI

Vial: 1:2,B

Per
0306-10



ID	Name	Trace	RT	Area	Response	Flags	ModTime	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.30	2189.793	2189.793	bb		0.0452	90.32	-9.68	217.886	3.21
WCL100227-07CRI	Perchlorate-101	101 > 85	4.30	682.912	682.912	bb		0.0459	91.78	-8.22	123.453	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.28	18871.918	18871.918	bb		0.4487	89.74	-10.26	3389.5...	

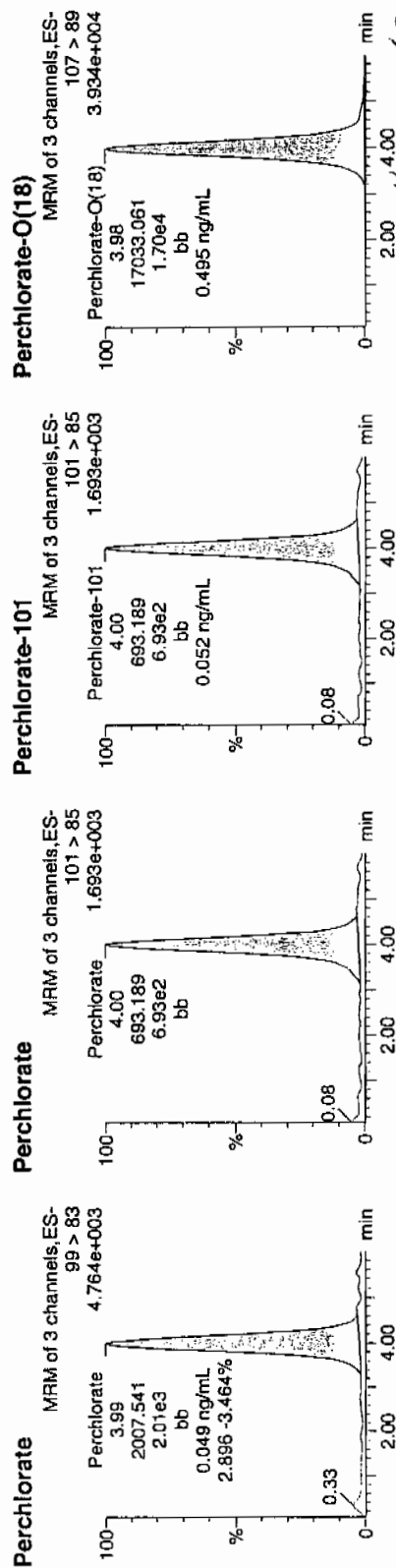
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307011a
Date: 07-Mar-2010
Time: 15:52:16
ID: WCL100227-07CRI
Vial: 1:2,B

Run
03-08-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.99	2007.541	2007.541	bb			0.0485	97.05	-2.95	91.305	2.90
WCL100227-07CRI	Perchlorate-101	101 > 85	4.00	693.189	693.189	bb			0.0521	104.28	4.28	198.860	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.98	17033.061	17033.061	bb			0.4952	99.05	-0.95	1992.9...	

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

Quantify Sample Report MassLynx 4.0 SP4

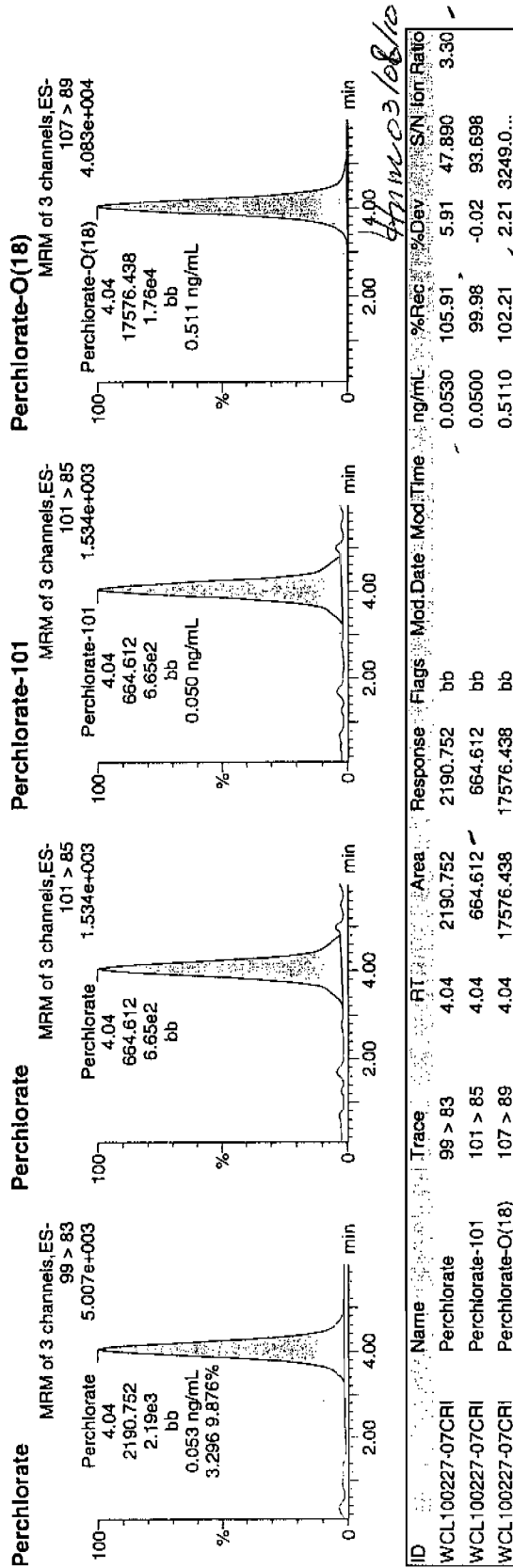
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030710a.qld

Last Altered: Monday, March 08, 2010 9:02:25 AM Eastern Standard Time
 Printed: Monday, March 08, 2010 9:23:04 AM Eastern Standard Time

Name: per0307024a
 Date: 07-Mar-2010
 Time: 17:49:50
 ID: WCL100227-07CRI
 Vial: 1:2,B

Per
 0.053
 0.0511



4.04 min

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 02-MAR-10

GEL Job No (SDG): 10-1912-1

GEL Sample ID: 1202049069

Date Filtered: 02-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	06-MAR-10 07:31	per0305113a
	Perchlorate Isotope Ratio						1	06-MAR-10 07:31	per0305113a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-MAR-10 07:31	per0305113a
	Perchlorate-O(18)			0.436	ug/L		1	06-MAR-10 07:31	per0305113a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305113a

Date: 06-Mar-2010

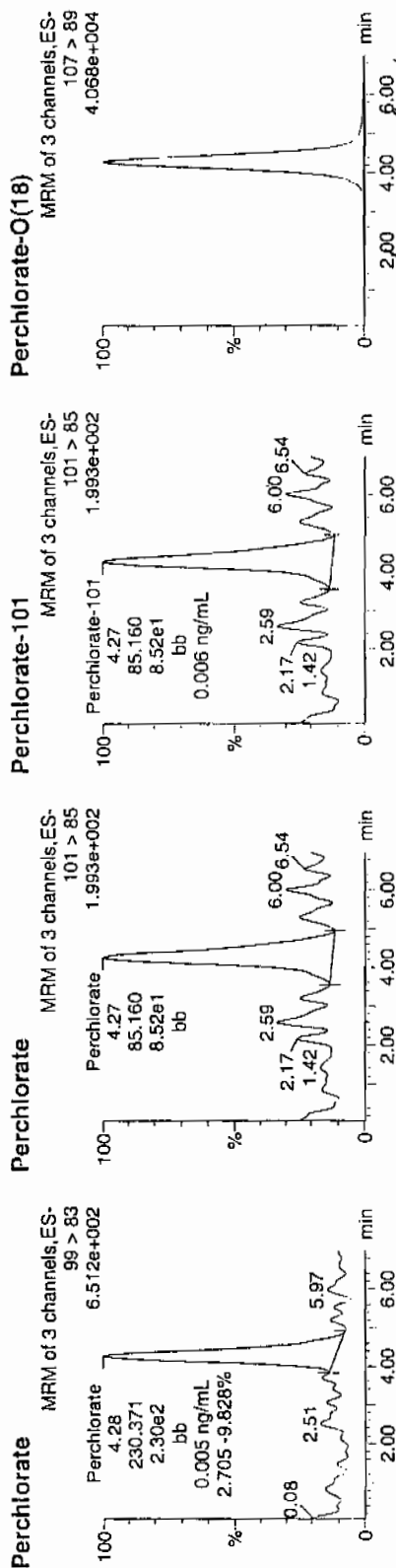
Time: 07:31:49

ID: 1202049069

Vial: 3:1,A

003
03-06-10

1202049069 / 1202 / 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049069	Perchlorate	99 > 83	4.28	230.371	230.371	bb			0.0048			29.862	2.71
1202049069	Perchlorate-101	101 > 85	4.27	85.160	85.160	bb			0.0057			20.845	
1202049069	Perchlorate-O(18)	107 > 89	4.29	18340.451	18340.451	bb			0.4361	87.21	-12.79	2029.6...	

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 955726
 Extraction Type: Filter/DAI
 Client Sample No. LCS
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-1912-1
 GEL Sample ID: 1202049070
 Date Filtered: 02-MAR-10
 Injection Volume (uL): 20

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.180	ug/L	J	1	06-MAR-10 07:42	per0305114a
	Perchlorate Isotope Ratio			3.12			1	06-MAR-10 07:42	per0305114a
14797-73-0	Perchlorate-101	.05	.2	0.188	ug/L	J	1	06-MAR-10 07:42	per0305114a
	Perchlorate-O(18)			0.416	ug/L		1	06-MAR-10 07:42	per0305114a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
 Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305114a

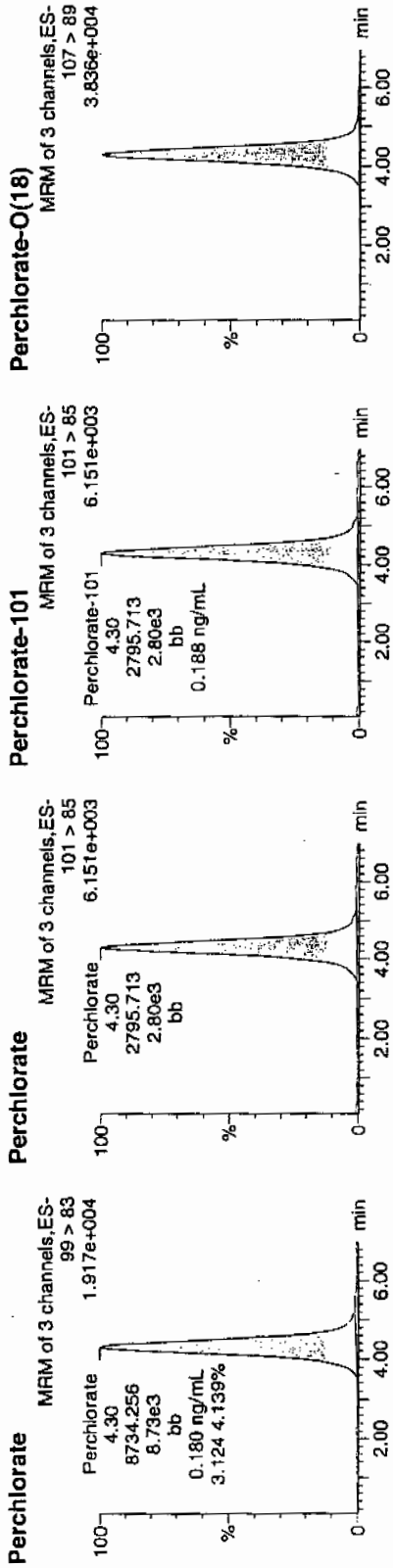
Date: 06-Mar-2010

Time: 07:42:03

ID: 1202049070

Vial: 3:1,B

955727 | 1202049070 | 1202049070 | 1202049070



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049070	Perchlorate	99 > 83	4.30	8734.256	8734.256	bb			0.1801	90.06	-9.94	2607.4...	3.12
1202049070	Perchlorate-101	101 > 85	4.30	2795.713	2795.713	bb			0.1879	93.93	-6.07	624.279	
1202049070	Perchlorate-O(18)	107 > 89	4.29	17497.846	17497.846	bb			0.4160	83.20	-16.80	1738.9...	

8734.256
48489.7
= 0.1801
48489.7 / 270000

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: 955726 Verified by: Kaylie Westmoreland
 Analyst: Kaylie Westmoreland
 Method: SW846 6850 Modified
 Lab SOP: GL-OA-E-067 REV# 6
 Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor	Volume (mL)
1302049069 MB	02-MAR-2010 14:28:00	10	10	1	10
1302049070 LCS	02-MAR-2010 14:28:00	10	10	1	10
247127001	02-MAR-2010 14:28:00	10	10	1	10
247130001	02-MAR-2010 14:28:00	10	10	1	10
247139001	02-MAR-2010 14:28:00	10	10	1	10
1302049071 MS (247139001)	02-MAR-2010 14:28:00	10	10	1	10
1302049072 MSD (247139001)	02-MAR-2010 14:28:00	10	10	1	10
247179001	02-MAR-2010 14:28:00	10	10	1	10
247182001	02-MAR-2010 14:28:00	10	10	1	10
247183001	02-MAR-2010 14:28:00	10	10	1	10
247192001	02-MAR-2010 14:28:00	10	10	1	10
247203001	02-MAR-2010 14:28:00	10	10	1	10
247250001	02-MAR-2010 14:28:00	10	10	1	10
247250002	02-MAR-2010 14:28:00	10	10	1	10
247256001	02-MAR-2010 14:28:00	10	10	1	10
247256002	02-MAR-2010 14:28:00	10	10	1	10
247322001	02-MAR-2010 14:28:00	10	10	1	10
247323002	02-MAR-2010 14:28:00	10	10	1	10
247335001	02-MAR-2010 14:28:00	10	10	1	10
247339001	02-MAR-2010 14:28:00	10	10	1	10
247339002	02-MAR-2010 14:28:00	10	10	1	10
247350001	02-MAR-2010 14:28:00	10	10	1	10
1302049073 ICS	02-MAR-2010 14:28:00	10	10	1	10

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
ICS	1302049073	10 ug/L ICS/CCV Second Source	UCL100210-02.2	2	mL	Desalting cartridges used: 100217-1-H & 100209-1-Ba
LCS	1302049070	10 ug/L ICS/CCV Second Source	UCL100210-02.2	2	mL	
MS	1302049071	10 ug/L ICS/CCV Second Source	UCL100210-02.2	2	mL	
MSD	1302049072	10 ug/L ICS/CCV Second Source	UCL100210-02.2	2	mL	
BLANK	ALL	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1267890	10	mL	
BLANK	ALL	0.25% HPLC Grade Water	1271949	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/05/10
Extr. Injection Volume: 20uL
Sequence Number: per030510a
Initial Calibration Date: 03/05/10

Method: EPA 6850-Modified
Int. Std.: UCL100126-01
Mobile Phase Lot#: 1278668, 1271949
Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *hmm*
Date: *03/09/10*
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0305001a	IPB001	CWW	3/5/2010 12:39			1		USE	B
per0305002a	IPB001	CWW	3/5/2010 12:50			1		USE	B
per0305003a	WCLICAL-01	CWW	3/5/2010 13:00			1		USE	I
per0305004a	WCLICAL-02	CWW	3/5/2010 13:10			1		USE	I
per0305005a	WCLICAL-03	CWW	3/5/2010 13:20			1		USE	I
per0305006a	WCLICAL-04	CWW	3/5/2010 13:30			1		USE	I
per0305007a	WCLICAL-05	CWW	3/5/2010 13:40			1		USE	I
per0305008a	IPB002	CWW	3/5/2010 13:50			1		USE	B
per0305009a	WCLICV	CWW	3/5/2010 14:00			1		USE	C
per0305010a	IPB003	CWW	3/5/2010 14:11			1		USE	B
per0305011a	WCLCRI	CWW	3/5/2010 14:21			1		USE	C
per0305012a	1202049034	CWW	3/5/2010 14:31	955706	VARIOUS	1	LANL	USE	S
per0305013a	1202049035	CWW	3/5/2010 14:41	955706	VARIOUS	1	LANL	USE	S
per0305014a	1202049038	CWW	3/5/2010 14:51	955706	VARIOUS	1	LANL	USE	S
per0305015a	247141001	CWW	3/5/2010 15:01	955706	10-1859	1	LANL	USE	S
per0305016a	247141002	CWW	3/5/2010 15:11	955706	10-1859	1	LANL	USE	S
per0305017a	247141003	CWW	3/5/2010 15:21	955706	10-1859	1	LANL	USE	S
per0305018a	247172001	CWW	3/5/2010 15:31	955706	10-1866	1	LANL	USE	S
per0305019a	247172002	CWW	3/5/2010 15:41	955706	10-1866	1	LANL	USE	S
per0305020a	247178001	CWW	3/5/2010 15:51	955706	10-1861	1	LANL	USE	S
per0305021a	247178002	CWW	3/5/2010 16:01	955706	10-1861	1	LANL	USE	S
per0305022a	WCLCCV	CWW	3/5/2010 16:11			1		USE	C
per0305023a	IPB004	CWW	3/5/2010 16:21			1		USE	B
per0305024a	WCLCRI	CWW	3/5/2010 16:31			1		USE	C
per0305025a	1202049036	CWW	3/5/2010 16:42	955706	10-1861	1	LANL	USE	S
per0305026a	1202049037	CWW	3/5/2010 16:52	955706	10-1861	1	LANL	USE	S
per0305027a	247178003	CWW	3/5/2010 17:02	955706	10-1861	1	LANL	USE	S
per0305028a	247178004	CWW	3/5/2010 17:12	955706	10-1861	1	LANL	USE	S
per0305029a	247178005	CWW	3/5/2010 17:22	955706	10-1861	1	LANL	USE	S

per0305030a	247178006	CWW	3/5/2010 17:32	955706	10-1861	1	LANL	USE	S
per0305031a	247178007	CWW	3/5/2010 17:42	955706	10-1861	1	LANL	USE	S
per0305032a	247178008	CWW	3/5/2010 17:52	955706	10-1861	1	LANL	USE	S
per0305033a	247178009	CWW	3/5/2010 18:02	955706	10-1861	1	LANL	USE	S
per0305034a	247178010	CWW	3/5/2010 18:12	955706	10-1861	1	LANL	USE	S
per0305035a	WCLCCV	CWW	3/5/2010 18:22			1		USE	C
per0305036a	IPB005	CWW	3/5/2010 18:32			1		USE	B
per0305037a	WCLCRI	CWW	3/5/2010 18:42			1		USE	C
per0305038a	247178011	CWW	3/5/2010 18:53	955706	10-1861	1	LANL	DUSE-RA	S
per0305039a	247197001	CWW	3/5/2010 19:03	955706	10-1865-1	1	LANL	DUSE-RA	S
per0305040a	247197002	CWW	3/5/2010 19:13	955706	10-1865-1	1	LANL	DUSE-RA	S
per0305041a	IPB006	CWW	3/5/2010 19:23			1		DUSE-RA	B
per0305042a	1202062446	CWW	3/5/2010 19:33	961557	248683	1	LANL	DUSE-RA	S
per0305043a	1202062447	CWW	3/5/2010 19:43	961557	248683	1	LANL	DUSE-RA	S
per0305044a	1202062450	CWW	3/5/2010 19:53	961557	248683	1	LANL	DUSE-RA	S
per0305045a	248683001	CWW	3/5/2010 20:03	961557	248683	1	LANL	DUSE-RA	S
per0305046a	1202062448	CWW	3/5/2010 20:13	961557	248683	1	LANL	DUSE-RA	S
per0305047a	1202062449	CWW	3/5/2010 20:23	961557	248683	1	LANL	DUSE-RA	S
per0305048a	WCLCCV	CWW	3/5/2010 20:34			1		DUSE	C
per0305049a	IPB007	CWW	3/5/2010 20:44			1		DUSE	B
per0305050a	WCLCRI	CWW	3/5/2010 20:54			1		DUSE	C
per0305051a	1202049039	CWW	3/5/2010 21:04	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305052a	1202049040	CWW	3/5/2010 21:14	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305053a	1202049043	CWW	3/5/2010 21:24	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305054a	247187001	CWW	3/5/2010 21:34	955709	10-1867	1	LANL	DUSE-RA	S
per0305055a	247187002	CWW	3/5/2010 21:45	955709	10-1867	1	LANL	DUSE-RA	S
per0305056a	247187003	CWW	3/5/2010 21:55	955709	10-1867	1	LANL	DUSE-RA	S
per0305057a	247188001	CWW	3/5/2010 22:05	955709	10-1863	1	LANL	DUSE-RA	S
per0305058a	1202049041	CWW	3/5/2010 22:15	955709	10-1863	1	LANL	DUSE-RA	S
per0305059a	1202049042	CWW	3/5/2010 22:25	955709	10-1863	1	LANL	DUSE-RA	S
per0305060a	247188002	CWW	3/5/2010 22:35	955709	10-1863	1	LANL	DUSE-RA	S
per0305061a	WCLCCV	CWW	3/5/2010 22:45			1		USE	C
per0305062a	IPB008	CWW	3/5/2010 22:55			1		USE	B
per0305063a	WCLCRI	CWW	3/5/2010 23:06			1		USE	C
per0305064a	247188003	CWW	3/5/2010 23:16	955709	10-1863	1	LANL	USE	S
per0305065a	247188004	CWW	3/5/2010 23:26	955709	10-1863	1	LANL	USE	S
per0305066a	247188005	CWW	3/5/2010 23:36	955709	10-1863	1	LANL	USE	S

per0305067a	247188006	CWW	3/5/2010 23:46	955709	10-1863	1	LANL	USE	S
per0305068a	247188007	CWW	3/5/2010 23:56	955709	10-1863	1	LANL	USE	S
per0305069a	247188008	CWW	3/6/2010 0:06	955709	10-1863	1	LANL	USE	S
per0305070a	247188009	CWW	3/6/2010 0:16	955709	10-1863	1	LANL	USE	S
per0305071a	247188010	CWW	3/6/2010 0:26	955709	10-1863	1	LANL	USE	S
per0305072a	247188011	CWW	3/6/2010 0:36	955709	10-1863	1	LANL	USE	S
per0305073a	247188012	CWW	3/6/2010 0:46	955709	10-1863	1	LANL	USE	S
per0305074a	WCLCCV	CWW	3/6/2010 0:56			1		USE	C
per0305075a	IPB009	CWW	3/6/2010 1:07			1		USE	B
per0305076a	WCLCRI	CWW	3/6/2010 1:17			1		USE	C
per0305077a	247188013	CWW	3/6/2010 1:27	955709	10-1863	1	LANL	USE	S
per0305078a	247188014	CWW	3/6/2010 1:37	955709	10-1863	1	LANL	USE	S
per0305079a	IPB010	CWW	3/6/2010 1:47			1		USE	B
per0305080a	1202049044	CWW	3/6/2010 1:58	955712	VARIOUS	1	LANL	USE	S
per0305081a	1202049045	CWW	3/6/2010 2:08	955712	VARIOUS	1	LANL	USE	S
per0305082a	1202049048	CWW	3/6/2010 2:18	955712	VARIOUS	1	LANL	USE	S
per0305083a	247181001	CWW	3/6/2010 2:28	955712	10-1871-1	1	LANL	USE	S
per0305084a	247181002	CWW	3/6/2010 2:38	955712	10-1871-1	1	LANL	USE	S
per0305085a	247186001	CWW	3/6/2010 2:48	955712	10-1868-1	1	LANL	USE	S
per0305086a	247186002	CWW	3/6/2010 2:58	955712	10-1868-1	1	LANL	USE	S
per0305087a	WCLCCV	CWW	3/6/2010 3:08			1		USE	C
per0305088a	IPB011	CWW	3/6/2010 3:19			1		USE	B
per0305089a	WCLCRI	CWW	3/6/2010 3:29			1		USE	C
per0305090a	247186003	CWW	3/6/2010 3:39	955712	10-1868-1	1	LANL	USE	S
per0305091a	247186004	CWW	3/6/2010 3:49	955712	10-1868-1	1	LANL	USE	S
per0305092a	247186005	CWW	3/6/2010 3:59	955712	10-1868-1	1	LANL	USE	S
per0305093a	247186006	CWW	3/6/2010 4:09	955712	10-1868-1	1	LANL	USE	S
per0305094a	247186007	CWW	3/6/2010 4:19	955712	10-1868-1	1	LANL	USE	S
per0305095a	247186008	CWW	3/6/2010 4:29	955712	10-1868-1	1	LANL	USE	S
per0305096a	247186009	CWW	3/6/2010 4:39	955712	10-1868-1	1	LANL	USE	S
per0305097a	247186010	CWW	3/6/2010 4:49	955712	10-1868-1	1	LANL	USE	S
per0305098a	WCLCCV	CWW	3/6/2010 4:59			1		USE	C
per0305099a	IPB012	CWW	3/6/2010 5:10			1		USE	B
per0305100a	WCLCRI	CWW	3/6/2010 5:20			1		USE	C
per0305101a	247201001	CWW	3/6/2010 5:30	955712	10-1873	1	LANL	USE	S
per0305102a	1202049046	CWW	3/6/2010 5:40	955712	10-1873	1	LANL	USE	S
per0305103a	1202049047	CWW	3/6/2010 5:50	955712	10-1873	1	LANL	USE	S

per0305104a	247201002	CWW	3/6/2010 6:00	955712	10-1873	1	LANL	USE	S
per0305105a	247201003	CWW	3/6/2010 6:10	955712	10-1873	1	LANL	USE	S
per0305106a	247201004	CWW	3/6/2010 6:20	955712	10-1873	1	LANL	USE	S
per0305107a	247201005	CWW	3/6/2010 6:31	955712	10-1873	1	LANL	USE	S
per0305108a	247201006	CWW	3/6/2010 6:41	955712	10-1873	1	LANL	USE	S
per0305109a	247201007	CWW	3/6/2010 6:51	955712	10-1873	1	LANL	USE	S
per0305110a	WCLCCV	CWW	3/6/2010 7:01			1		USE	C
per0305111a	IPB013	CWW	3/6/2010 7:11			1		USE	B
per0305112a	WCLCRI	CWW	3/6/2010 7:21			1		USE	C
per0305113a	1202049069	CWW	3/6/2010 7:31	955727	VARIOUS	1	LANL	USE	S
per0305114a	1202049070	CWW	3/6/2010 7:42	955727	VARIOUS	1	LANL	USE	S
per0305115a	1202049073	CWW	3/6/2010 7:52	955727	VARIOUS	1	LANL	USE	S
per0305116a	247127001	CWW	3/6/2010 8:02	955727	10-1849-1	1	LANL	USE	S
per0305117a	247130001	CWW	3/6/2010 8:12	955727	10-1850-1	1	LANL	USE	S
per0305118a	247139001	CWW	3/6/2010 8:22	955727	10-1854-1	1	LANL	USE	S
per0305119a	1202049071	CWW	3/6/2010 8:32	955727	10-1854-1	1	LANL	USE	S
per0305120a	1202049072	CWW	3/6/2010 8:42	955727	10-1854-1	1	LANL	USE	S
per0305121a	247179001	CWW	3/6/2010 8:52	955727	10-1871	1	LANL	USE	S
per0305122a	247182001	CWW	3/6/2010 9:02	955727	10-1861-1	1	LANL	USE	S
per0305123a	WCLCCV	CWW	3/6/2010 9:12			1		USE	C
per0305124a	IPB014	CWW	3/6/2010 9:23			1		USE	B
per0305125a	WCLCRI	CWW	3/6/2010 9:33			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/07/10

Extr. Injection Volume: 20uL

Sequence Number: per030710a

Initial Calibration Date: 03/07/10

Method: EPA 6850-Modified

Int. Std.: UCL100126-01

Mobile Phase Lot#: 1278668, 1271949

Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *hml*

Date: 12/3/09/10

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

Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0307001a	IPB001	CWW	3/7/2010 14:21			1		USE	B
per0307002a	IPB001	CWW	3/7/2010 14:31			1		USE	B
per0307003a	WCLICAL-01	CWW	3/7/2010 14:40			1		USE	I
per0307004a	WCLICAL-02	CWW	3/7/2010 14:49			1		USE	I
per0307005a	WCLICAL-03	CWW	3/7/2010 14:58			1		USE	I
per0307006a	WCLICAL-04	CWW	3/7/2010 15:07			1		USE	I
per0307007a	WCLICAL-05	CWW	3/7/2010 15:16			1		USE	I
per0307008a	IPB002	CWW	3/7/2010 15:25			1		USE	B
per0307009a	WCLICV	CWW	3/7/2010 15:34			1		USE	C
per0307010a	IPB003	CWW	3/7/2010 15:43			1		USE	B
per0307011a	WCLCRI	CWW	3/7/2010 15:52			1		USE	C
per0307012a	247339001	CWW	3/7/2010 16:01	955727	10-1909-1	1	LANL	USE	S
per0307013a	247339002	CWW	3/7/2010 16:10	955727	10-1909-1	1	LANL	USE	S
per0307014a	247350001	CWW	3/7/2010 16:19	955727	10-1912-1	1	LANL	USE	S
per0307015a	IPB004	CWW	3/7/2010 16:28			1		USE	B
per0307016a	1202049027	CWW	3/7/2010 16:37	955703	VARIOUS	1	LANL	USE	S
per0307017a	1202049028	CWW	3/7/2010 16:46	955703	VARIOUS	1	LANL	USE	S
per0307018a	1202049031	CWW	3/7/2010 16:55	955703	VARIOUS	1	LANL	USE	S
per0307019a	247123001	CWW	3/7/2010 17:04	955703	10-1848	1	LANL	USE	S
per0307020a	247123002	CWW	3/7/2010 17:13	955703	10-1848	1	LANL	USE	S
per0307021a	247123003	CWW	3/7/2010 17:22	955703	10-1848	1	LANL	USE	S
per0307022a	WCLCCV	CWW	3/7/2010 17:31			1		USE	C
per0307023a	IPB005	CWW	3/7/2010 17:40			1		USE	B
per0307024a	WCLCRI	CWW	3/7/2010 17:49			1		USE	C
per0307025a	247123004	CWW	3/7/2010 17:58	955703	10-1848	1	LANL	USE	S
per0307026a	247126001	CWW	3/7/2010 18:07	955703	10-1849	1	LANL	USE	S
per0307027a	247126002	CWW	3/7/2010 18:16	955703	10-1849	1	LANL	USE	S
per0307028a	247126003	CWW	3/7/2010 18:26	955703	10-1849	1	LANL	USE	S
per0307029a	247129001	CWW	3/7/2010 18:35	955703	10-1850	1	LANL	USE	S

per0307030a	1202049029	CWW	3/7/2010 18:44	955703	10-1850	1	LANL	USE	S
per0307031a	1202049030	CWW	3/7/2010 18:53	955703	10-1850	1	LANL	USE	S
per0307032a	247129002	CWW	3/7/2010 19:02	955703	10-1850	1	LANL	USE	S
per0307033a	247129003	CWW	3/7/2010 19:11	955703	10-1850	1	LANL	USE	S
per0307034a	WCLCCV	CWW	3/7/2010 19:20			1		USE	C
per0307035a	IPB006	CWW	3/7/2010 19:29			1		USE	B
per0307036a	WCLCRI	CWW	3/7/2010 19:38			1		USE	C
per0307037a	247129004	CWW	3/7/2010 19:47	955703	10-1850	1	LANL	USE	S
per0307038a	247129005	CWW	3/7/2010 19:56	955703	10-1850	1	LANL	USE	S
per0307039a	247129006	CWW	3/7/2010 20:05	955703	10-1850	1	LANL	USE	S
per0307040a	247129007	CWW	3/7/2010 20:14	955703	10-1850	1	LANL	USE	S
per0307041a	247129008	CWW	3/7/2010 20:23	955703	10-1850	1	LANL	USE	S
per0307042a	247136001	CWW	3/7/2010 20:32	955703	10-1853	1	LANL	USE	S
per0307043a	247136002	CWW	3/7/2010 20:41	955703	10-1853	1	LANL	USE	S
per0307044a	247138001	CWW	3/7/2010 20:50	955703	10-1854	1	LANL	USE	S
per0307045a	WCLCCV	CWW	3/7/2010 20:59			1		USE	C
per0307046a	IPB007	CWW	3/7/2010 21:08			1		USE	B
per0307047a	WCLCRI	CWW	3/7/2010 21:18			1		USE	C
per0307048a	1202042701	CWW	3/7/2010 21:27	953008	VARIOUS	1	LANL	USE	S
per0307049a	1202042702	CWW	3/7/2010 21:36	953008	VARIOUS	1	LANL	USE	S
per0307050a	1202042705	CWW	3/7/2010 21:45	953008	VARIOUS	1	LANL	USE	S
per0307051a	246881001	CWW	3/7/2010 21:54	953008	10-1767	1	LANL	USE	S
per0307052a	246881002	CWW	3/7/2010 22:03	953008	10-1767	1	LANL	USE	S
per0307053a	1202042703	CWW	3/7/2010 22:12	953008	10-1767	1	LANL	USE	S
per0307054a	1202042704	CWW	3/7/2010 22:21	953008	10-1767	1	LANL	USE	S
per0307055a	246881003	CWW	3/7/2010 22:30	953008	10-1767	1	LANL	USE	S
per0307056a	246881004	CWW	3/7/2010 22:39	953008	10-1767	1	LANL	USE	S
per0307057a	246881005	CWW	3/7/2010 22:48	953008	10-1767	1	LANL	USE	S
per0307058a	WCLCCV	CWW	3/7/2010 22:57			1		USE	C
per0307059a	IPB008	CWW	3/7/2010 23:06			1		USE	B
per0307060a	WCLCRI	CWW	3/7/2010 23:15			1		USE	C
per0307061a	246881006	CWW	3/7/2010 23:24	953008	10-1767	1	LANL	USE	S
per0307062a	246881007	CWW	3/7/2010 23:34	953008	10-1767	1	LANL	USE	S
per0307063a	246881008	CWW	3/7/2010 23:43	953008	10-1767	1	LANL	USE	S
per0307064a	246881009	CWW	3/7/2010 23:52	953008	10-1767	1	LANL	USE	S
per0307065a	246881010	CWW	3/8/2010 0:01	953008	10-1767	1	LANL	USE	S
per0307066a	246881011	CWW	3/8/2010 0:10	953008	10-1767	1	LANL	USE	S

per0307067a	246881012	CWW	3/8/2010 0:19	953008	10-1767	1	LANL	USE	S
per0307068a	246881013	CWW	3/8/2010 0:28	953008	10-1767	1	LANL	USE	S
per0307069a	246881014	CWW	3/8/2010 0:37	953008	10-1767	1	LANL	USE	S
per0307070a	246887001	CWW	3/8/2010 0:46	953008	10-1770-1	1	LANL	USE	S
per0307071a	WCLCCV	CWW	3/8/2010 0:55			1		USE	C
per0307072a	IPB009	CWW	3/8/2010 1:04			1		USE	B
per0307073a	WCLCRI	CWW	3/8/2010 1:13			1		USE	C
per0307074a	246887002	CWW	3/8/2010 1:22	953008	10-1770-1	1	LANL	USE	S
per0307075a	246887003	CWW	3/8/2010 1:31	953008	10-1770-1	1	LANL	USE	S
per0307076a	246887004	CWW	3/8/2010 1:41	953008	10-1770-1	1	LANL	USE	S
per0307077a	246887005	CWW	3/8/2010 1:50	953008	10-1770-1	1	LANL	USE	S
per0307078a	IPB010	CWW	3/8/2010 1:59			1		USE	B
per0307079a	1202048998	CWW	3/8/2010 2:08	955688	VARIOUS	1	LANL	USE	S
per0307080a	1202048999	CWW	3/8/2010 2:17	955688	VARIOUS	1	LANL	USE	S
per0307081a	1202049002	CWW	3/8/2010 2:26	955688	VARIOUS	1	LANL	USE	S
per0307082a	246870001	CWW	3/8/2010 2:35	955688	10-1782	1	LANL	USE	S
per0307083a	WCLCCV	CWW	3/8/2010 2:44			1		USE	C
per0307084a	IPB011	CWW	3/8/2010 2:54			1		USE	B
per0307085a	WCLCRI	CWW	3/8/2010 3:03			1		USE	C
per0307086a	246870002	CWW	3/8/2010 3:12	955688	10-1782	1	LANL	USE	S
per0307087a	1202049000	CWW	3/8/2010 3:21	955688	10-1782	1	LANL	USE	S
per0307088a	1202049001	CWW	3/8/2010 3:30	955688	10-1782	1	LANL	USE	S
per0307089a	246870003	CWW	3/8/2010 3:39	955688	10-1782	1	LANL	USE	S
per0307090a	246870004	CWW	3/8/2010 3:48	955688	10-1782	1	LANL	USE	S
per0307091a	246870005	CWW	3/8/2010 3:57	955688	10-1782	1	LANL	USE	S
per0307092a	246870006	CWW	3/8/2010 4:06	955688	10-1782	1	LANL	USE	S
per0307093a	246870007	CWW	3/8/2010 4:15	955688	10-1782	1	LANL	USE	S
per0307094a	246870008	CWW	3/8/2010 4:24	955688	10-1782	1	LANL	USE	S
per0307095a	WCLCCV	CWW	3/8/2010 4:33			1		USE	C
per0307096a	IPB012	CWW	3/8/2010 4:43			1		USE	B
per0307097a	WCLCRI	CWW	3/8/2010 4:52			1		USE	C
per0307098a	246870009	CWW	3/8/2010 5:01	955688	10-1782	1	LANL	DUSE-RA	S
per0307099a	246870010	CWW	3/8/2010 5:10	955688	10-1782	1	LANL	DUSE-RA	S
per0307100a	246982001	CWW	3/8/2010 5:19	955688	10-1812	1	LANL	DUSE-RA	S
per0307101a	246982002	CWW	3/8/2010 5:28	955688	10-1812	1	LANL	DUSE-RA	S
per0307102a	246982003	CWW	3/8/2010 5:37	955688	10-1812	1	LANL	DUSE-RA	S
per0307103a	246982004	CWW	3/8/2010 5:46	955688	10-1812	1	LANL	DUSE-RA	S

per0307104a	246982005	CWW	3/8/2010 5:55	955688	10-1812	1	LANL	DUSE-RA	S
per0307105a	246982006	CWW	3/8/2010 6:04	955688	10-1812	1	LANL	DUSE-RA	S
per0307106a	246982007	CWW	3/8/2010 6:13	955688	10-1812	1	LANL	DUSE-RA	S
per0307107a	WCLCCV	CWW	3/8/2010 6:22			1		DUSE	C
per0307108a	IPB013	CWW	3/8/2010 6:32			1		DUSE	B
per0307109a	WCLCRI	CWW	3/8/2010 6:41			1		DUSE	C

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

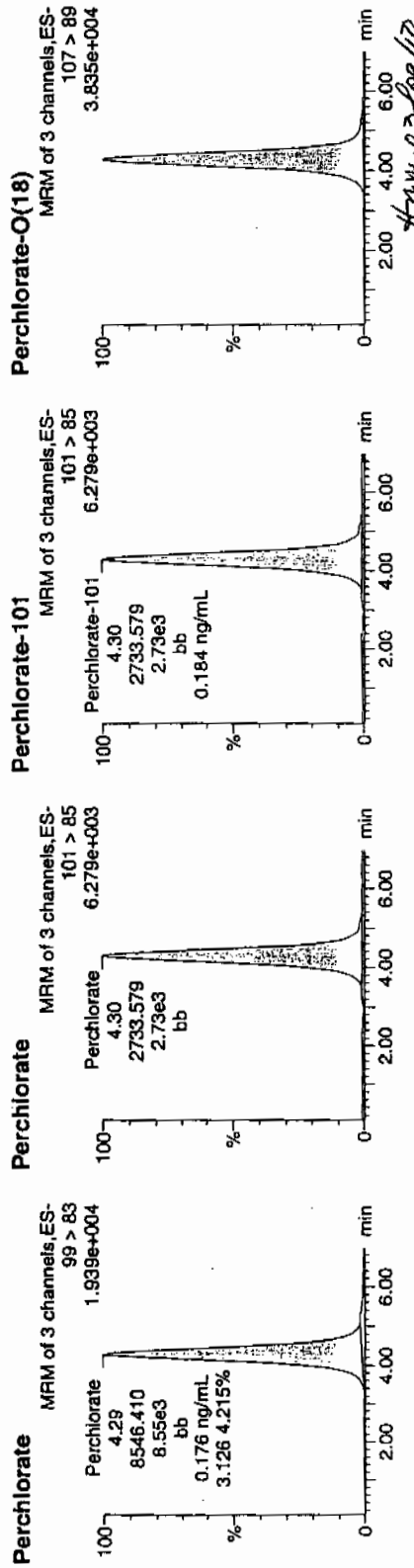
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305119a
Date: 06-Mar-2010
Time: 08:32:26
ID: 1202049071
Vial: 3:2,A

333
03-06-10

1202049071 | 1202049071 | MS | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	ISN	Ion Ratio
1202049071	Perchlorate	99 > 83	4.29	8546.410	8546.410	bb			0.1763	88.13	-11.87	2108.0...	3.13
1202049071	Perchlorate-101	101 > 85	4.30	2733.579	2733.579	bb			0.1837	91.84	-8.16	366.816	
1202049071	Perchlorate-O(18)	107 > 89	4.28	17431.014	17431.014	bb			0.4144	82.89	-17.11	662.567	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305120a

Date: 06-Mar-2010

Time: 08:42:37

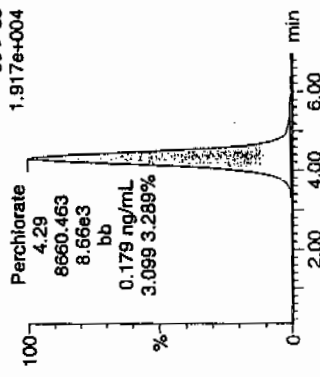
ID: 1202049072

Vial: 3:2,B

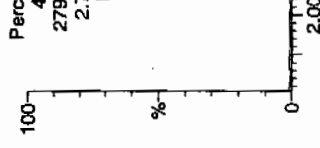
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623
08-06-10

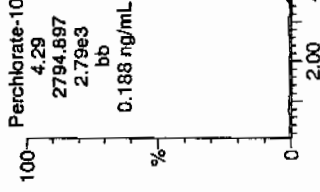
Perchlorate MRM of 3 channels.ES-
99 > 83 1.917e+004



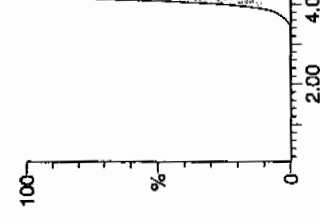
Perchlorate MRM of 3 channels.ES-
101 > 85 6.225e+003



Perchlorate-101 MRM of 3 channels.ES-
101 > 85 6.225e+003



Perchlorate-O(18) MRM of 3 channels.ES-
107 > 89 3.878e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049072	Perchlorate	99 > 83	4.29	8660.463	8660.463	bb			0.1786	89.30	-10.70	982.990	3.10
1202049072	Perchlorate-101	101 > 85	4.29	2794.897	2794.897	bb			0.1878	93.90	-6.10	161.762	
1202049072	Perchlorate-O(18)	107 > 89	4.28	17646.725	17646.725	bb			0.4196	83.91	-16.09	1070.4...	

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 10-1912**

Sample Analysis

Sample ID	Client ID
247347001	RE15-10-8246
247347002	RE15-10-8245
247347003	RE15-10-8243
247347004	RE15-10-8244
247347005	RE15-10-8242
247347006	RE15-10-8240
247347007	RE15-10-8241
247347008	RE15-10-8267
1202047709	Method Blank (MB) ICP
1202047714	Laboratory Control Sample (LCS)
1202047711	247325001(RE46-10-12661L) Serial Dilution (SD)
1202047710	247325001(RE46-10-12661D) Sample Duplicate (DUP)
1202047712	247325001(RE46-10-12661S) Matrix Spike (MS)
1202047713	247325001(RE46-10-12661SD) Matrix Spike Duplicate (MSD)
1202047715	Method Blank (MB) ICP-MS
1202047720	Laboratory Control Sample (LCS)
1202047717	247325001(RE46-10-12661L) Serial Dilution (SD)
1202047716	247325001(RE46-10-12661D) Sample Duplicate (DUP)
1202047718	247325001(RE46-10-12661S) Matrix Spike (MS)
1202047719	247325001(RE46-10-12661SD) Matrix Spike Duplicate (MSD)

1202055930	Method Blank (MB) CVAA
1202055931	Laboratory Control Sample (LCS)
1202055934	247338001(RE15-10-8208L) Serial Dilution (SD)
1202055932	247338001(RE15-10-8208D) Sample Duplicate (DUP)
1202055933	247338001(RE15-10-8208S) Matrix Spike (MS)
1202055935	247338001(RE15-10-8208SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	955136, 955138 and 958634
Prep Batch :	955135, 955137 and 958630
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 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - 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 zinc, 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: 247325001 (RE46-10-12661) and 247338001 (RE15-10-8208).

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 antimony, barium, magnesium, manganese, potassium, zinc, nickel and selenium, 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 antimony, barium, magnesium, manganese, potassium, nickel and selenium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

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

Duplicate Relative Percent Difference (RPD) Statement

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

Serial Dilution % Difference Statement

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

Technical Information**Holding Time Specifications**

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

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instruments. Dilutions were required for 247347001 (RE15-10-8246) and 247347008 (RE15-10-8267) in order to minimize antimony suppression due to matrix interferences. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information

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

Miscellaneous Information

Electronic Packaging Comment

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

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

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 805135 and 806482. A copy of each DER is included in the Miscellaneous Data section of this package.

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Kristen Pearson Date: 3/19/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347001

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8246

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	966000	ug/kg		6370	18700	18700	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-36-0	Antimony	4690	ug/kg	U	1550	4690	4690	5	P	JWJ	03/17/10 01:13	031610B-1	955136
7440-38-2	Arsenic	321	ug/kg	J	193	964	964	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-39-3	Barium	10500	ug/kg		93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-41-7	Beryllium	287	ug/kg		19.3	96.4	96.4	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-43-9	Cadmium	157	ug/kg	J	93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-70-2	Calcium	460000	ug/kg		7500	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-47-3	Chromium	781	ug/kg		141	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-48-4	Cobalt	494	ug/kg		141	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-50-8	Copper	2060	ug/kg		281	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-89-6	Iron	7810000	ug/kg		7500	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-92-1	Lead	5340	ug/kg		234	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-95-4	Magnesium	234000	ug/kg		7970	28100	28100	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-96-5	Manganese	250000	ug/kg		187	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7439-97-6	Mercury	11	ug/kg	U	3.73	11	11	1	AV	JXL	03/03/10 13:28	030310S2-5	958634
7440-02-0	Nickel	397	ug/kg		96.4	386	386	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-09-7	Potassium	503000	ug/kg		6000	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7782-49-2	Selenium	964	ug/kg	U	482	964	964	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-22-4	Silver	469	ug/kg	U	93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-23-5	Sodium	382000	ug/kg		6560	23400	23400	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-28-0	Thallium	193	ug/kg	U	57.8	193	193	2	MS	RMJ	03/18/10 15:55	100317-2	955138
7440-62-2	Vanadium	2050	ug/kg		93.7	469	469	1	P	JWJ	03/16/10 23:56	031610B-1	955136
7440-66-6	Zinc	53300	ug/kg		309	937	937	1	P	JWJ	03/16/10 23:56	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.542	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.527	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.555	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347002

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8245

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 99.05

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	597000	ug/kg		6510	19200	19200	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-36-0	Antimony	958	ug/kg	U	316	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-38-2	Arsenic	197	ug/kg	J	192	960	960	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-39-3	Barium	4790	ug/kg		95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-41-7	Beryllium	258	ug/kg		19.2	96	96	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-43-9	Cadmium	121	ug/kg	J	95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-70-2	Calcium	298000	ug/kg		7660	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-47-3	Chromium	561	ug/kg		144	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-48-4	Cobalt	328	ug/kg	J	144	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-50-8	Copper	1540	ug/kg		287	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-89-6	Iron	6010000	ug/kg		7660	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-92-1	Lead	3020	ug/kg		239	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-95-4	Magnesium	103000	ug/kg		8140	28700	28700	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-96-5	Manganese	168000	ug/kg		192	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7439-97-6	Mercury	11.3	ug/kg	U	3.84	11.3	11.3	1	AV	JXL1	03/03/10 13:29	030310S2-5	958634
7440-02-0	Nickel	313	ug/kg	J	96	384	384	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-09-7	Potassium	346000	ug/kg		6130	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7782-49-2	Selenium	960	ug/kg	U	480	960	960	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-22-4	Silver	479	ug/kg	U	95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-23-5	Sodium	246000	ug/kg		6710	23900	23900	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-28-0	Thallium	192	ug/kg	U	57.6	192	192	2	MS	RMJ	03/18/10 15:59	100317-2	955138
7440-62-2	Vanadium	1600	ug/kg		95.8	479	479	1	P	JWJ	03/17/10 00:00	031610B-1	955136
7440-66-6	Zinc	41300	ug/kg		316	958	958	1	P	JWJ	03/17/10 00:00	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.527	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.526	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.536	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347003

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8243

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1130000	ug/kg		6730	19800	19800	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-36-0	Antimony	990	ug/kg	U	327	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-38-2	Arsenic	248	ug/kg	J	198	990	990	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-39-3	Barium	8190	ug/kg		99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-41-7	Beryllium	303	ug/kg		19.8	99	99	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-43-9	Cadmium	495	ug/kg	U	99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-70-2	Calcium	389000	ug/kg		7920	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-47-3	Chromium	3040	ug/kg		148	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-48-4	Cobalt	369	ug/kg	J	148	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-50-8	Copper	1630	ug/kg		297	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-89-6	Iron	6400000	ug/kg		7920	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-92-1	Lead	3710	ug/kg		247	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-95-4	Magnesium	148000	ug/kg		8410	29700	29700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-96-5	Manganese	202000	ug/kg		198	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7439-97-6	Mercury	11.8	ug/kg	U	4	11.8	11.8	1	AV	JXLJ	03/03/10 13:34	030310S2-5	958634
7440-02-0	Nickel	717	ug/kg		99	396	396	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-09-7	Potassium	557000	ug/kg		6340	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7782-49-2	Selenium	990	ug/kg	U	495	990	990	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-22-4	Silver	495	ug/kg	U	99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-23-5	Sodium	500000	ug/kg		6930	24700	24700	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-28-0	Thallium	198	ug/kg	U	59.4	198	198	2	MS	RMJ	03/18/10 16:03	100317-2	955138
7440-62-2	Vanadium	1880	ug/kg		99	495	495	1	P	JWJ	03/17/10 00:03	031610B-1	955136
7440-66-6	Zinc	36600	ug/kg		327	990	990	1	P	JWJ	03/17/10 00:03	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.513	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.513	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.518	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347004

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8244

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 97.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1190000	ug/kg		6930	20400	20400	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-36-0	Antimony	1020	ug/kg	U	336	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-38-2	Arsenic	290	ug/kg	J	202	1010	1010	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-39-3	Barium	11400	ug/kg		102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-41-7	Beryllium	374	ug/kg		20.2	101	101	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-43-9	Cadmium	143	ug/kg	J	102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-70-2	Calcium	723000	ug/kg		8150	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-47-3	Chromium	2600	ug/kg		153	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-48-4	Cobalt	591	ug/kg		153	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-50-8	Copper	2300	ug/kg		306	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-89-6	Iron	9480000	ug/kg		8150	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-92-1	Lead	6940	ug/kg		255	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-95-4	Magnesium	297000	ug/kg		8660	30600	30600	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-96-5	Manganese	306000	ug/kg		204	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7439-97-6	Mercury	11.4	ug/kg	U	3.89	11.4	11.4	1	AV	JXL1	03/03/10 13:36	030310S2-5	958634
7440-02-0	Nickel	614	ug/kg		101	403	403	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-09-7	Potassium	600000	ug/kg		6520	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7782-49-2	Selenium	1010	ug/kg	U	504	1010	1010	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-22-4	Silver	509	ug/kg	U	102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-23-5	Sodium	554000	ug/kg		7130	25500	25500	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-28-0	Thallium	202	ug/kg	U	60.5	202	202	2	MS	RMJ	03/18/10 16:07	100317-2	955138
7440-62-2	Vanadium	2950	ug/kg		102	509	509	1	P	JWJ	03/17/10 00:07	031610B-1	955136
7440-66-6	Zinc	53600	ug/kg		336	1020	1020	1	P	JWJ	03/17/10 00:07	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.502	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.507	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.537	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347005

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8242

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1070000	ug/kg		6670	19600	19600	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-36-0	Antimony	980	ug/kg	U	324	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-38-2	Arsenic	416	ug/kg	J	198	992	992	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-39-3	Barium	12500	ug/kg		98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-41-7	Beryllium	211	ug/kg		19.8	99.2	99.2	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-43-9	Cadmium	119	ug/kg	J	98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-70-2	Calcium	355000	ug/kg		7840	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-47-3	Chromium	2420	ug/kg		147	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-48-4	Cobalt	467	ug/kg	J	147	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-50-8	Copper	1480	ug/kg		294	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-89-6	Iron	7040000	ug/kg		7840	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-92-1	Lead	3310	ug/kg		245	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-95-4	Magnesium	155000	ug/kg		8330	29400	29400	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-96-5	Manganese	257000	ug/kg		196	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7439-97-6	Mercury	11.5	ug/kg	U	3.9	11.5	11.5	1	AV	JXL1	03/03/10 13:38	030310S2-5	958634
7440-02-0	Nickel	655	ug/kg		99.2	397	397	2	MS	RMJ	03/18/10 23:54	100318-4	955138
7440-09-7	Potassium	549000	ug/kg		6270	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7782-49-2	Selenium	992	ug/kg	U	496	992	992	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-22-4	Silver	490	ug/kg	U	98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-23-5	Sodium	455000	ug/kg		6860	24500	24500	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-28-0	Thallium	198	ug/kg	U	59.5	198	198	2	MS	RMJ	03/18/10 16:19	100317-2	955138
7440-62-2	Vanadium	2360	ug/kg		98	490	490	1	P	JWJ	03/17/10 00:11	031610B-1	955136
7440-66-6	Zinc	41600	ug/kg		324	980	980	1	P	JWJ	03/17/10 00:11	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.517	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.511	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.53	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347006

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8240

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1640000	ug/kg		6740	19800	19800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-36-0	Antimony	991	ug/kg	U	327	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-38-2	Arsenic	528	ug/kg	J	193	965	965	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-39-3	Barium	28500	ug/kg		99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-41-7	Beryllium	342	ug/kg		19.3	96.5	96.5	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-43-9	Cadmium	114	ug/kg	J	99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-70-2	Calcium	1530000	ug/kg		7930	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-47-3	Chromium	2700	ug/kg		149	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-48-4	Cobalt	567	ug/kg		149	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-50-8	Copper	1690	ug/kg		297	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-89-6	Iron	7240000	ug/kg		7930	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-92-1	Lead	3040	ug/kg		248	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-95-4	Magnesium	465000	ug/kg		8420	29700	29700	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-96-5	Manganese	245000	ug/kg		198	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7439-97-6	Mercury	3.76	ug/kg	J	3.6	10.6	10.6	1	AV	JXL1	03/03/10 13:39	030310S2-5	958634
7440-02-0	Nickel	1460	ug/kg		96.5	386	386	2	MS	RMJ	03/18/10 23:57	100318-4	955138
7440-09-7	Potassium	508000	ug/kg		6340	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7782-49-2	Selenium	965	ug/kg	U	482	965	965	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-22-4	Silver	496	ug/kg	U	99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-23-5	Sodium	355000	ug/kg		6940	24800	24800	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-28-0	Thallium	193	ug/kg	U	57.9	193	193	2	MS	RMJ	03/18/10 16:24	100317-2	955138
7440-62-2	Vanadium	3580	ug/kg		99.1	496	496	1	P	JWJ	03/17/10 00:14	031610B-1	955136
7440-66-6	Zinc	35800	ug/kg		327	991	991	1	P	JWJ	03/17/10 00:14	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.513	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.527	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.576	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347007

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8241

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	965000	ug/kg		6800	20000	20000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-36-0	Antimony	1000	ug/kg	U	330	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-38-2	Arsenic	288	ug/kg	J	202	1010	1010	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-39-3	Barium	8340	ug/kg		100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-41-7	Beryllium	442	ug/kg		20.2	101	101	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-43-9	Cadmium	500	ug/kg	U	100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-70-2	Calcium	263000	ug/kg		8000	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-47-3	Chromium	2270	ug/kg		150	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-48-4	Cobalt	299	ug/kg	J	150	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-50-8	Copper	1470	ug/kg		300	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-89-6	Iron	6120000	ug/kg		8000	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-92-1	Lead	3130	ug/kg		250	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-95-4	Magnesium	107000	ug/kg		8500	30000	30000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-96-5	Manganese	195000	ug/kg		200	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7439-97-6	Mercury	12.1	ug/kg	U	4.13	12.1	12.1	1	AV	JXLJ	03/03/10 13:41	030310S2-5	958634
7440-02-0	Nickel	516	ug/kg		101	403	403	2	MS	RMJ	03/18/10 23:59	100318-4	955138
7440-09-7	Potassium	513000	ug/kg		6400	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7782-49-2	Selenium	1010	ug/kg	U	504	1010	1010	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-22-4	Silver	500	ug/kg	U	100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-23-5	Sodium	430000	ug/kg		7000	25000	25000	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-28-0	Thallium	202	ug/kg	U	60.5	202	202	2	MS	RMJ	03/18/10 16:28	100317-2	955138
7440-62-2	Vanadium	1750	ug/kg		100	500	500	1	P	JWJ	03/17/10 00:18	031610B-1	955136
7440-66-6	Zinc	36400	ug/kg		330	1000	1000	1	P	JWJ	03/17/10 00:18	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.506	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.502	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.5	g	30	mL	03/02/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247347008

BASIS: Dry Weight

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8267

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1100000	ug/kg		6860	20200	20200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-36-0	Antimony	5040	ug/kg	U	1660	5040	5040	5	P	JWJ	03/17/10 01:17	031610B-1	955136
7440-38-2	Arsenic	304	ug/kg	J	182	912	912	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-39-3	Barium	12400	ug/kg		101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-41-7	Beryllium	210	ug/kg		18.2	91.2	91.2	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-43-9	Cadmium	101	ug/kg	J	101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-70-2	Calcium	350000	ug/kg		8070	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-47-3	Chromium	2480	ug/kg		151	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-48-4	Cobalt	497	ug/kg	J	151	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-50-8	Copper	1500	ug/kg		302	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-89-6	Iron	6970000	ug/kg		8070	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-92-1	Lead	3390	ug/kg		252	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-95-4	Magnesium	145000	ug/kg		8570	30200	30200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-96-5	Manganese	250000	ug/kg		202	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7439-97-6	Mercury	10.3	ug/kg	U	3.51	10.3	10.3	1	AV	JXL1	03/03/10 13:43	030310S2-5	958634
7440-02-0	Nickel	569	ug/kg		91.2	365	365	2	MS	RMJ	03/19/10 00:02	100318-4	955138
7440-09-7	Potassium	570000	ug/kg		6450	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7782-49-2	Selenium	912	ug/kg	U	456	912	912	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-22-4	Silver	504	ug/kg	U	101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-23-5	Sodium	465000	ug/kg		7060	25200	25200	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-28-0	Thallium	182	ug/kg	U	54.7	182	182	2	MS	RMJ	03/18/10 16:32	100317-2	955138
7440-62-2	Vanadium	2080	ug/kg		101	504	504	1	P	JWJ	03/17/10 00:21	031610B-1	955136
7440-66-6	Zinc	41200	ug/kg		333	1010	1010	1	P	JWJ	03/17/10 00:21	031610B-1	955136

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955136	955135	SW846 3050B	0.502	g	50	mL	02/25/10	AXG2
955138	955137	SW846 3050B	0.555	g	50	mL	02/25/10	AXG2
958634	958630	SW846 7471A Prep	0.588	g	30	mL	03/02/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3.ICPMS6.OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.23	ug/L	5	ug/L	104.7	90.0 – 110.0	AV	03-MAR-10 10:25	030310S2-5
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Antimony	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Cadmium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Cobalt	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Copper	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Lead	485	ug/L	500	ug/L	97	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Manganese	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Potassium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Silver	253	ug/L	250	ug/L	101.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Sodium	2410	ug/L	2500	ug/L	96.5	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Arsenic	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	18-MAR-10 14:14	100317-2
	Beryllium	50	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	18-MAR-10 14:14	100317-2
	Nickel	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	18-MAR-10 14:14	100317-2
	Selenium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	18-MAR-10 14:14	100317-2
	Thallium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	18-MAR-10 14:14	100317-2
	Nickel	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	18-MAR-10 23:36	100318-4
CCV01										
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	03-MAR-10 10:30	030310S2-5
	Aluminum	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Antimony	548	ug/L	500	ug/L	109.6	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Barium	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Cadmium	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Chromium	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Cobalt	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Copper	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Iron	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Lead	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Magnesium	5400	ug/L	5000	ug/L	107.9	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Manganese	531	ug/L	500	ug/L	106.3	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Potassium	5710	ug/L	5000	ug/L	114.1	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Silver	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Sodium	10700	ug/L	10000	ug/L	106.6	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Vanadium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Zinc	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Arsenic	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	18-MAR-10 14:34	100317-2
	Beryllium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	18-MAR-10 14:34	100317-2
	Nickel	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	18-MAR-10 14:34	100317-2
	Selenium	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	18-MAR-10 14:34	100317-2
	Thallium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	18-MAR-10 14:34	100317-2
	Nickel	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	18-MAR-10 23:49	100318-4
CCV02										
	Mercury	5.37	ug/L	5	ug/L	107.3	80.0 – 120.0	AV	03-MAR-10 10:50	030310S2-5
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Antimony	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Barium	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Cadmium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Calcium	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Chromium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Iron	4850	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Magnesium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Manganese	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Potassium	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Silver	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Vanadium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Arsenic	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	18-MAR-10 14:50	100317-2
	Beryllium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	18-MAR-10 14:50	100317-2
	Nickel	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	18-MAR-10 14:50	100317-2
	Selenium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	18-MAR-10 14:50	100317-2
	Thallium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	18-MAR-10 14:50	100317-2
	Nickel	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	19-MAR-10 00:05	100318-4
CCV03										
	Mercury	5.25	ug/L	5	ug/L	105	80.0 – 120.0	AV	03-MAR-10 11:10	030310S2-5
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Antimony	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Barium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Cadmium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Calcium	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Copper	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Lead	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Magnesium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Manganese	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Potassium	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Silver	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	9740	ug/L	10000	ug/L	97.4	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Arsenic	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	18-MAR-10 15:31	100317-2
	Beryllium	51.9	ug/L	50	ug/L	103.9	90.0 - 110.0	MS	18-MAR-10 15:31	100317-2
	Nickel	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	18-MAR-10 15:31	100317-2
	Selenium	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	18-MAR-10 15:31	100317-2
	Thallium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	18-MAR-10 15:31	100317-2
CCV04										
	Mercury	5.32	ug/L	5	ug/L	106.5	80.0 - 120.0	AV	03-MAR-10 11:30	030310S2-5
	Aluminum	4790	ug/L	5000	ug/L	95.8	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Antimony	476	ug/L	500	ug/L	95.3	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Barium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Cadmium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Calcium	4820	ug/L	5000	ug/L	96.4	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Chromium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Cobalt	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Copper	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Iron	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Lead	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Magnesium	4860	ug/L	5000	ug/L	97.3	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Potassium	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Silver	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Zinc	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Arsenic	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	18-MAR-10 16:11	100317-2
	Beryllium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	18-MAR-10 16:11	100317-2
	Nickel	47.7	ug/L	50	ug/L	95.3	90.0 - 110.0	MS	18-MAR-10 16:11	100317-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05	Selenium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	18-MAR-10 16:11	100317-2
	Thallium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	18-MAR-10 16:11	100317-2
CCV05	Mercury	5.44	ug/L	5	ug/L	108.7	80.0 - 120.0	AV	03-MAR-10 11:50	030310S2-5
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Antimony	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Barium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Cadmium	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Calcium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Copper	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Lead	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Manganese	510	ug/L	500	ug/L	102	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Silver	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1
	Arsenic	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	18-MAR-10 16:36	100317-2
	Beryllium	46.1	ug/L	50	ug/L	92.1	90.0 - 110.0	MS	18-MAR-10 16:36	100317-2
	Nickel	44.1	ug/L	50	ug/L	88.2	90.0 - 110.0	MS	18-MAR-10 16:36	100317-2
CCV06	Selenium	52.7	ug/L	50	ug/L	105.4	90.0 - 110.0	MS	18-MAR-10 16:36	100317-2
	Thallium	51	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	18-MAR-10 16:36	100317-2
CCV06	Mercury	5.58	ug/L	5	ug/L	111.6	80.0 - 120.0	AV	03-MAR-10 12:10	030310S2-5
	Aluminum	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Antimony	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Barium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Cadmium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Calcium	4890	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Chromium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Cobalt	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Copper	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Iron	4980	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Lead	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Magnesium	4920	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Potassium	4850	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Silver	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
	Zinc	490	ug/L	500	ug/L	98	90.0 - 110.0	P	16-MAR-10 16:34	031610B-1
CCV07	Mercury	5.58	ug/L	5	ug/L	111.5	80.0 - 120.0	AV	03-MAR-10 12:30	030310S2-5
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Antimony	485	ug/L	500	ug/L	97	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Chromium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Lead	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Magnesium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Manganese	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1
	Potassium	4980	ug/L	5000	ug/L	99.6	90.0 - 110.0	P	16-MAR-10 17:14	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-MAR-10 17:14	031610B-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 – 110.0	P	16-MAR-10 17:14	031610B-1
	Vanadium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	16-MAR-10 17:14	031610B-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	16-MAR-10 17:14	031610B-1
CCV08										
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	03-MAR-10 12:50	030310S2-5
	Aluminum	4890	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Antimony	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Cadmium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Calcium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Iron	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Lead	485	ug/L	500	ug/L	97	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Magnesium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Potassium	4860	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Silver	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Sodium	9960	ug/L	10000	ug/L	99.6	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Vanadium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 17:38	031610B-1
CCV09										
	Mercury	5.2	ug/L	5	ug/L	104	80.0 – 120.0	AV	03-MAR-10 13:11	030310S2-5
	Aluminum	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Antimony	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Barium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Cadmium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Calcium	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Cobalt	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Copper	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Iron	5400	ug/L	5000	ug/L	108	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Lead	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Magnesium	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Manganese	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Potassium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Silver	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Sodium	10800	ug/L	10000	ug/L	107.6	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
	Zinc	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	16-MAR-10 18:24	031610B-1
CCV10	Mercury	5.17	ug/L	5	ug/L	103.4	80.0 – 120.0	AV	03-MAR-10 13:31	030310S2-5
	Aluminum	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Barium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Cadmium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Chromium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Cobalt	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Copper	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Iron	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Lead	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Magnesium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Silver	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	16-MAR-10 18:46	031610B-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV11	Zinc	510	ug/L	500	ug/L	102	90.0 - 110.0	P	16-MAR-10 18:46	031610B-1
	Mercury	5.53	ug/L	5	ug/L	110.7	80.0 - 120.0	AV	03-MAR-10 13:51	030310S2-5
	Aluminum	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Antimony	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Barium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Cobalt	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Copper	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Iron	5080	ug/L	5000	ug/L	101.6	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Lead	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Magnesium	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Manganese	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Potassium	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Sodium	10300	ug/L	10000	ug/L	103.4	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
	Zinc	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-MAR-10 19:24	031610B-1
CCV12	Aluminum	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Antimony	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Calcium	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Cobalt	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Magnesium	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Manganese	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Silver	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Vanadium	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
	Zinc	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	16-MAR-10 19:51	031610B-1
CCV13	Aluminum	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Cadmium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Chromium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Cobalt	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Iron	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Lead	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Manganese	518	ug/L	500	ug/L	103.5	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Silver	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Sodium	10400	ug/L	10000	ug/L	103.6	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
	Zinc	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	16-MAR-10 20:31	031610B-1
CCV14	Aluminum	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Antimony	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Barium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Calcium	5120	ug/L	5000	ug/L	102.4	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Chromium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Copper	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Iron	5170	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Lead	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Silver	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Sodium	10200	ug/L	10000	ug/L	101.8	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Vanadium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
	Zinc	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	16-MAR-10 21:11	031610B-1
CCV15	Aluminum	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Barium	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Cadmium	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Calcium	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Chromium	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Cobalt	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Copper	525	ug/L	500	ug/L	105.1	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Iron	5440	ug/L	5000	ug/L	108.8	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Lead	520	ug/L	500	ug/L	104	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Manganese	535	ug/L	500	ug/L	106.9	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Potassium	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Silver	525	ug/L	500	ug/L	105	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Sodium	10800	ug/L	10000	ug/L	107.9	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,JCPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	527	ug/L	500	ug/L	105.5	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
	Zinc	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	16-MAR-10 21:47	031610B-1
CCV16										
	Aluminum	5320	ug/L	5000	ug/L	106.3	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Antimony	527	ug/L	500	ug/L	105.4	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Barium	531	ug/L	500	ug/L	106.1	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Cadmium	529	ug/L	500	ug/L	105.9	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Calcium	5350	ug/L	5000	ug/L	107	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Chromium	532	ug/L	500	ug/L	106.3	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Cobalt	528	ug/L	500	ug/L	105.5	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Copper	530	ug/L	500	ug/L	106.1	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Iron	5440	ug/L	5000	ug/L	108.7	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Lead	527	ug/L	500	ug/L	105.5	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Magnesium	5400	ug/L	5000	ug/L	108	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Manganese	542	ug/L	500	ug/L	108.4	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Potassium	5310	ug/L	5000	ug/L	106.3	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Silver	530	ug/L	500	ug/L	106	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Sodium	10800	ug/L	10000	ug/L	108.1	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Vanadium	534	ug/L	500	ug/L	106.8	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
	Zinc	532	ug/L	500	ug/L	106.3	90.0 - 110.0	P	16-MAR-10 22:27	031610B-1
CCV17										
	Aluminum	5280	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Antimony	534	ug/L	500	ug/L	106.9	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Barium	532	ug/L	500	ug/L	106.4	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Cadmium	533	ug/L	500	ug/L	106.7	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Calcium	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Chromium	536	ug/L	500	ug/L	107.3	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Cobalt	530	ug/L	500	ug/L	106	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Copper	533	ug/L	500	ug/L	106.6	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1
	Iron	5440	ug/L	5000	ug/L	108.8	90.0 - 110.0	P	16-MAR-10 23:03	031610B-1

METALS
~2a~
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Magnesium	5440	ug/L	5000	ug/L	108.9	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Manganese	547	ug/L	500	ug/L	109.4	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Potassium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Silver	533	ug/L	500	ug/L	106.7	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Sodium	10700	ug/L	10000	ug/L	107	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Vanadium	538	ug/L	500	ug/L	107.7	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
	Zinc	533	ug/L	500	ug/L	106.7	90.0 – 110.0	P	16-MAR-10 23:03	031610B-1
CCV18	Aluminum	5360	ug/L	5000	ug/L	107.2	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Antimony	534	ug/L	500	ug/L	106.7	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Barium	538	ug/L	500	ug/L	107.5	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Cadmium	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Calcium	5400	ug/L	5000	ug/L	107.9	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Chromium	539	ug/L	500	ug/L	107.8	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Cobalt	535	ug/L	500	ug/L	107.1	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Copper	538	ug/L	500	ug/L	107.5	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Iron	5540	ug/L	5000	ug/L	110.9	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Lead	534	ug/L	500	ug/L	106.8	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Magnesium	5460	ug/L	5000	ug/L	109.2	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Manganese	551	ug/L	500	ug/L	110.3	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Potassium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Silver	538	ug/L	500	ug/L	107.7	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Sodium	10900	ug/L	10000	ug/L	108.8	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Vanadium	542	ug/L	500	ug/L	108.3	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
	Zinc	539	ug/L	500	ug/L	107.8	90.0 – 110.0	P	16-MAR-10 23:36	031610B-1
CCV19	Aluminum	5390	ug/L	5000	ug/L	107.8	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Antimony	538	ug/L	500	ug/L	107.7	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Barium	533	ug/L	500	ug/L	106.5	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1

METALS

~2a~

Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	533	ug/L	500	ug/L	106.6	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Calcium	5400	ug/L	5000	ug/L	107.9	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Chromium	534	ug/L	500	ug/L	106.8	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Cobalt	531	ug/L	500	ug/L	106.2	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Copper	532	ug/L	500	ug/L	106.5	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Iron	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Lead	532	ug/L	500	ug/L	106.4	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Magnesium	5390	ug/L	5000	ug/L	107.8	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Manganese	546	ug/L	500	ug/L	109.2	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Potassium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Silver	532	ug/L	500	ug/L	106.5	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Sodium	10600	ug/L	10000	ug/L	106	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Vanadium	537	ug/L	500	ug/L	107.4	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
	Zinc	535	ug/L	500	ug/L	107	90.0 – 110.0	P	16-MAR-10 23:49	031610B-1
CCV20	Aluminum	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Antimony	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Barium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Cadmium	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Calcium	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Chromium	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Cobalt	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Copper	525	ug/L	500	ug/L	105	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Iron	5340	ug/L	5000	ug/L	106.7	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Lead	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Magnesium	5360	ug/L	5000	ug/L	107.2	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Manganese	539	ug/L	500	ug/L	107.7	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Silver	526	ug/L	500	ug/L	105.3	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1
	Sodium	10400	ug/L	10000	ug/L	104.2	90.0 – 110.0	P	17-MAR-10 00:25	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	530	ug/L	500	ug/L	105.9	90.0 - 110.0	P	17-MAR-10 00:25	031610B-1
	Zinc	528	ug/L	500	ug/L	105.7	90.0 - 110.0	P	17-MAR-10 00:25	031610B-1
CCV21										
	Aluminum	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Antimony	522	ug/L	500	ug/L	104.5	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Barium	525	ug/L	500	ug/L	105	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Cadmium	526	ug/L	500	ug/L	105.1	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Calcium	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Chromium	526	ug/L	500	ug/L	105.3	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Cobalt	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Copper	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Iron	5330	ug/L	5000	ug/L	106.5	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Lead	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Manganese	537	ug/L	500	ug/L	107.4	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Potassium	5290	ug/L	5000	ug/L	105.9	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Silver	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Vanadium	529	ug/L	500	ug/L	105.8	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
	Zinc	526	ug/L	500	ug/L	105.3	90.0 - 110.0	P	17-MAR-10 00:42	031610B-1
CCV22										
	Aluminum	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Antimony	521	ug/L	500	ug/L	104.3	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Barium	522	ug/L	500	ug/L	104.5	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Cadmium	522	ug/L	500	ug/L	104.5	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Calcium	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Chromium	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Cobalt	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Copper	521	ug/L	500	ug/L	104.3	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1
	Iron	5260	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	17-MAR-10 01:05	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	521	ug/L	500	ug/L	104.3	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Manganese	537	ug/L	500	ug/L	107.5	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Potassium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Silver	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Sodium	10400	ug/L	10000	ug/L	103.7	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Vanadium	526	ug/L	500	ug/L	105.3	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
	Zinc	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	17-MAR-10 01:05	031610B-1
CCV23	Aluminum	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Antimony	520	ug/L	500	ug/L	104	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Barium	520	ug/L	500	ug/L	104	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Cadmium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Calcium	5190	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Chromium	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Cobalt	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Copper	520	ug/L	500	ug/L	104	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Iron	5300	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Lead	520	ug/L	500	ug/L	103.9	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Magnesium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Manganese	532	ug/L	500	ug/L	106.4	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Silver	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Sodium	10500	ug/L	10000	ug/L	105	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Vanadium	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1
	Zinc	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	17-MAR-10 01:20	031610B-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.182	ug/L	.2	ug/L	91	70.0 – 130.0	AV	03-MAR-10 10:28	030310S2-5
	Nickel	2.2	ug/L	2	ug/L	110	70.0 – 130.0	MS	18-MAR-10 14:22	100317-2
	Thallium	1.14	ug/L	1	ug/L	114.2	70.0 – 130.0	MS	18-MAR-10 14:22	100317-2
	Beryllium	.582	ug/L	.5	ug/L	116.4	70.0 – 130.0	MS	18-MAR-10 14:22	100317-2
	Arsenic	6.2	ug/L	5	ug/L	123.9	70.0 – 130.0	MS	18-MAR-10 14:22	100317-2
	Selenium	6.25	ug/L	5	ug/L	125	70.0 – 130.0	MS	18-MAR-10 14:22	100317-2
	Nickel	2.16	ug/L	2	ug/L	107.8	70.0 – 130.0	MS	18-MAR-10 23:41	100318-4
PQL01										
	Aluminum	207	ug/L	200	ug/L	103.3	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Manganese	9.84	ug/L	10	ug/L	98.4	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Copper	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Cobalt	4.31	ug/L	5	ug/L	86.3	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Chromium	4.43	ug/L	5	ug/L	88.5	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Cadmium	4.73	ug/L	5	ug/L	94.7	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Barium	5.08	ug/L	5	ug/L	101.7	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Antimony	11.2	ug/L	10	ug/L	112	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Silver	4.67	ug/L	5	ug/L	93.5	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Potassium	136	ug/L	150	ug/L	90.6	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Calcium	205	ug/L	200	ug/L	102.6	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Zinc	6.89	ug/L	10	ug/L	68.9	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Vanadium	4.72	ug/L	5	ug/L	94.5	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Magnesium	323	ug/L	300	ug/L	107.8	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Iron	85.9	ug/L	100	ug/L	85.9	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Lead	10.1	ug/L	10	ug/L	100.8	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
PQL02										
	Vanadium	4.94	ug/L	5	ug/L	98.8	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Manganese	10.3	ug/L	10	ug/L	103.3	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Cobalt	5.21	ug/L	5	ug/L	104.1	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Chromium	5.04	ug/L	5	ug/L	100.8	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS6,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	5.03	ug/L	5	ug/L	100.6	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Barium	5.36	ug/L	5	ug/L	107.2	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Antimony	12.5	ug/L	10	ug/L	124.6	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Sodium	353	ug/L	300	ug/L	117.5	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Silver	5.03	ug/L	5	ug/L	100.6	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Potassium	161	ug/L	150	ug/L	107.3	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Magnesium	309	ug/L	300	ug/L	103.1	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Zinc	7.46	ug/L	10	ug/L	74.6	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Iron	124	ug/L	100	ug/L	123.8	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Lead	9.85	ug/L	10	ug/L	98.5	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Copper	11.1	ug/L	10	ug/L	111.1	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1
	Calcium	202	ug/L	200	ug/L	101.2	70.0 – 130.0	P	16-MAR-10 22:31	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 10:26	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 14:00	031610B-1
	Antimony	4.74	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:00	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:00	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:00	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:00	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:00	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:00	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 14:00	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:00	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 14:00	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 14:00	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 14:00	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 14:00	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:00	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 14:00	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:00	031610B-1
	Zinc	-7.4	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:00	031610B-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-MAR-10 14:18	100317-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	18-MAR-10 14:18	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 14:18	100317-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-MAR-10 14:18	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-MAR-10 14:18	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 23:39	100318-4
CCB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 10:31	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 14:22	031610B-1
	Antimony	7.98	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:22	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:22	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:22	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:22	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:22	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:22	031610B-1
	Copper	4.17	+/-10	J	3.0	10.0	SOL	P	16-MAR-10 14:22	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:22	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 14:22	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 14:22	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 14:22	031610B-1
	Potassium	127.57	+/-250	J	64.0	250	SOL	P	16-MAR-10 14:22	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:22	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 14:22	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:22	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 14:22	031610B-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-MAR-10 14:38	100317-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	18-MAR-10 14:38	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 14:38	100317-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-MAR-10 14:38	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-MAR-10 14:38	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 23:51	100318-4
CCB02										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 10:51	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 14:39	031610B-1
	Antimony	7.02	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:39	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:39	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:39	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:39	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:39	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:39	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 14:39	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:39	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 14:39	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 14:39	031610B-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 14:39	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 14:39	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:39	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 14:39	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:39	031610B-1
	Zinc	-7.61	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:39	031610B-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-MAR-10 14:54	100317-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	18-MAR-10 14:54	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 14:54	100317-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-MAR-10 14:54	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-MAR-10 14:54	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	19-MAR-10 00:07	100318-4
CCB03										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 11:11	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 14:50	031610B-1
	Antimony	4.51	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:50	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:50	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:50	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:50	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:50	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 14:50	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 14:50	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 14:50	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 14:50	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 14:50	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 14:50	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 14:50	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:50	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 14:50	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 14:50	031610B-1
	Zinc	-7.64	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 14:50	031610B-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB04	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-MAR-10 15:35	100317-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	18-MAR-10 15:35	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 15:35	100317-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-MAR-10 15:35	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-MAR-10 15:35	100317-2
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 11:31	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 15:19	031610B-1
	Antimony	6.14	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 15:19	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:19	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:19	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 15:19	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 15:19	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 15:19	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 15:19	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 15:19	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 15:19	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 15:19	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 15:19	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 15:19	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:19	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 15:19	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:19	031610B-1
	Zinc	-7.87	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 15:19	031610B-1
CCB05	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-MAR-10 16:15	100317-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	18-MAR-10 16:15	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 16:15	100317-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-MAR-10 16:15	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-MAR-10 16:15	100317-2
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 11:52	030310S2-5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

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>
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 15:58	031610B-1
	Antimony	4.05	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 15:58	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:58	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:58	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 15:58	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 15:58	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 15:58	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 15:58	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 15:58	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 15:58	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 15:58	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 15:58	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 15:58	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:58	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 15:58	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 15:58	031610B-1
	Zinc	-7.84	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 15:58	031610B-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-MAR-10 16:40	100317-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	18-MAR-10 16:40	100317-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-MAR-10 16:40	100317-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-MAR-10 16:40	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-MAR-10 16:40	100317-2
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 12:12	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 16:37	031610B-1
	Antimony	4.36	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 16:37	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 16:37	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 16:37	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 16:37	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 16:37	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 16:37	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 16:37	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 16:37	031610B-1
	Lead	2.56	+/-10	J	2.5	10.0	SOL	P	16-MAR-10 16:37	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 16:37	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 16:37	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 16:37	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 16:37	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 16:37	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 16:37	031610B-1
	Zinc	-4.45	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 16:37	031610B-1
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 12:32	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 17:17	031610B-1
	Antimony	5.12	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 17:17	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:17	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:17	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 17:17	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 17:17	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 17:17	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 17:17	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 17:17	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 17:17	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 17:17	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 17:17	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 17:17	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:17	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 17:17	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:17	031610B-1
	Zinc	-4.27	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 17:17	031610B-1
CCB08	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 12:52	030310S2-5

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 17:42	031610B-1
	Antimony	5.33	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 17:42	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:42	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:42	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 17:42	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 17:42	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 17:42	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 17:42	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 17:42	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 17:42	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 17:42	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 17:42	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 17:42	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:42	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 17:42	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 17:42	031610B-1
	Zinc	-3.81	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 17:42	031610B-1
CCB09										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 13:12	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 18:28	031610B-1
	Antimony	7.84	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 18:28	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:28	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:28	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 18:28	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 18:28	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 18:28	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 18:28	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 18:28	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 18:28	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 18:28	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 18:28	031610B-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB10	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 18:28	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:28	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 18:28	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:28	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 18:28	031610B-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 13:33	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 18:50	031610B-1
	Antimony	4.87	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 18:50	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:50	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:50	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 18:50	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 18:50	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 18:50	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 18:50	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 18:50	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 18:50	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 18:50	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 18:50	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 18:50	031610B-1
	Silver	-1.02	+/-5	J	1.0	5.0	SOL	P	16-MAR-10 18:50	031610B-1
CCB11	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 18:50	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 18:50	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 18:50	031610B-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	03-MAR-10 13:53	030310S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 19:28	031610B-1
	Antimony	5.26	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 19:28	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:28	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:28	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 19:28	031610B-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 19:28	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 19:28	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 19:28	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 19:28	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 19:28	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 19:28	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 19:28	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 19:28	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:28	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 19:28	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:28	031610B-1
	Zinc	-3.49	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 19:28	031610B-1
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 19:55	031610B-1
	Antimony	3.83	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 19:55	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:55	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:55	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 19:55	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 19:55	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 19:55	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 19:55	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 19:55	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 19:55	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 19:55	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 19:55	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 19:55	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:55	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 19:55	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 19:55	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 19:55	031610B-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB13	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 20:35	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 20:35	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 20:35	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 20:35	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 20:35	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 20:35	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 20:35	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 20:35	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 20:35	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 20:35	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 20:35	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 20:35	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 20:35	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 20:35	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 20:35	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 20:35	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 20:35	031610B-1
CCB14	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 21:15	031610B-1
	Antimony	3.56	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 21:15	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:15	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:15	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 21:15	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 21:15	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 21:15	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 21:15	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 21:15	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 21:15	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 21:15	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 21:15	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 21:15	031610B-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:15	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 21:15	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:15	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 21:15	031610B-1
CCB15	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 21:51	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 21:51	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:51	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:51	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 21:51	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 21:51	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 21:51	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 21:51	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 21:51	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 21:51	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 21:51	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 21:51	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 21:51	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:51	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 21:51	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 21:51	031610B-1
	Zinc	-6.16	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 21:51	031610B-1
CCB16	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 22:34	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 22:34	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 22:34	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 22:34	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 22:34	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 22:34	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 22:34	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 22:34	031610B-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

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	16-MAR-10 22:34	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 22:34	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 22:34	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 22:34	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 22:34	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 22:34	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 22:34	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 22:34	031610B-1
	Zinc	-5.7	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 22:34	031610B-1
CCB17	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 23:07	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 23:07	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:07	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:07	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 23:07	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 23:07	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 23:07	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 23:07	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 23:07	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 23:07	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 23:07	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 23:07	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 23:07	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:07	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 23:07	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:07	031610B-1
	Zinc	-5.95	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 23:07	031610B-1
CCB18	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 23:40	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-MAR-10 23:40	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:40	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:40	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 23:40	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 23:40	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 23:40	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 23:40	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 23:40	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 23:40	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 23:40	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 23:40	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 23:40	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:40	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 23:40	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:40	031610B-1
	Zinc	-5.74	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 23:40	031610B-1
CCB19	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-MAR-10 23:52	031610B-1
	Antimony	5.52	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 23:52	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:52	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:52	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 23:52	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 23:52	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-MAR-10 23:52	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-MAR-10 23:52	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	16-MAR-10 23:52	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	16-MAR-10 23:52	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	16-MAR-10 23:52	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-MAR-10 23:52	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-MAR-10 23:52	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:52	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-MAR-10 23:52	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-MAR-10 23:52	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

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>
CCB20	Zinc	-5.65	+/-10	J	3.3	10.0	SOL	P	16-MAR-10 23:52	031610B-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-MAR-10 00:29	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	17-MAR-10 00:29	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:29	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:29	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 00:29	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 00:29	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 00:29	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-MAR-10 00:29	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 00:29	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	17-MAR-10 00:29	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	17-MAR-10 00:29	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-MAR-10 00:29	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-MAR-10 00:29	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:29	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-MAR-10 00:29	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:29	031610B-1
CCB21	Zinc	-5.95	+/-10	J	3.3	10.0	SOL	P	17-MAR-10 00:29	031610B-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-MAR-10 00:46	031610B-1
	Antimony	3.98	+/-10	J	3.3	10.0	SOL	P	17-MAR-10 00:46	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:46	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:46	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 00:46	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 00:46	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 00:46	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-MAR-10 00:46	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 00:46	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	17-MAR-10 00:46	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	17-MAR-10 00:46	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-MAR-10 00:46	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-MAR-10 00:46	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:46	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-MAR-10 00:46	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 00:46	031610B-1
	Zinc	-5.98	+/-10	J	3.3	10.0	SOL	P	17-MAR-10 00:46	031610B-1
CCB22	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-MAR-10 01:09	031610B-1
	Antimony	4.41	+/-10	J	3.3	10.0	SOL	P	17-MAR-10 01:09	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:09	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:09	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 01:09	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 01:09	031610B-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 01:09	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-MAR-10 01:09	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 01:09	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	17-MAR-10 01:09	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	17-MAR-10 01:09	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-MAR-10 01:09	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-MAR-10 01:09	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:09	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-MAR-10 01:09	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:09	031610B-1
	Zinc	-5.86	+/-10	J	3.3	10.0	SOL	P	17-MAR-10 01:09	031610B-1
CCB23	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-MAR-10 01:24	031610B-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	17-MAR-10 01:24	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:24	031610B-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:24	031610B-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 01:24	031610B-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 01:24	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-MAR-10 01:24	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-MAR-10 01:24	031610B-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	17-MAR-10 01:24	031610B-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	17-MAR-10 01:24	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	17-MAR-10 01:24	031610B-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-MAR-10 01:24	031610B-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-MAR-10 01:24	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:24	031610B-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-MAR-10 01:24	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-MAR-10 01:24	031610B-1
	Zinc	-6.01	+/-10	J	3.3	10.0	SOL	P	17-MAR-10 01:24	031610B-1

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-1912
 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>
1202047709	Iron	7980	ug/kg	+/-25000	U	P	7980	25000
	Lead	250	ug/kg	+/-998	U	P	250	998
	Magnesium	8480	ug/kg	+/-29900	U	P	8480	29900
	Manganese	200	ug/kg	+/-998	U	P	200	998
	Potassium	6390	ug/kg	+/-25000	U	P	6390	25000
	Silver	99.8	ug/kg	+/-499	U	P	99.8	499
	Sodium	6990	ug/kg	+/-25000	U	P	6990	25000
	Vanadium	99.8	ug/kg	+/-499	U	P	99.8	499
	Aluminum	6790	ug/kg	+/-20000	U	P	6790	20000
	Copper	299	ug/kg	+/-998	U	P	299	998
	Cobalt	150	ug/kg	+/-499	U	P	150	499
	Chromium	150	ug/kg	+/-499	U	P	150	499
	Calcium	7980	ug/kg	+/-25000	U	P	7980	25000
	Cadmium	99.8	ug/kg	+/-499	U	P	99.8	499
	Barium	99.8	ug/kg	+/-499	U	P	99.8	499
	Antimony	329	ug/kg	+/-998	U	P	329	998
	Zinc	-493	ug/kg	+/-998	J	P	329	998
1202047715	Arsenic	194	ug/kg	+/-971	U	MS	194	971
	Beryllium	19.4	ug/kg	+/-97.1	U	MS	19.4	97.1
	Nickel	97.1	ug/kg	+/-388	U	MS	97.1	388
	Selenium	485	ug/kg	+/-971	U	MS	485	971
	Thallium	58.3	ug/kg	+/-194	U	MS	58.3	194
1202055930	Mercury	4.02	ug/kg	+/-11.8	U	AV	4.02	11.8

METALS

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Interference Check Sample

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA I

<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	521000	ug/L	500000	ug/L	104	80.0 – 120.0	16-MAR-10 14:07	031610B-1
	Antimony	-8.1	ug/L					16-MAR-10 14:07	031610B-1
	Barium	7.2	ug/L					16-MAR-10 14:07	031610B-1
	Cadmium	3.89	ug/L					16-MAR-10 14:07	031610B-1
	Calcium	491000	ug/L	500000	ug/L	98.3	80.0 – 120.0	16-MAR-10 14:07	031610B-1
	Chromium	-2.06	ug/L					16-MAR-10 14:07	031610B-1
	Cobalt	3.0	ug/L					16-MAR-10 14:07	031610B-1
	Copper	1.49	ug/L					16-MAR-10 14:07	031610B-1
	Iron	190000	ug/L	200000	ug/L	94.9	80.0 – 120.0	16-MAR-10 14:07	031610B-1
	Lead	-0.626	ug/L					16-MAR-10 14:07	031610B-1
	Magnesium	501000	ug/L	500000	ug/L	100	80.0 – 120.0	16-MAR-10 14:07	031610B-1
	Manganese	0.59	ug/L					16-MAR-10 14:07	031610B-1
	Potassium	-117.0	ug/L					16-MAR-10 14:07	031610B-1
	Silver	0.397	ug/L					16-MAR-10 14:07	031610B-1
	Sodium	8.24	ug/L					16-MAR-10 14:07	031610B-1
	Vanadium	-5.16	ug/L					16-MAR-10 14:07	031610B-1
	Zinc	-5.14	ug/L					16-MAR-10 14:07	031610B-1
ICSAB01									
	Aluminum	527000	ug/L	500000	ug/L	105	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Antimony	533	ug/L	500	ug/L	107	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Barium	507	ug/L	500	ug/L	101	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Cadmium	472	ug/L	500	ug/L	94.3	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Calcium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Chromium	491	ug/L	500	ug/L	98.1	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Cobalt	452	ug/L	500	ug/L	90.4	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Copper	563	ug/L	500	ug/L	113	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Iron	190000	ug/L	200000	ug/L	95	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Lead	496	ug/L	500	ug/L	99.3	80.0 – 120.0	16-MAR-10 14:10	031610B-1
	Magnesium	504000	ug/L	500000	ug/L	101	80.0 – 120.0	16-MAR-10 14:10	031610B-1

METALS
-4-
Interference Check Sample

SDG No: 10-1912

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	494	ug/L	500	ug/L	98.7	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Potassium	5300	ug/L	5000	ug/L	106	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Silver	268	ug/L	250	ug/L	107	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Sodium	5270	ug/L	5000	ug/L	105	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Vanadium	523	ug/L	500	ug/L	105	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Zinc	477	ug/L	500	ug/L	95.5	80.0 - 120.0	16-MAR-10 14:10	031610B-1

METALS
-4-
Interference Check Sample

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	0.472	ug/L					18-MAR-10 14:26	100317-2
	Beryllium	0.108	ug/L					18-MAR-10 14:26	100317-2
	Nickel	3.01	ug/L					18-MAR-10 14:26	100317-2
	Selenium	-1.41	ug/L					18-MAR-10 14:26	100317-2
	Thallium	0.006	ug/L					18-MAR-10 14:26	100317-2
ICSAB01									
	Arsenic	22.8	ug/L	20	ug/L	114	80.0 - 120.0	18-MAR-10 14:30	100317-2
	Beryllium	21.0	ug/L	20	ug/L	105	80.0 - 120.0	18-MAR-10 14:30	100317-2
	Nickel	23.2	ug/L	23.31	ug/L	99.5	80.0 - 120.0	18-MAR-10 14:30	100317-2
	Selenium	21.8	ug/L	20	ug/L	109	80.0 - 120.0	18-MAR-10 14:30	100317-2
	Thallium	20.6	ug/L	20	ug/L	103	80.0 - 120.0	18-MAR-10 14:30	100317-2

METALS
-4-
Interference Check Sample

SDG No: 10-1912

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Nickel	2.55	ug/L					18-MAR-10 23:44	100318-4
ICSAB01	Nickel	22.3	ug/L	23.31	ug/L	95.5	80.0 – 120.0	18-MAR-10 23:46	100318-4

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912

Client ID: RE46-10-12661S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 83

Sample ID: 247325001

Spike ID: 1202047712

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg		18500000		12500000		586000	1030	N/A	P
Antimony	ug/kg	75-125	42400		377	U	58600	72.3	N	P
Barium	ug/kg	75-125	187000		202000		58600	-26	N	P
Cadmium	ug/kg	75-125	63200		224	J	58600	107		P
Calcium	ug/kg		3380000		3860000		586000	-81.6	N/A	P
Chromium	ug/kg	75-125	73500		8420		58600	111		P
Cobalt	ug/kg	75-125	62600		2960		58600	102		P
Copper	ug/kg	75-125	76400		7730		58600	117		P
Iron	ug/kg		16100000		13600000		586000	437	N/A	P
Lead	ug/kg	75-125	73700		10400		58600	108		P
Magnesium	ug/kg	75-125	3010000		2240000		586000	131	N	P
Manganese	ug/kg	75-125	314000		225000		58600	151	N	P
Potassium	ug/kg	75-125	2470000		1600000		586000	148	N	P
Silver	ug/kg	75-125	63800		173	J	58600	109		P
Sodium	ug/kg	75-125	889000		278000		586000	104		P
Vanadium	ug/kg	75-125	84200		20000		58600	110		P
Zinc	ug/kg	75-125	111000		33600		58600	132	N	P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1912 Client ID RE46-10-12661SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 83

Sample ID: 247325001 Spike ID: 1202047713

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg		18600000		12500000		596000	1030	N/A	P
Antimony	ug/kg	75-125	44100		377	U	59600	73.9	N	P
Barium	ug/kg	75-125	200000		202000		59600	-3.18	N	P
Cadmium	ug/kg	75-125	63000		224	J	59600	105		P
Calcium	ug/kg		3830000		3860000		596000	-4.93	N/A	P
Chromium	ug/kg	75-125	74600		8420		59600	111		P
Cobalt	ug/kg	75-125	63700		2960		59600	102		P
Copper	ug/kg	75-125	76900		7730		59600	116		P
Iron	ug/kg		16300000		13600000		596000	454	N/A	P
Lead	ug/kg	75-125	75500		10400		59600	109		P
Magnesium	ug/kg	75-125	3050000		2240000		596000	136	N	P
Manganese	ug/kg	75-125	373000		225000		59600	247	N	P
Potassium	ug/kg	75-125	2510000		1600000		596000	153	N	P
Silver	ug/kg	75-125	64000		173	J	59600	107		P
Sodium	ug/kg	75-125	891000		278000		596000	103		P
Vanadium	ug/kg	75-125	88100		20000		59600	114		P
Zinc	ug/kg	75-125	108000		33600		59600	124		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912 Client ID RE46-10-12661S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 83

Sample ID: 247325001 Spike ID: 1202047718

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	ug/kg	75-125	9850		2200		9650	79.3		MS
Beryllium	ug/kg	75-125	6100		848		6030	87.2		MS
Nickel	ug/kg	75-125	11500		7840		6030	60.6	N	MS
Selenium	ug/kg	75-125	1760		599	U	2410	72.8	N	MS
Thallium	ug/kg	75-125	10700		187	J	12100	87.5		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1912 Client ID RE46-10-12661SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 83

Sample ID: 247325001 Spike ID: 1202047719

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	ug/kg	75-125	9810		2200		9310	81.7		MS
Beryllium	ug/kg	75-125	5940		848		5820	87.5		MS
Nickel	ug/kg	75-125	15300		7840		5820	128	N	MS
Selenium	ug/kg	75-125	1700		599	U	2330	72.9	N	MS
Thallium	ug/kg	75-125	10500		187	J	11600	88.5		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912 Client ID RE15-10-8208S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 96.9

Sample ID: 247338001 Spike ID: 1202055933

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	146		3.54	U	122	119		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1912 Client ID RE15-10-8208SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 96.9

Sample ID: 247338001 Spike ID: 1202055935

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	148		3.54	U	123	120		AV

Metals

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Duplicate Sample Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-12661D

Sample ID: 247325001

Duplicate ID: 1202047710

Percent Solids for Dup: 83

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20%	12500000		9930000		22.8	*	P
Antimony	ug/kg		377 U		383 U				P
Barium	ug/kg	+/-20%	202000		162000		21.9	*	P
Cadmium	ug/kg	+/-580	224 J		221 J		1.24		P
Calcium	ug/kg	+/-20%	3860000		2850000		30.3	*	P
Chromium	ug/kg	+/-20%	8420		8170		3.09		P
Cobalt	ug/kg	+/-20%	2960		3620		19.8		P
Copper	ug/kg	+/-20%	7730		7310		5.54		P
Iron	ug/kg	+/-20%	13600000		13700000		.922		P
Lead	ug/kg	+/-20%	10400		10400		.279		P
Magnesium	ug/kg	+/-20%	2240000		1710000		26.7	*	P
Manganese	ug/kg	+/-20%	225000		277000		20.7	*	P
Potassium	ug/kg	+/-20%	1600000		1340000		17.7		P
Silver	ug/kg	+/-580	173 J		181 J		4.57		P
Sodium	ug/kg	+/-20%	278000		245000		12.5		P
Vanadium	ug/kg	+/-20%	20000		18700		6.45		P
Zinc	ug/kg	+/-20%	33600		33200		1.19		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-12661SD

Sample ID: 1202047712

Duplicate ID: 1202047713

Percent Solids for Dup: 83

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20	18500000		18600000		.465		P
Antimony	ug/kg	+/-20	42400		44100		3.94		P
Barium	ug/kg	+/-20	187000		200000		6.88		P
Cadmium	ug/kg	+/-20	63200		63000		.17		P
Calcium	ug/kg	+/-20	3380000		3830000		12.4		P
Chromium	ug/kg	+/-20	73500		74600		1.48		P
Cobalt	ug/kg	+/-20	62600		63700		1.7		P
Copper	ug/kg	+/-20	76400		76900		.649		P
Iron	ug/kg	+/-20	16100000		16300000		.911		P
Lead	ug/kg	+/-20	73700		75500		2.38		P
Magnesium	ug/kg	+/-20	3010000		3050000		1.28		P
Manganese	ug/kg	+/-20	314000		373000		17.2		P
Potassium	ug/kg	+/-20	2470000		2510000		1.75		P
Silver	ug/kg	+/-20	63800		64000		.374		P
Sodium	ug/kg	+/-20	889000		891000		.262		P
Vanadium	ug/kg	+/-20	84200		88100		4.51		P
Zinc	ug/kg	+/-20	111000		108000		3.23		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-12661D

Sample ID: 247325001

Duplicate ID: 1202047716

Percent Solids for Dup: 83

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-1180	2200		1830		18.1		MS
Beryllium	ug/kg	+/-20%	848		801		5.7		MS
Nickel	ug/kg	+/-20%	7840		7570		3.47		MS
Selenium	ug/kg		599 U		590 U				MS
Thallium	ug/kg	+/-236	187 J		154 J		19.6		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-12661SD

Sample ID: 1202047718

Duplicate ID: 1202047719

Percent Solids for Dup: 83

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-20	9850		9810		.434		MS
Beryllium	ug/kg	+/-20	6100		5940		2.68		MS
Nickel	ug/kg	+/-20	11500		15300		28.2	*	MS
Selenium	ug/kg	+/-20	1760		1700		3.29		MS
Thallium	ug/kg	+/-20	10700		10500		2.35		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8208D

Sample ID: 247338001

Duplicate ID: 1202055932

Percent Solids for Dup: 96.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.54 U		4.09 U				AV

Metals

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Duplicate Sample Summary

SDG No.: 10-1912

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8208SD

Sample ID: 1202055933

Duplicate ID: 1202055935

Percent Solids for Dup: 96.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	146		148		.967		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1912

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>
1202047714								
	Aluminum	ug/kg	10500000	10400000		98.8	56-144	P
	Antimony	ug/kg	173000	128000		73.7	71-130	P
	Barium	ug/kg	198000	223000		113	80-120	P
	Cadmium	ug/kg	60700	67200		111	81-120	P
	Calcium	ug/kg	9870000	11000000		111	83-117	P
	Chromium	ug/kg	236000	272000		115	80-120	P
	Cobalt	ug/kg	91200	100000		110	81-120	P
	Copper	ug/kg	174000	204000		117	81-118	P
	Iron	ug/kg	18000000	21900000		121	51-149	P
	Lead	ug/kg	86000	95000		110	79-121	P
	Magnesium	ug/kg	4000000	4330000		108	79-122	P
	Manganese	ug/kg	558000	645000		116	81-119	P
	Potassium	ug/kg	4300000	4620000		107	74-127	P
	Silver	ug/kg	30100	34800		116	66-134	P
	Sodium	ug/kg	1020000	1120000		110	74-127	P
	Vanadium	ug/kg	115000	138000		120	79-121	P
	Zinc	ug/kg	594000	659000		111	80-121	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1912

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>
1202047720								
	Arsenic	ug/kg	104000	109000		104	78-123	MS
	Beryllium	ug/kg	77600	65500		84.4	84-116	MS
	Nickel	ug/kg	134000	118000		87.7	78-123	MS
	Selenium	ug/kg	286000	287000		101	77-123	MS
	Thallium	ug/kg	121000	126000		104	78-122	MS

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1912

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>
1202055931	Mercury	ug/kg	5150	5500		107	71.6-128.3	AV

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1912 Client ID RE46-10-12661L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247325001 Serial Dilution ID: 1202047711

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	109000		111000		1.83		10	P
Antimony	3.3	U	16.5	U				P
Barium	1770		1790		1.13		10	P
Cadmium	1.96	J	5	U	100			P
Calcium	33800		34600		2.37		10	P
Chromium	73.7		73		.95			P
Cobalt	26		26.4		1.54			P
Copper	67.6		68.5		1.33			P
Iron	119000		125000		4.62		10	P
Lead	91.5		94.5		3.28			P
Magnesium	19600		20100		2.55		10	P
Manganese	1970		1980		.254		10	P
Potassium	14000		14300		1.79		10	P
Silver	1.51	J	5	U	100			P
Sodium	2430		2550		4.94			P
Vanadium	175		173		1.43		10	P
Zinc	294		275		6.63		10	P

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1912 **Client ID** RE46-10-12661L**Contract:** LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 247325001 **Serial Dilution ID:** 1202047717

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	9.16		9.15	J	.109			MS
Beryllium	3.54		4.37		23.4			MS
Nickel	32.7		35.8		9.48			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.781	J	1.5	U	100			MS

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1912

Client ID. RE15-10-8208L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 247338001

Serial Dilution ID: 1202055934

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.068	U	.34	U				AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1912

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 955135							
1202047709	MB for batch 955135	MB	S	25-FEB-10	.501g	50mL	
1202047714	LCS for batch 955135	LCS	S	25-FEB-10	.519g	50mL	
1202047712	RE46-10-12661S	MS	S	25-FEB-10	.517g	50mL	
1202047713	RE46-10-12661SD	MSD	S	25-FEB-10	.508g	50mL	
1202047710	RE46-10-12661D	DUP	S	25-FEB-10	.522g	50mL	
247347001	RE15-10-8246	SAMPLE	S	25-FEB-10	.542g	50mL	
247347002	RE15-10-8245	SAMPLE	S	25-FEB-10	.527g	50mL	
247347003	RE15-10-8243	SAMPLE	S	25-FEB-10	.513g	50mL	
247347004	RE15-10-8244	SAMPLE	S	25-FEB-10	.502g	50mL	
247347005	RE15-10-8242	SAMPLE	S	25-FEB-10	.517g	50mL	
247347006	RE15-10-8240	SAMPLE	S	25-FEB-10	.513g	50mL	
247347007	RE15-10-8241	SAMPLE	S	25-FEB-10	.506g	50mL	
247347008	RE15-10-8267	SAMPLE	S	25-FEB-10	.502g	50mL	

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METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1912

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 955137							
1202047715	MB for batch 955137	MB	S	25-FEB-10	.515g	50mL	
1202047720	LCS for batch 955137	LCS	S	25-FEB-10	.505g	50mL	
1202047718	RE46-10-12661S	MS	S	25-FEB-10	.502g	50mL	
1202047719	RE46-10-12661SD	MSD	S	25-FEB-10	.52g	50mL	
1202047716	RE46-10-12661D	DUP	S	25-FEB-10	.513g	50mL	
247347001	RE15-10-8246	SAMPLE	S	25-FEB-10	.527g	50mL	
247347002	RE15-10-8245	SAMPLE	S	25-FEB-10	.526g	50mL	
247347003	RE15-10-8243	SAMPLE	S	25-FEB-10	.513g	50mL	
247347004	RE15-10-8244	SAMPLE	S	25-FEB-10	.507g	50mL	
247347005	RE15-10-8242	SAMPLE	S	25-FEB-10	.511g	50mL	
247347006	RE15-10-8240	SAMPLE	S	25-FEB-10	.527g	50mL	
247347007	RE15-10-8241	SAMPLE	S	25-FEB-10	.502g	50mL	
247347008	RE15-10-8267	SAMPLE	S	25-FEB-10	.555g	50mL	

SW846

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1912

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 958630							
1202055930	MB for batch 958630	MB	S	02-MAR-10	.507g	30mL	
1202055931	LCS for batch 958630	LCS	S	02-MAR-10	.201g	30mL	
1202055933	RE15-10-8208S	MS	S	02-MAR-10	.508g	30mL	
1202055935	RE15-10-8208SD	MSD	S	02-MAR-10	.505g	30mL	
1202055932	RE15-10-8208D	DUP	S	02-MAR-10	.515g	30mL	
247347001	RE15-10-8246	SAMPLE	S	02-MAR-10	.555g	30mL	
247347002	RE15-10-8245	SAMPLE	S	02-MAR-10	.536g	30mL	
247347003	RE15-10-8243	SAMPLE	S	02-MAR-10	.518g	30mL	
247347004	RE15-10-8244	SAMPLE	S	02-MAR-10	.537g	30mL	
247347005	RE15-10-8242	SAMPLE	S	02-MAR-10	.53g	30mL	
247347006	RE15-10-8240	SAMPLE	S	02-MAR-10	.576g	30mL	
247347007	RE15-10-8241	SAMPLE	S	02-MAR-10	.5g	30mL	
247347008	RE15-10-8267	SAMPLE	S	02-MAR-10	.588g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 18-MAR-10

End Date: 18-MAR-10

Client Sdg: 10-1912

Method MS

Data File: 100317-2

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	V	Zn
S0.0	1	14:02			X		X											X	X			X			
S10	1	14:06			X		X											X	X			X			
S100	1	14:10			X		X											X	X			X			
ICV01	1	14:14			X		X											X	X			X			
ICB01	1	14:18			X		X											X	X			X			
CRDL01	1	14:22			X		X											X	X			X			
ICSA01	1	14:26			X		X											X	X			X			
ICSAB01	1	14:30			X		X											X	X			X			
CCV01	1	14:34			X		X											X	X			X			
CCB01	1	14:38			X		X											X	X			X			
1202047715	2	14:42			X		X											X	X			X			
1202047720	40	14:46			X		X											X	X			X			
CCV02	1	14:50			X		X											X	X			X			
CCB02	1	14:54			X		X											X	X			X			
ZZZZZZ	2	14:58																							
1202047716	2	15:02			X		X											X	X			X			
1202047718	2	15:06			X		X											X	X			X			
1202047719	2	15:10			X		X											X	X			X			
1202047717	10	15:14			X		X											X	X			X			
ZZZZZZ	2	15:18																							
ZZZZZZ	2	15:23																							
ZZZZZZ	2	15:27																							
CCV03	1	15:31			X		X											X	X			X			
CCB03	1	15:35			X		X											X	X			X			
ZZZZZZ	2	15:39																							
ZZZZZZ	2	15:43																							
ZZZZZZ	2	15:47																							
ZZZZZZ	2	15:51																							
247347001	2	15:55			X		X											X	X			X			
247347002	2	15:59			X		X											X	X			X			
247347003	2	16:03			X		X											X	X			X			
247347004	2	16:07			X		X											X	X			X			
CCV04	1	16:11			X		X											X	X			X			
CCB04	1	16:15			X		X											X	X			X			
247347005	2	16:19			X		X												X			X			
247347006	2	16:24			X		X												X			X			
247347007	2	16:28			X		X												X			X			
247347008	2	16:32			X		X												X			X			
CCV05	1	16:36			X		X											X	X			X			
CCB05	1	16:40			X		X											X	X			X			

Metals
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Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS6**Start Date:** 18-MAR-10**Client Sdg:** 10-1912**Method:** MS**Data File:** 100318-4**End Date:** 19-MAR-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	23:28																X							
S10	1	23:31																X							
S100	1	23:33																X							
ICV01	1	23:36																X							
ICB01	1	23:39																X							
CRDL01	1	23:41																X							
ICSA01	1	23:44																X							
ICSAB01	1	23:46																X							
CCV01	1	23:49																X							
CCB01	1	23:51																X							
247347005	2	23:54																X							
247347006	2	23:57																X							
247347007	2	23:59																X							
247347008	2	00:02																X							
CCV02	1	00:05																X							
CCB02	1	00:07																X							

Metals
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Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 03-MAR-10

End Date: 03-MAR-10

Client Sdg: 10-1912

Method: AV

Data File: 030310S2-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	10:15															X								
S0.2	1	10:16															X								
S0.5	1	10:18															X								
S2.0	1	10:20															X								
S5.0	1	10:21															X								
S10.0	1	10:23															X								
ICV01	1	10:25															X								
ICB01	1	10:26															X								
CRDL01	1	10:28															X								
CCV01	1	10:30															X								
CCB01	1	10:31															X								
ZZZZZZ	1	10:33																							
ZZZZZZ	1	10:35																							
ZZZZZZ	1	10:36																							
ZZZZZZ	1	10:38																							
ZZZZZZ	1	10:40																							
ZZZZZZ	1	10:41																							
ZZZZZZ	5	10:43																							
ZZZZZZ	1	10:45																							
ZZZZZZ	1	10:46																							
ZZZZZZ	1	10:48																							
CCV02	1	10:50															X								
CCB02	1	10:51															X								
ZZZZZZ	1	10:53																							
ZZZZZZ	1	10:55																							
ZZZZZZ	1	10:56																							
ZZZZZZ	1	10:58																							
ZZZZZZ	1	11:00																							
ZZZZZZ	1	11:01																							
ZZZZZZ	1	11:03																							
ZZZZZZ	1	11:05																							
ZZZZZZ	1	11:06																							
ZZZZZZ	1	11:08																							
CCV03	1	11:10															X								
CCB03	1	11:11															X								
ZZZZZZ	1	11:13																							
ZZZZZZ	1	11:15																							
ZZZZZZ	1	11:16																							
ZZZZZZ	1	11:18																							
ZZZZZZ	1	11:20																							

Metals
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Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	11:21
ZZZZZZ	1	11:23
ZZZZZZ	1	11:25
ZZZZZZ	1	11:26
ZZZZZZ	5	11:28
CCV04	1	11:30
CCB04	1	11:31
ZZZZZZ	1	11:33
ZZZZZZ	10	11:35
ZZZZZZ	1	11:36
ZZZZZZ	1	11:38
ZZZZZZ	1	11:40
ZZZZZZ	1	11:42
ZZZZZZ	5	11:43
ZZZZZZ	1	11:45
ZZZZZZ	1	11:47
ZZZZZZ	1	11:48
CCV05	1	11:50
CCB05	1	11:52
ZZZZZZ	1	11:53
ZZZZZZ	1	11:55
ZZZZZZ	1	11:57
ZZZZZZ	1	11:58
ZZZZZZ	1	12:00
ZZZZZZ	1	12:02
ZZZZZZ	1	12:03
ZZZZZZ	1	12:05
ZZZZZZ	1	12:07
ZZZZZZ	1	12:08
CCV06	1	12:10
CCB06	1	12:12
ZZZZZZ	1	12:13
ZZZZZZ	10	12:15
ZZZZZZ	1	12:17
ZZZZZZ	1	12:18
ZZZZZZ	1	12:20
ZZZZZZ	5	12:22
ZZZZZZ	1	12:23
ZZZZZZ	1	12:25
ZZZZZZ	1	12:27

Metals
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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	V	Zn
ZZZZZZ	1	12:29																							
CCV07	1	12:30															X								
CCB07	1	12:32															X								
ZZZZZZ	1	12:34																							
ZZZZZZ	1	12:35																							
ZZZZZZ	1	12:37																							
ZZZZZZ	1	12:39																							
ZZZZZZ	1	12:40																							
ZZZZZZ	1	12:42																							
ZZZZZZ	1	12:44																							
ZZZZZZ	1	12:45																							
ZZZZZZ	1	12:47																							
ZZZZZZ	1	12:49																							
CCV08	1	12:50															X								
CCB08	1	12:52															X								
ZZZZZZ	1	12:54																							
1202055930	1	12:55															X								
1202055931	10	12:57															X								
ZZZZZZ	1	12:59																							
1202055932	1	13:01															X								
1202055933	1	13:02															X								
1202055935	1	13:04															X								
1202055934	5	13:06															X								
ZZZZZZ	1	13:07																							
ZZZZZZ	1	13:09																							
CCV09	1	13:11															X								
CCB09	1	13:12															X								
ZZZZZZ	1	13:14																							
ZZZZZZ	1	13:16																							
ZZZZZZ	1	13:17																							
ZZZZZZ	1	13:19																							
ZZZZZZ	1	13:21																							
ZZZZZZ	1	13:22																							
ZZZZZZ	1	13:24																							
ZZZZZZ	1	13:26																							
247347001	1	13:28															X								
247347002	1	13:29															X								
CCV10	1	13:31															X								
CCB10	1	13:33															X								
247347003	1	13:34															X								

Samp No.	D/F	Run Time
247347004	1	13:36
247347005	1	13:38
247347006	1	13:39
247347007	1	13:41
247347008	1	13:43
ZZZZZZ	1	13:45
ZZZZZZ	1	13:46
ZZZZZZ	1	13:48
ZZZZZZ	1	13:50
CCV11	1	13:51
CCB11	1	13:53

Metals
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Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 16-MAR-10

End Date: 17-MAR-10

Client Sdg: 10-1912

Method P

Data File: 031610B-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	V	Zn
S0.0	1	13:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S0.1	1	13:44		X		X		X		X	X	X		X		X			X		X			X	X
S0.5	1	13:47	X	X		X		X	X	X	X	X		X	X	X			X		X			X	X
SCAL	1	13:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S10	1	13:54	X						X				X		X							X			
ICV01	1	13:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICB01	1	14:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
PQL01	1	14:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSA01	1	14:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSAB01	1	14:10	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR01	1	14:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR02	1	14:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV01	1	14:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB01	1	14:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV02	1	14:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB02	1	14:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR03	1	14:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV03	1	14:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB03	1	14:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	14:53																							
ZZZZZZ	1	14:57																							
ZZZZZZ	1	15:01																							
ZZZZZZ	1	15:04																							
ZZZZZZ	1	15:08																							
ZZZZZZ	5	15:11																							
CCV04	1	15:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB04	1	15:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	15:22																							
ZZZZZZ	1	15:26																							
ZZZZZZ	1	15:29																							
247560002	1	15:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	15:36																							
ZZZZZZ	1	15:40																							
ZZZZZZ	1	15:43																							
ZZZZZZ	1	15:47																							
ZZZZZZ	1	15:50																							
CCV05	1	15:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB05	1	15:58	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	16:01																							
ZZZZZZ	1	16:05																							

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	1	16:08																												
ZZZZZZ	1	16:12																												
ZZZZZZ	1	16:16																												
ZZZZZZ	1	16:19																												
ZZZZZZ	5	16:23																												
ZZZZZZ	1	16:27																												
ZZZZZZ	1	16:30																												
CCV06	1	16:34	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCB06	1	16:37	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
ZZZZZZ	1	16:41																												
ZZZZZZ	1	16:45																												
ZZZZZZ	1	16:48																												
ZZZZZZ	1	16:52																												
ZZZZZZ	1	16:56																												
ZZZZZZ	1	16:59																												
ZZZZZZ	1	17:03																												
ZZZZZZ	5	17:06																												
ZZZZZZ	10	17:10																												
CCV07	1	17:14	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCB07	1	17:17	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
ZZZZZZ	5	17:34																												
CCV08	1	17:38	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCB08	1	17:42	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
ZZZZZZ	50	17:59																												
ZZZZZZ	50	18:03																												
ZZZZZZ	50	18:06																												
ZZZZZZ	50	18:10																												
ZZZZZZ	250	18:13																												
ZZZZZZ	50	18:17																												
ZZZZZZ	50	18:21																												
CCV09	1	18:24	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCB09	1	18:28	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
ZZZZZZ	10	18:31																												
ZZZZZZ	20	18:35																												
ZZZZZZ	10	18:39																												
ZZZZZZ	20	18:43																												
CCV10	1	18:46	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCB10	1	18:50	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCV11	1	19:24	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	
CCB11	1	19:28	X	X		X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X		X	X	

Metals
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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	V	Zn
ZZZZZZ	1	19:33																							
ZZZZZZ	1	19:37																							
ZZZZZZ	1	19:40																							
ZZZZZZ	1	19:44																							
CCV12	1	19:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB12	1	19:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	19:58																							
ZZZZZZ	2	20:02																							
ZZZZZZ	1	20:05																							
ZZZZZZ	1	20:09																							
ZZZZZZ	1	20:13																							
ZZZZZZ	1	20:16																							
ZZZZZZ	5	20:20																							
ZZZZZZ	1	20:24																							
ZZZZZZ	1	20:27																							
CCV13	1	20:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB13	1	20:35	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	20:38																							
ZZZZZZ	1	20:42																							
ZZZZZZ	1	20:45																							
ZZZZZZ	1	20:49																							
ZZZZZZ	1	20:53																							
ZZZZZZ	1	20:56																							
ZZZZZZ	1	21:00																							
ZZZZZZ	1	21:04																							
ZZZZZZ	1	21:07																							
CCV14	1	21:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB14	1	21:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	21:18																							
ZZZZZZ	1	21:22																							
ZZZZZZ	1	21:25																							
ZZZZZZ	1	21:29																							
ZZZZZZ	1	21:33																							
ZZZZZZ	1	21:36																							
ZZZZZZ	1	21:40																							
ZZZZZZ	1	21:44																							
CCV15	1	21:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB15	1	21:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	21:57																							
ZZZZZZ	1	22:01																							

[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	V	Zn
ZZZZZZ	5	00:36																							
CCV21	1	00:42	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB21	1	00:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	00:58																							
ZZZZZZ	1	01:02																							
CCV22	1	01:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB22	1	01:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247347001	5	01:13		X																					
247347008	5	01:17		X																					
CCV23	1	01:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB23	1	01:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1912

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1912

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. 10-1912

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
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1912**

Contract: LANL01004

Instrument: OPTIMA1

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	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interement Correction Factors

Lab Code: GEL

GEL Job No:

10-1912

Contract: LANL01004

Instrument: OPTIMA1

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	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1912

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1912

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No:

10-1912Contract: LANL01004Instrument: OPTIMA1Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Sulfur	Thallium	Tin	Titanium	Uranium
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	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1912

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1912

Contract: LANL01004

Lab Code: GEL

Instrument ID JCPMS6

<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
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1912

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA I

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	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
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10

Raw Data

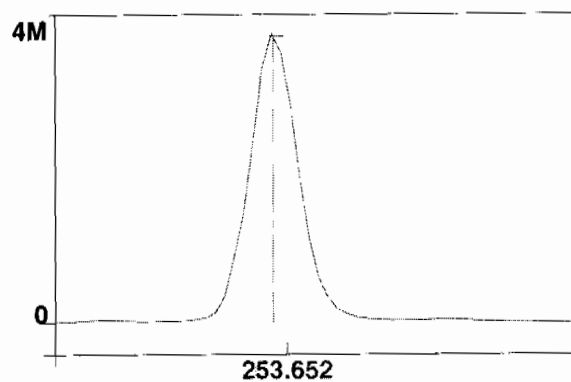
Spectra

Method: Hg_ReAlign
Result: 031910C

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 3722924.5 cps
Conc:

1

=====
Analysis Begun

Start Time: 3/16/2010 13:41:04

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610A.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb
=====

Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 3/16/2010 10:34:08

IEC File: 011510.iec

MSF File:

Method Description:

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

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/16/2010 13:41:07

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	96310.1	96310.1	99.5 %	13:41:44
1	Al 396.153Radial†	-113.6	-114.1	[0.00] µg/L	13:41:44
1	Ca 317.933Radial†	391.5	393.5	[0.00] µg/L	13:42:04
1	Fe 238.204 Radial†	11.9	12.0	[0.00] µg/L	13:42:04

1	K 766.490 Radial†	454.1	456.3	[0.00]	µg/L	13:41:44
1	Mg 279.077 IEC†	9.1	9.1	[0.00]	µg/L	13:42:04
1	Na 589.592 Radial†	168.2	169.0	[0.00]	µg/L	13:41:44
1	Sr 421.552†	145.4	146.2	[0.00]	µg/L	13:41:44
1	Sc 361.383	2092200.5	2092200.5	99.957	%	13:43:06
1	Y 371.029	1431573.2	1431573.2	99.909	%	13:43:06
1	Ag 328.068†	-464.1	-464.3	[0.00]	µg/L	13:43:12
1	As 188.979†	-7.3	-7.3	[0.00]	µg/L	13:43:32
1	B 249.677†	288.8	288.9	[0.00]	µg/L	13:43:12
1	Ba 233.527†	-11.7	-11.7	[0.00]	µg/L	13:43:32
1	Be 313.107†	-1126.7	-1127.2	[0.00]	µg/L	13:43:12
1	Cd 226.502†	-174.7	-174.8	[0.00]	µg/L	13:43:32
1	Co 228.616†	46.1	46.2	[0.00]	µg/L	13:43:32
1	Cr 267.716†	105.5	105.6	[0.00]	µg/L	13:43:12
1	Cu 324.752†	4384.9	4386.8	[0.00]	µg/L	13:43:12
1	Mn 257.610†	-689.4	-689.7	[0.00]	µg/L	13:43:32
1	Mo 202.031†	4.1	4.1	[0.00]	µg/L	13:43:32
1	Ni 231.604†	375.1	375.3	[0.00]	µg/L	13:43:32
1	P 214.914†	275.1	275.3	[0.00]	µg/L	13:43:32
1	Pb 220.353†	24.9	25.0	[0.00]	µg/L	13:43:32
1	S 181.975 Axial†	22.5	22.6	[0.00]	µg/L	13:43:32
1	Sb 206.836†	23.7	23.7	[0.00]	µg/L	13:43:32
1	Se 196.026†	28.4	28.4	[0.00]	µg/L	13:43:32
1	SiO2†	2772.9	2774.1	[0.00]	µg/L	13:43:12
1	Si 251.611†	421.5	421.7	[0.00]	µg/L	13:43:32
1	Sn 189.927†	-10.0	-10.0	[0.00]	µg/L	13:43:32
1	Ti 334.940†	-613.0	-613.3	[0.00]	µg/L	13:43:12
1	Tl 190.801†	-35.5	-35.5	[0.00]	µg/L	13:43:32
1	U 409.014†	3.8	3.8	[0.00]	µg/L	13:43:12
1	V 292.402†	86.7	86.7	[0.00]	µg/L	13:43:12
1	Zn 213.857†	1026.4	1026.9	[0.00]	µg/L	13:43:32
2	Sc RADIAL	96813.2	96813.2	100	%	13:42:10
2	Al 396.153Radial†	-133.0	-132.9	[0.00]	µg/L	13:42:10
2	Ca 317.933Radial†	378.8	378.7	[0.00]	µg/L	13:42:30
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	µg/L	13:42:30
2	K 766.490 Radial†	490.3	490.2	[0.00]	µg/L	13:42:10
2	Mg 279.077 IEC†	8.0	8.0	[0.00]	µg/L	13:42:30
2	Na 589.592 Radial†	213.5	213.4	[0.00]	µg/L	13:42:10
2	Sr 421.552†	120.7	120.7	[0.00]	µg/L	13:42:10
2	Sc 361.383	2084241.1	2084241.1	99.576	%	13:43:38
2	Y 371.029	1427836.1	1427836.1	99.649	%	13:43:38
2	Ag 328.068†	-405.9	-407.7	[0.00]	µg/L	13:43:44
2	As 188.979†	-0.6	-0.6	[0.00]	µg/L	13:44:04
2	B 249.677†	309.9	311.2	[0.00]	µg/L	13:43:44
2	Ba 233.527†	-8.2	-8.2	[0.00]	µg/L	13:44:04
2	Be 313.107†	-1135.5	-1140.3	[0.00]	µg/L	13:43:44
2	Cd 226.502†	-167.9	-168.6	[0.00]	µg/L	13:44:04
2	Co 228.616†	47.5	47.7	[0.00]	µg/L	13:44:04
2	Cr 267.716†	80.4	80.7	[0.00]	µg/L	13:43:44
2	Cu 324.752†	4400.5	4419.2	[0.00]	µg/L	13:43:44
2	Mn 257.610†	-687.2	-690.2	[0.00]	µg/L	13:44:04
2	Mo 202.031†	11.2	11.3	[0.00]	µg/L	13:44:04
2	Ni 231.604†	375.1	376.7	[0.00]	µg/L	13:44:04
2	P 214.914†	273.4	274.6	[0.00]	µg/L	13:44:04
2	Pb 220.353†	35.0	35.2	[0.00]	µg/L	13:44:04
2	S 181.975 Axial†	24.5	24.6	[0.00]	µg/L	13:44:04
2	Sb 206.836†	23.8	23.9	[0.00]	µg/L	13:44:04
2	Se 196.026†	28.3	28.5	[0.00]	µg/L	13:44:04
2	SiO2†	2774.9	2786.7	[0.00]	µg/L	13:43:44
2	Si 251.611†	424.0	425.8	[0.00]	µg/L	13:44:04
2	Sn 189.927†	-8.3	-8.4	[0.00]	µg/L	13:44:04
2	Ti 334.940†	-620.9	-623.6	[0.00]	µg/L	13:43:44
2	Tl 190.801†	-34.2	-34.3	[0.00]	µg/L	13:44:04
2	U 409.014†	-6.4	-6.5	[0.00]	µg/L	13:43:44
2	V 292.402†	143.8	144.4	[0.00]	µg/L	13:43:44
2	Zn 213.857†	1021.1	1025.5	[0.00]	µg/L	13:44:04
3	Sc RADIAL	97241.5	97241.5	100	%	13:42:36
3	Al 396.153Radial†	-111.4	-110.8	[0.00]	µg/L	13:42:36
3	Ca 317.933Radial†	385.6	383.8	[0.00]	µg/L	13:42:56
3	Fe 238.204 Radial†	11.5	11.4	[0.00]	µg/L	13:42:56
3	K 766.490 Radial†	511.9	509.5	[0.00]	µg/L	13:42:36

3	Mg 279.077 IEC†	6.9	6.9	[0.00] µg/L	13:42:56
3	Na 589.592 Radial†	160.0	159.3	[0.00] µg/L	13:42:36
3	Sr 421.552†	152.1	151.4	[0.00] µg/L	13:42:36
3	Sc 361.383	2102883.6	2102883.6	100.47 %	13:44:10
3	Y 371.029	1439201.5	1439201.5	100.44 %	13:44:10
3	Ag 328.068†	-511.0	-508.7	[0.00] µg/L	13:44:16
3	As 188.979†	-1.9	-1.9	[0.00] µg/L	13:44:36
3	B 249.677†	299.4	298.0	[0.00] µg/L	13:44:16
3	Ba 233.527†	-5.3	-5.3	[0.00] µg/L	13:44:36
3	Be 313.107†	-1214.7	-1209.0	[0.00] µg/L	13:44:16
3	Cd 226.502†	-169.1	-168.3	[0.00] µg/L	13:44:36
3	Co 228.616†	50.5	50.3	[0.00] µg/L	13:44:36
3	Cr 267.716†	54.7	54.4	[0.00] µg/L	13:44:16
3	Cu 324.752†	4344.2	4324.0	[0.00] µg/L	13:44:16
3	Mn 257.610†	-684.2	-681.1	[0.00] µg/L	13:44:36
3	Mo 202.031†	-0.0	-0.0	[0.00] µg/L	13:44:36
3	Ni 231.604†	380.5	378.7	[0.00] µg/L	13:44:36
3	P 214.914†	268.6	267.4	[0.00] µg/L	13:44:36
3	Pb 220.353†	30.5	30.4	[0.00] µg/L	13:44:36
3	S 181.975 Axial†	20.6	20.5	[0.00] µg/L	13:44:36
3	Sb 206.836†	20.6	20.5	[0.00] µg/L	13:44:36
3	Se 196.026†	25.2	25.1	[0.00] µg/L	13:44:36
3	SiO2†	2791.5	2778.5	[0.00] µg/L	13:44:16
3	Si 251.611†	426.8	424.8	[0.00] µg/L	13:44:36
3	Sn 189.927†	-4.0	-4.0	[0.00] µg/L	13:44:36
3	Ti 334.940†	-497.2	-494.9	[0.00] µg/L	13:44:16
3	Tl 190.801†	-32.7	-32.6	[0.00] µg/L	13:44:36
3	U 409.014†	-14.9	-14.8	[0.00] µg/L	13:44:16
3	V 292.402†	106.3	105.8	[0.00] µg/L	13:44:16
3	Zn 213.857†	978.8	974.2	[0.00] µg/L	13:44:36

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	2093108.4	9354.33	0.45%	100.00 %
Sc RADIAL	96788.3	466.20	0.48%	100 %
Y 371.029	1432870.2	5792.65	0.40%	100.00 %
Ag 328.068†	-460.2	50.62	11.00%	[0.00] µg/L
Al 396.153Radial†	-119.3	11.92	9.99%	[0.00] µg/L
As 188.979†	-3.3	3.57	109.72%	[0.00] µg/L
B 249.677†	299.4	11.22	3.75%	[0.00] µg/L
Ba 233.527†	-8.4	3.24	38.46%	[0.00] µg/L
Be 313.107†	-1158.8	43.95	3.79%	[0.00] µg/L
Ca 317.933Radial†	385.3	7.52	1.95%	[0.00] µg/L
Cd 226.502†	-170.6	3.66	2.15%	[0.00] µg/L
Co 228.616†	48.1	2.09	4.36%	[0.00] µg/L
Cr 267.716†	80.2	25.59	31.89%	[0.00] µg/L
Cu 324.752†	4376.7	48.39	1.11%	[0.00] µg/L
Fe 238.204 Radial†	12.0	0.51	4.24%	[0.00] µg/L
K 766.490 Radial†	485.3	26.93	5.55%	[0.00] µg/L
Mg 279.077 IEC†	8.0	1.10	13.82%	[0.00] µg/L
Mn 257.610†	-687.0	5.13	0.75%	[0.00] µg/L
Mo 202.031†	5.1	5.73	111.70%	[0.00] µg/L
Na 589.592 Radial†	180.6	28.84	15.97%	[0.00] µg/L
Ni 231.604†	376.9	1.75	0.46%	[0.00] µg/L
P 214.914†	272.4	4.38	1.61%	[0.00] µg/L
Pb 220.353†	30.2	5.11	16.94%	[0.00] µg/L
S 181.975 Axial†	22.5	2.05	9.11%	[0.00] µg/L
Sb 206.836†	22.7	1.93	8.48%	[0.00] µg/L
Se 196.026†	27.3	1.95	7.13%	[0.00] µg/L
SiO2†	2779.7	6.41	0.23%	[0.00] µg/L
Si 251.611†	424.1	2.16	0.51%	[0.00] µg/L
Sn 189.927†	-7.4	3.11	41.86%	[0.00] µg/L
Sr 421.552†	139.4	16.44	11.79%	[0.00] µg/L
Ti 334.940†	-577.2	71.51	12.39%	[0.00] µg/L
Tl 190.801†	-34.1	1.46	4.28%	[0.00] µg/L
U 409.014†	-5.8	9.33	160.61%	[0.00] µg/L
V 292.402†	112.3	29.35	26.13%	[0.00] µg/L
Zn 213.857†	1008.9	29.99	2.97%	[0.00] µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/16/2010 13:44:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	98715.8	98715.8	102 %	13:45:17
1	K 766.490 Radial†	2592.4	2056.4	[1000] µg/L	13:45:17
1	Sr 421.552†	17263.6	16787.1	[100] µg/L	13:45:17
1	Sc 361.383	2094721.1	2094721.1	100.08 %	13:45:39
1	Y 371.029	1434102.7	1434102.7	100.09 %	13:45:39
1	Ag 328.068†	12293.9	12744.6	[100] µg/L	13:45:44
1	As 188.979†	70.0	73.2	[100] µg/L	13:46:05
1	B 249.677†	2506.5	2205.2	[100] µg/L	13:45:44
1	Ba 233.527†	4749.0	4753.7	[100] µg/L	13:46:05
1	Be 313.107†	175330.6	176354.4	[100] µg/L	13:45:39
1	Cd 226.502†	4244.7	4412.1	[100] µg/L	13:46:05
1	Co 228.616†	2472.2	2422.2	[100] µg/L	13:46:05
1	Cr 267.716†	4944.8	4860.7	[100] µg/L	13:45:44
1	Cu 324.752†	20439.1	16046.7	[100] µg/L	13:45:44
1	Mn 257.610†	34361.8	35022.3	[100] µg/L	13:45:44
1	Mo 202.031†	1112.9	1106.9	[100] µg/L	13:46:05
1	Ni 231.604†	2269.8	1891.1	[100] µg/L	13:46:05
1	P 214.914†	594.3	321.5	[500] µg/L	13:46:05
1	Pb 220.353†	447.5	417.0	[100] µg/L	13:46:05
1	S 181.975 Axial†	92.0	69.4	[200] µg/L	13:46:05
1	Sb 206.836†	145.3	122.4	[100] µg/L	13:46:05
1	Se 196.026†	137.0	109.6	[100] µg/L	13:46:05
1	SiO2†	9003.6	6216.9	[1069.5] µg/L	13:45:44
1	Si 251.611†	8093.8	7663.5	[500] µg/L	13:45:44
1	Sn 189.927†	275.6	282.9	[100] µg/L	13:46:05
1	Ti 334.940†	42939.4	43483.5	[100] µg/L	13:45:44
1	Tl 190.801†	72.6	106.7	[100] µg/L	13:46:05
1	U 409.014†	1155.3	1160.3	[100] µg/L	13:45:44
1	V 292.402†	8861.3	8742.1	[100] µg/L	13:45:44
1	Zn 213.857†	5580.6	4567.5	[100] µg/L	13:46:05
2	Sc RADIAL	98746.9	98746.9	102 %	13:45:23
2	K 766.490 Radial†	2620.5	2083.2	[1000] µg/L	13:45:23
2	Sr 421.552†	17298.0	16815.5	[100] µg/L	13:45:23
2	Sc 361.383	2100226.4	2100226.4	100.34 %	13:46:11
2	Y 371.029	1439792.5	1439792.5	100.48 %	13:46:11
2	Ag 328.068†	12345.5	12763.8	[100] µg/L	13:46:17
2	As 188.979†	67.3	70.3	[100] µg/L	13:46:37
2	B 249.677†	2557.3	2249.3	[100] µg/L	13:46:17
2	Ba 233.527†	4728.4	4720.8	[100] µg/L	13:46:37
2	Be 313.107†	175386.8	175951.2	[100] µg/L	13:46:11
2	Cd 226.502†	4247.0	4403.2	[100] µg/L	13:46:37
2	Co 228.616†	2478.6	2422.1	[100] µg/L	13:46:37
2	Cr 267.716†	4958.6	4861.5	[100] µg/L	13:46:17
2	Cu 324.752†	20540.7	16094.4	[100] µg/L	13:46:17
2	Mn 257.610†	34546.6	35116.5	[100] µg/L	13:46:17
2	Mo 202.031†	1110.1	1101.2	[100] µg/L	13:46:37
2	Ni 231.604†	2257.9	1873.3	[100] µg/L	13:46:37
2	P 214.914†	593.4	319.0	[500] µg/L	13:46:37
2	Pb 220.353†	453.6	421.9	[100] µg/L	13:46:37
2	S 181.975 Axial†	98.5	75.6	[200] µg/L	13:46:37
2	Sb 206.836†	142.4	119.2	[100] µg/L	13:46:37
2	Se 196.026†	136.6	108.9	[100] µg/L	13:46:37
2	SiO2†	8990.1	6179.9	[1069.5] µg/L	13:46:17
2	Si 251.611†	8054.1	7602.7	[500] µg/L	13:46:17
2	Sn 189.927†	279.4	285.9	[100] µg/L	13:46:37
2	Ti 334.940†	43205.6	43636.4	[100] µg/L	13:46:17
2	Tl 190.801†	71.0	104.9	[100] µg/L	13:46:37
2	U 409.014†	1121.8	1123.8	[100] µg/L	13:46:17
2	V 292.402†	8955.3	8812.6	[100] µg/L	13:46:17

2	Zn 213.857†	5596.7	4568.9	[100] µg/L	13:46:37
3	Sc RADIAL	99227.6	99227.6	103 %	13:45:28
3	K 766.490 Radial†	2604.0	2054.7	[1000] µg/L	13:45:28
3	Sr 421.552†	17310.0	16745.0	[100] µg/L	13:45:28
3	Sc 361.383	2097900.5	2097900.5	100.23 %	13:46:44
3	Y 371.029	1438218.9	1438218.9	100.37 %	13:46:44
3	Ag 328.068†	12354.9	12786.9	[100] µg/L	13:46:49
3	As 188.979†	72.1	75.2	[100] µg/L	13:47:10
3	B 249.677†	2500.5	2195.5	[100] µg/L	13:46:49
3	Ba 233.527†	4717.5	4715.1	[100] µg/L	13:47:10
3	Be 313.107†	175589.1	176346.9	[100] µg/L	13:46:44
3	Cd 226.502†	4212.4	4373.3	[100] µg/L	13:47:10
3	Co 228.616†	2475.0	2421.3	[100] µg/L	13:47:10
3	Cr 267.716†	4959.0	4867.4	[100] µg/L	13:46:49
3	Cu 324.752†	20426.8	16003.5	[100] µg/L	13:46:49
3	Mn 257.610†	34298.5	34907.1	[100] µg/L	13:46:49
3	Mo 202.031†	1110.6	1103.0	[100] µg/L	13:47:10
3	Ni 231.604†	2254.1	1872.1	[100] µg/L	13:47:10
3	P 214.914†	602.9	329.1	[500] µg/L	13:47:10
3	Pb 220.353†	435.3	404.2	[100] µg/L	13:47:10
3	S 181.975 Axial†	83.4	60.6	[200] µg/L	13:47:10
3	Sb 206.836†	141.8	118.8	[100] µg/L	13:47:10
3	Se 196.026†	130.1	102.5	[100] µg/L	13:47:10
3	SiO2†	8943.3	6143.1	[1069.5] µg/L	13:46:49
3	Si 251.611†	8011.5	7569.1	[500] µg/L	13:46:49
3	Sn 189.927†	278.7	285.5	[100] µg/L	13:47:10
3	Ti 334.940†	42980.6	43459.6	[100] µg/L	13:46:49
3	Tl 190.801†	69.6	103.6	[100] µg/L	13:47:10
3	U 409.014†	1134.7	1137.9	[100] µg/L	13:46:49
3	V 292.402†	8902.5	8769.9	[100] µg/L	13:46:49
3	Zn 213.857†	5560.8	4539.2	[100] µg/L	13:47:10

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	2097616.0	2763.63	0.13%	100.22 %
Sc RADIAL	98896.7	286.93	0.29%	102 %
Y 371.029	1437371.4	2938.05	0.20%	100.31 %
Ag 328.068†	12765.1	21.16	0.17%	[100] µg/L
As 188.979†	72.9	2.47	3.39%	[100] µg/L
B 249.677†	2216.6	28.68	1.29%	[100] µg/L
Ba 233.527†	4729.9	20.84	0.44%	[100] µg/L
Be 313.107†	176217.5	230.67	0.13%	[100] µg/L
Cd 226.502†	4396.2	20.30	0.46%	[100] µg/L
Co 228.616†	2421.9	0.50	0.02%	[100] µg/L
Cr 267.716†	4863.2	3.65	0.08%	[100] µg/L
Cu 324.752†	16048.2	45.49	0.28%	[100] µg/L
K 766.490 Radial†	2064.8	15.99	0.77%	[1000] µg/L
Mn 257.610†	35015.3	104.84	0.30%	[100] µg/L
Mo 202.031†	1103.7	2.93	0.27%	[100] µg/L
Ni 231.604†	1878.8	10.66	0.57%	[100] µg/L
P 214.914†	323.2	5.29	1.64%	[500] µg/L
Pb 220.353†	414.4	9.14	2.21%	[100] µg/L
S 181.975 Axial†	68.5	7.51	10.96%	[200] µg/L
Sb 206.836†	120.1	2.01	1.68%	[100] µg/L
Se 196.026†	107.0	3.88	3.63%	[100] µg/L
SiO2†	6179.9	36.90	0.60%	[1069.5] µg/L
Si 251.611†	7611.8	47.81	0.63%	[500] µg/L
Sn 189.927†	284.7	1.65	0.58%	[100] µg/L
Sr 421.552†	16782.5	35.44	0.21%	[100] µg/L
Ti 334.940†	43526.5	95.91	0.22%	[100] µg/L
Tl 190.801†	105.0	1.56	1.48%	[100] µg/L
U 409.014†	1140.7	18.37	1.61%	[100] µg/L
V 292.402†	8774.9	35.49	0.40%	[100] µg/L
Zn 213.857†	4558.5	16.73	0.37%	[100] µg/L

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

Autosampler Location: 3
 Date Collected: 3/16/2010 13:47:19
 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	100074.7	100074.7	103	%	13:47:50
1	Al 396.153Radial†	10699.0	10467.0	[5000]	µg/L	13:47:50
1	Ca 317.933Radial†	14852.2	13979.2	[5000]	µg/L	13:47:50
1	K 766.490 Radial†	11694.6	10825.2	[5000]	µg/L	13:47:50
1	Mg 279.077 IEC†	407.4	386.1	[5000]	µg/L	13:48:10
1	Sr 421.552†	87389.5	84380.3	[500]	µg/L	13:47:50
1	Sc 361.383	2086321.5	2086321.5	99.676	%	13:49:14
1	Y 371.029	1422836.0	1422836.0	99.300	%	13:49:14
1	Ag 328.068†	62741.3	63405.6	[500]	µg/L	13:49:19
1	As 188.979†	358.5	363.0	[500]	µg/L	13:49:40
1	B 249.677†	11575.1	11313.4	[500]	µg/L	13:49:19
1	Ba 233.527†	23656.5	23741.9	[500]	µg/L	13:49:19
1	Be 313.107†	878338.7	882354.8	[500]	µg/L	13:49:14
1	Cd 226.502†	21751.7	21993.0	[500]	µg/L	13:49:19
1	Co 228.616†	12217.5	12209.2	[500]	µg/L	13:49:19
1	Cr 267.716†	24228.1	24226.7	[500]	µg/L	13:49:19
1	Cu 324.752†	83409.3	79304.0	[500]	µg/L	13:49:19
1	Mn 257.610†	173738.8	174991.0	[500]	µg/L	13:49:14
1	Mo 202.031†	5418.2	5430.7	[500]	µg/L	13:49:40
1	Ni 231.604†	9708.7	9363.4	[500]	µg/L	13:49:19
1	P 214.914†	1882.2	1615.9	[2500]	µg/L	13:49:40
1	Pb 220.353†	2060.0	2036.5	[500]	µg/L	13:49:40
1	S 181.975 Axial†	351.4	330.0	[1000]	µg/L	13:49:40
1	Sb 206.836†	613.4	592.6	[500]	µg/L	13:49:40
1	Se 196.026†	600.7	575.3	[500]	µg/L	13:49:40
1	SiO2†	33299.9	30628.5	[5347.5]	µg/L	13:49:19
1	Si 251.611†	38386.1	38086.9	[2500]	µg/L	13:49:19
1	Sn 189.927†	1373.2	1385.1	[500]	µg/L	13:49:40
1	Ti 334.940†	218890.7	220180.0	[500]	µg/L	13:49:14
1	Tl 190.801†	509.8	545.5	[500]	µg/L	13:49:40
1	U 409.014†	5659.3	5683.5	[500]	µg/L	13:49:19
1	V 292.402†	44006.7	44037.6	[500]	µg/L	13:49:19
1	Zn 213.857†	23916.7	22985.7	[500]	µg/L	13:49:19
2	Sc RADIAL	99306.2	99306.2	103	%	13:48:16
2	Al 396.153Radial†	10633.8	10483.5	[5000]	µg/L	13:48:16
2	Ca 317.933Radial†	14719.7	13961.2	[5000]	µg/L	13:48:16
2	K 766.490 Radial†	11489.6	10713.0	[5000]	µg/L	13:48:16
2	Mg 279.077 IEC†	411.2	392.8	[5000]	µg/L	13:48:36
2	Sr 421.552†	86575.3	84240.8	[500]	µg/L	13:48:16
2	Sc 361.383	2088104.0	2088104.0	99.761	%	13:49:47
2	Y 371.029	1424214.4	1424214.4	99.396	%	13:49:47
2	Ag 328.068†	62542.8	63152.9	[500]	µg/L	13:49:53
2	As 188.979†	350.4	354.5	[500]	µg/L	13:50:13
2	B 249.677†	11540.6	11268.9	[500]	µg/L	13:49:53
2	Ba 233.527†	23599.4	23664.4	[500]	µg/L	13:49:53
2	Be 313.107†	878324.6	881588.5	[500]	µg/L	13:49:47
2	Cd 226.502†	21731.5	21954.1	[500]	µg/L	13:49:53
2	Co 228.616†	12180.9	12162.1	[500]	µg/L	13:49:53
2	Cr 267.716†	24125.0	24102.6	[500]	µg/L	13:49:53
2	Cu 324.752†	83124.2	78946.8	[500]	µg/L	13:49:53
2	Mn 257.610†	174021.4	175125.4	[500]	µg/L	13:49:47
2	Mo 202.031†	5328.5	5336.1	[500]	µg/L	13:50:13
2	Ni 231.604†	9688.3	9334.6	[500]	µg/L	13:49:53
2	P 214.914†	1853.7	1585.7	[2500]	µg/L	13:50:13
2	Pb 220.353†	2027.1	2001.8	[500]	µg/L	13:50:13
2	S 181.975 Axial†	346.2	324.4	[1000]	µg/L	13:50:13
2	Sb 206.836†	596.8	575.5	[500]	µg/L	13:50:13
2	Se 196.026†	588.3	562.4	[500]	µg/L	13:50:13
2	SiO2†	33286.2	30586.2	[5347.5]	µg/L	13:49:53

2	Si 251.611†	38283.7	37951.4	[2500]	µg/L	13:49:53
2	Sn 189.927†	1350.6	1361.3	[500]	µg/L	13:50:13
2	Ti 334.940†	219123.4	220225.8	[500]	µg/L	13:49:47
2	Tl 190.801†	494.4	529.7	[500]	µg/L	13:50:13
2	U 409.014†	5782.8	5802.5	[500]	µg/L	13:49:53
2	V 292.402†	43961.3	43954.3	[500]	µg/L	13:49:53
2	Zn 213.857†	23783.8	22831.9	[500]	µg/L	13:49:53
3	Sc RADIAL	100050.4	100050.4	103	%	13:48:42
3	Al 396.153Radial†	10642.3	10414.6	[5000]	µg/L	13:48:42
3	Ca 317.933Radial†	14755.5	13889.1	[5000]	µg/L	13:48:42
3	K 766.490 Radial†	11490.7	10630.7	[5000]	µg/L	13:48:42
3	Mg 279.077 IEC†	404.2	383.1	[5000]	µg/L	13:49:02
3	Sr 421.552†	87086.2	84107.4	[500]	µg/L	13:48:42
3	Sc 361.383	2071228.8	2071228.8	98.955	%	13:50:21
3	Y 371.029	1409380.7	1409380.7	98.361	%	13:50:21
3	Ag 328.068†	58350.1	59426.7	[500]	µg/L	13:50:26
3	As 188.979†	297.3	303.7	[500]	µg/L	13:50:47
3	B 249.677†	10705.3	10519.0	[500]	µg/L	13:50:26
3	Ba 233.527†	21400.9	21635.4	[500]	µg/L	13:50:26
3	Be 313.107†	804451.5	814108.2	[500]	µg/L	13:50:21
3	Cd 226.502†	19505.4	19882.1	[500]	µg/L	13:50:26
3	Co 228.616†	10876.1	10943.0	[500]	µg/L	13:50:26
3	Cr 267.716†	20805.6	20945.1	[500]	µg/L	13:50:26
3	Cu 324.752†	75185.9	71603.4	[500]	µg/L	13:50:26
3	Mn 257.610†	160217.0	162596.4	[500]	µg/L	13:50:21
3	Mo 202.031†	4437.6	4479.4	[500]	µg/L	13:50:47
3	Ni 231.604†	8697.8	8412.8	[500]	µg/L	13:50:26
3	P 214.914†	1618.8	1363.5	[2500]	µg/L	13:50:47
3	Pb 220.353†	1745.4	1733.6	[500]	µg/L	13:50:47
3	S 181.975 Axial†	306.0	286.7	[1000]	µg/L	13:50:47
3	Sb 206.836†	524.6	507.4	[500]	µg/L	13:50:47
3	Se 196.026†	508.3	486.3	[500]	µg/L	13:50:47
3	SiO2†	30775.8	28321.1	[5347.5]	µg/L	13:50:26
3	Si 251.611†	35188.6	35136.2	[2500]	µg/L	13:50:26
3	Sn 189.927†	1102.7	1121.7	[500]	µg/L	13:50:47
3	Ti 334.940†	199565.5	202250.8	[500]	µg/L	13:50:21
3	Tl 190.801†	449.2	488.1	[500]	µg/L	13:50:47
3	U 409.014†	5033.3	5092.2	[500]	µg/L	13:50:26
3	V 292.402†	38957.9	39257.2	[500]	µg/L	13:50:26
3	Zn 213.857†	21411.0	20628.3	[500]	µg/L	13:50:26

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2081884.7	9271.29	0.45%	99.464	%
Sc RADIAL	99810.4	436.87	0.44%	103	%
Y 371.029	1418810.4	8195.38	0.58%	99.019	%
Ag 328.068†	61995.1	2227.89	3.59%	[500]	µg/L
Al 396.153Radial†	10455.0	35.97	0.34%	[5000]	µg/L
As 188.979†	340.4	32.05	9.41%	[500]	µg/L
B 249.677†	11033.8	446.33	4.05%	[500]	µg/L
Ba 233.527†	23013.9	1194.42	5.19%	[500]	µg/L
Be 313.107†	859350.5	39182.84	4.56%	[500]	µg/L
Ca 317.933Radial†	13943.2	47.65	0.34%	[5000]	µg/L
Cd 226.502†	21276.4	1207.69	5.68%	[500]	µg/L
Co 228.616†	11771.4	717.85	6.10%	[500]	µg/L
Cr 267.716†	23091.4	1859.81	8.05%	[500]	µg/L
Cu 324.752†	76618.1	4346.48	5.67%	[500]	µg/L
K 766.490 Radial†	10723.0	97.65	0.91%	[5000]	µg/L
Mg 279.077 IEC†	387.3	4.96	1.28%	[5000]	µg/L
Mn 257.610†	170904.3	7195.12	4.21%	[500]	µg/L
Mo 202.031†	5082.1	524.08	10.31%	[500]	µg/L
Ni 231.604†	9036.9	540.71	5.98%	[500]	µg/L
P 214.914†	1521.7	137.85	9.06%	[2500]	µg/L
Pb 220.353†	1924.0	165.75	8.62%	[500]	µg/L
S 181.975 Axial†	313.7	23.60	7.52%	[1000]	µg/L
Sb 206.836†	558.5	45.06	8.07%	[500]	µg/L
Se 196.026†	541.3	48.09	8.88%	[500]	µg/L
SiO2†	29845.3	1320.12	4.42%	[5347.5]	µg/L
Si 251.611†	37058.1	1665.82	4.50%	[2500]	µg/L

Sn 189.927†	1289.4	145.66	11.30%	[500]	µg/L
Sr 421.552†	84242.8	136.48	0.16%	[500]	µg/L
Ti 334.940†	214218.9	10364.68	4.84%	[500]	µg/L
Tl 190.801†	521.1	29.67	5.69%	[500]	µg/L
U 409.014†	5526.1	380.40	6.88%	[500]	µg/L
V 292.402†	42416.4	2736.26	6.45%	[500]	µg/L
Zn 213.857†	22148.6	1318.91	5.95%	[500]	µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/16/2010 13:50:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	99005.9	99005.9	102	%	13:51:27
1	Al 396.153Radial†	21396.9	21036.9	[10000]	µg/L	13:51:27
1	Ca 317.933Radial†	28774.4	27744.6	[10000]	µg/L	13:51:27
1	Fe 238.204 Radial†	886.3	854.5	[10000]	µg/L	13:51:48
1	K 766.490 Radial†	22406.6	21419.4	[10000]	µg/L	13:51:27
1	Mg 279.077 IEC†	796.2	770.3	[10000]	µg/L	13:51:48
1	Na 589.592 Radial†	20579.8	19938.3	[10000]	µg/L	13:51:27
1	Sr 421.552†	171886.5	167897.0	[1000]	µg/L	13:51:27
1	Sc 361.383	2084281.9	2084281.9	99.578	%	13:52:51
1	Y 371.029	1417699.3	1417699.3	98.941	%	13:52:51
1	Ag 328.068†	127625.8	128626.5	[1000]	µg/L	13:52:57
1	As 188.979†	716.7	723.0	[1000]	µg/L	13:53:18
1	B 249.677†	23034.3	22832.5	[1000]	µg/L	13:52:57
1	Ba 233.527†	47400.5	47609.6	[1000]	µg/L	13:52:57
1	Be 313.107†	1736563.9	1745076.7	[1000]	µg/L	13:52:51
1	Cd 226.502†	43541.3	43896.3	[1000]	µg/L	13:52:57
1	Co 228.616†	24264.4	24319.0	[1000]	µg/L	13:52:57
1	Cr 267.716†	48452.1	48577.0	[1000]	µg/L	13:52:57
1	Cu 324.752†	163712.1	160028.7	[1000]	µg/L	13:52:57
1	Mn 257.610†	343886.1	346029.4	[1000]	µg/L	13:52:57
1	Mo 202.031†	10846.8	10887.6	[1000]	µg/L	13:53:18
1	Ni 231.604†	18887.7	18590.8	[1000]	µg/L	13:52:57
1	P 214.914†	3477.5	3219.9	[5000]	µg/L	13:53:18
1	Pb 220.353†	4063.4	4050.5	[1000]	µg/L	13:53:18
1	S 181.975 Axial†	685.2	665.6	[2000]	µg/L	13:53:18
1	Sb 206.836†	1217.9	1200.4	[1000]	µg/L	13:53:18
1	Se 196.026†	1145.3	1122.8	[1000]	µg/L	13:53:18
1	SiO2†	63781.6	61271.9	[10695]	µg/L	13:52:57
1	Si 251.611†	76182.5	76081.1	[5000]	µg/L	13:52:57
1	Sn 189.927†	2763.0	2782.1	[1000]	µg/L	13:53:18
1	Ti 334.940†	438415.6	440849.5	[1000]	µg/L	13:52:51
1	Tl 190.801†	1032.2	1070.7	[1000]	µg/L	13:53:18
1	U 409.014†	11613.3	11668.3	[1000]	µg/L	13:52:57
1	V 292.402†	88724.4	88987.8	[1000]	µg/L	13:52:57
1	Zn 213.857†	46062.2	45248.4	[1000]	µg/L	13:52:57
2	Sc RADIAL	98878.3	98878.3	102	%	13:51:53
2	Al 396.153Radial†	21291.7	20961.0	[10000]	µg/L	13:51:53
2	Ca 317.933Radial†	28704.1	27712.1	[10000]	µg/L	13:51:53
2	Fe 238.204 Radial†	882.4	851.7	[10000]	µg/L	13:52:13
2	K 766.490 Radial†	22391.6	21432.9	[10000]	µg/L	13:51:53
2	Mg 279.077 IEC†	797.4	772.6	[10000]	µg/L	13:52:13
2	Na 589.592 Radial†	20571.2	19955.8	[10000]	µg/L	13:51:53
2	Sr 421.552†	171860.0	168088.0	[1000]	µg/L	13:51:53
2	Sc 361.383	2086112.0	2086112.0	99.666	%	13:53:24
2	Y 371.029	1420463.0	1420463.0	99.134	%	13:53:24
2	Ag 328.068†	126833.0	127718.5	[1000]	µg/L	13:53:30
2	As 188.979†	701.1	706.7	[1000]	µg/L	13:53:51
2	B 249.677†	22869.1	22646.4	[1000]	µg/L	13:53:30
2	Ba 233.527†	47051.7	47217.9	[1000]	µg/L	13:53:30
2	Be 313.107†	1742218.7	1749220.6	[1000]	µg/L	13:53:24
2	Cd 226.502†	43183.6	43499.0	[1000]	µg/L	13:53:30
2	Co 228.616†	24100.7	24133.5	[1000]	µg/L	13:53:30
2	Cr 267.716†	48201.6	48283.0	[1000]	µg/L	13:53:30
2	Cu 324.752†	163007.4	159177.4	[1000]	µg/L	13:53:30
2	Mn 257.610†	341756.3	343589.5	[1000]	µg/L	13:53:30
2	Mo 202.031†	10599.6	10630.0	[1000]	µg/L	13:53:51
2	Ni 231.604†	18831.1	18517.4	[1000]	µg/L	13:53:30
2	P 214.914†	3401.5	3140.5	[5000]	µg/L	13:53:51
2	Pb 220.353†	3993.0	3976.2	[1000]	µg/L	13:53:51

2	S 181.975 Axial†	672.9	652.6	[2000]	µg/L	13:53:51
2	Sb 206.836†	1190.1	1171.4	[1000]	µg/L	13:53:51
2	Se 196.026†	1125.5	1102.0	[1000]	µg/L	13:53:51
2	SiO2†	63502.5	60935.8	[10695]	µg/L	13:53:30
2	Si 251.611†	75835.9	75666.1	[5000]	µg/L	13:53:30
2	Sn 189.927†	2693.2	2709.7	[1000]	µg/L	13:53:51
2	Ti 334.940†	439551.1	441602.5	[1000]	µg/L	13:53:24
2	Tl 190.801†	1022.7	1060.2	[1000]	µg/L	13:53:51
2	U 409.014†	11401.7	11445.7	[1000]	µg/L	13:53:30
2	V 292.402†	88057.2	88240.2	[1000]	µg/L	13:53:30
2	Zn 213.857†	45789.6	44934.3	[1000]	µg/L	13:53:30
3	Sc RADIAL	98949.7	98949.7	102	%	13:52:19
3	Al 396.153Radial†	21345.9	20999.0	[10000]	µg/L	13:52:19
3	Ca 317.933Radial†	28773.8	27759.9	[10000]	µg/L	13:52:19
3	Fe 238.204 Radial†	884.5	853.3	[10000]	µg/L	13:52:39
3	K 766.490 Radial†	22416.2	21441.2	[10000]	µg/L	13:52:19
3	Mg 279.077 IEC†	802.2	776.7	[10000]	µg/L	13:52:39
3	Na 589.592 Radial†	20655.3	20023.5	[10000]	µg/L	13:52:19
3	Sr 421.552†	172362.1	168457.6	[1000]	µg/L	13:52:19
3	Sc 361.383	2098634.1	2098634.1	100.26	%	13:53:57
3	Y 371.029	1431664.8	1431664.8	99.916	%	13:53:57
3	Ag 328.068†	117444.6	117595.6	[1000]	µg/L	13:54:03
3	As 188.979†	593.3	595.0	[1000]	µg/L	13:54:24
3	B 249.677†	20953.8	20599.3	[1000]	µg/L	13:54:03
3	Ba 233.527†	42175.0	42072.3	[1000]	µg/L	13:54:03
3	Be 313.107†	1600289.8	1597235.1	[1000]	µg/L	13:53:57
3	Cd 226.502†	38322.8	38392.5	[1000]	µg/L	13:54:03
3	Co 228.616†	21253.1	21149.1	[1000]	µg/L	13:54:03
3	Cr 267.716†	41031.4	40843.1	[1000]	µg/L	13:54:03
3	Cu 324.752†	144535.2	139778.0	[1000]	µg/L	13:54:03
3	Mn 257.610†	301338.4	301232.0	[1000]	µg/L	13:54:03
3	Mo 202.031†	8756.9	8728.7	[1000]	µg/L	13:54:24
3	Ni 231.604†	16588.3	16167.7	[1000]	µg/L	13:54:03
3	P 214.914†	2923.2	2643.2	[5000]	µg/L	13:54:24
3	Pb 220.353†	3418.8	3379.6	[1000]	µg/L	13:54:24
3	S 181.975 Axial†	590.2	566.1	[2000]	µg/L	13:54:24
3	Sb 206.836†	1017.2	991.8	[1000]	µg/L	13:54:24
3	Se 196.026†	983.1	953.2	[1000]	µg/L	13:54:24
3	SiO2†	58031.5	55098.9	[10695]	µg/L	13:54:03
3	Si 251.611†	68995.1	68389.4	[5000]	µg/L	13:54:03
3	Sn 189.927†	2196.1	2197.8	[1000]	µg/L	13:54:24
3	Ti 334.940†	400140.2	399663.8	[1000]	µg/L	13:53:57
3	Tl 190.801†	896.8	928.5	[1000]	µg/L	13:54:24
3	U 409.014†	9905.6	9885.3	[1000]	µg/L	13:54:03
3	V 292.402†	76998.0	76683.0	[1000]	µg/L	13:54:03
3	Zn 213.857†	40519.9	39404.4	[1000]	µg/L	13:54:03

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	2089676.0	7811.74	0.37%	99.836	%
Sc RADIAL	98944.6	63.99	0.06%	102	%
Y 371.029	1423275.7	7395.42	0.52%	99.330	%
Ag 328.068†	124646.9	6123.42	4.91%	[1000]	µg/L
Al 396.153Radial†	20998.9	37.98	0.18%	[10000]	µg/L
As 188.979†	674.9	69.69	10.33%	[1000]	µg/L
B 249.677†	22026.1	1239.12	5.63%	[1000]	µg/L
Ba 233.527†	45633.3	3090.08	6.77%	[1000]	µg/L
Be 313.107†	1697177.5	86577.45	5.10%	[1000]	µg/L
Ca 317.933Radial†	27738.9	24.43	0.09%	[10000]	µg/L
Cd 226.502†	41929.3	3069.39	7.32%	[1000]	µg/L
Co 228.616†	23200.5	1779.01	7.67%	[1000]	µg/L
Cr 267.716†	45901.0	4382.79	9.55%	[1000]	µg/L
Cu 324.752†	152994.7	11453.92	7.49%	[1000]	µg/L
Fe 238.204 Radial†	853.2	1.38	0.16%	[10000]	µg/L
K 766.490 Radial†	21431.2	10.99	0.05%	[10000]	µg/L
Mg 279.077 IEC†	773.2	3.23	0.42%	[10000]	µg/L
Mn 257.610†	330283.6	25189.03	7.63%	[1000]	µg/L
Mo 202.031†	10082.1	1179.12	11.70%	[1000]	µg/L
Na 589.592 Radial†	19972.5	45.03	0.23%	[10000]	µg/L

Ni 231.604†	17758.6	1378.29	7.76%	[1000]	µg/L
P 214.914†	3001.2	312.58	10.42%	[5000]	µg/L
Pb 220.353†	3802.1	367.77	9.67%	[1000]	µg/L
S 181.975 Axial†	628.1	54.07	8.61%	[2000]	µg/L
Sb 206.836†	1121.2	113.00	10.08%	[1000]	µg/L
Se 196.026†	1059.3	92.51	8.73%	[1000]	µg/L
SiO2†	59102.2	3471.01	5.87%	[10695]	µg/L
Si 251.611†	73378.9	4325.99	5.90%	[5000]	µg/L
Sn 189.927†	2563.2	318.50	12.43%	[1000]	µg/L
Sr 421.552†	168147.5	285.01	0.17%	[1000]	µg/L
Ti 334.940†	427371.9	23998.85	5.62%	[1000]	µg/L
Tl 190.801†	1019.8	79.22	7.77%	[1000]	µg/L
U 409.014†	10999.8	971.55	8.83%	[1000]	µg/L
V 292.402†	84637.0	6898.52	8.15%	[1000]	µg/L
Zn 213.857†	43195.7	3287.12	7.61%	[1000]	µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/16/2010 13:54:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	98789.2	98789.2	102 %	13:55:04
1	Al 396.153Radial†	107058.1	105009.0	[50000] µg/L	13:55:04
1	Ca 317.933Radial†	140672.7	137438.2	[50000] µg/L	13:55:04
1	Fe 238.204 Radial†	1738.5	1691.3	[20000] µg/L	13:55:24
1	Mg 279.077 IEC†	3867.4	3781.1	[50000] µg/L	13:55:24
1	Na 589.592 Radial†	41160.6	40146.4	[20000] µg/L	13:55:04
1	Sc 361.383	2092272.1	2092272.1	99.960 %	13:56:28
1	Y 371.029	1418049.8	1418049.8	98.966 %	13:56:28
2	Sc RADIAL	99260.5	99260.5	103 %	13:55:30
2	Al 396.153Radial†	107263.0	104710.8	[50000] µg/L	13:55:30
2	Ca 317.933Radial†	141368.5	137462.3	[50000] µg/L	13:55:30
2	Fe 238.204 Radial†	1735.4	1680.3	[20000] µg/L	13:55:50
2	Mg 279.077 IEC†	3879.3	3774.7	[50000] µg/L	13:55:50
2	Na 589.592 Radial†	41276.8	40068.2	[20000] µg/L	13:55:30
2	Sc 361.383	2104318.4	2104318.4	100.54 %	13:56:36
2	Y 371.029	1426757.5	1426757.5	99.573 %	13:56:36
3	Sc RADIAL	98790.7	98790.7	102 %	13:55:56
3	Al 396.153Radial†	106517.5	104477.8	[50000] µg/L	13:55:56
3	Ca 317.933Radial†	140287.9	137059.1	[50000] µg/L	13:55:56
3	Fe 238.204 Radial†	1736.9	1689.7	[20000] µg/L	13:56:16
3	Mg 279.077 IEC†	3898.1	3811.1	[50000] µg/L	13:56:16
3	Na 589.592 Radial†	41109.8	40096.0	[20000] µg/L	13:55:56
3	Sc 361.383	2096930.4	2096930.4	100.18 %	13:56:43
3	Y 371.029	1423055.3	1423055.3	99.315 %	13:56:43

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	2097840.3	6074.46	0.29%	100.23 %
Sc RADIAL	98946.8	271.66	0.27%	102 %
Y 371.029	1422620.9	4370.07	0.31%	99.285 %
Al 396.153Radial†	104732.5	266.28	0.25%	[50000] µg/L
Ca 317.933Radial†	137319.9	226.12	0.16%	[50000] µg/L
Fe 238.204 Radial†	1687.1	5.98	0.35%	[20000] µg/L
Mg 279.077 IEC†	3788.9	19.42	0.51%	[50000] µg/L
Na 589.592 Radial†	40103.5	39.62	0.10%	[20000] µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	124.5	0.00000	0.999995	
Al 396.153Radial	3	Lin Thru 0	0.0	2.095	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	0.6765	0.00000	0.999970	
B 249.677	3	Lin Thru 0	0.0	22.04	0.00000	1.000000	
Ba 233.527	3	Lin Thru 0	0.0	45.72	0.00000	0.999989	
Be 313.107	3	Lin Thru 0	0.0	1702	0.00000	0.999982	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.748	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	42.07	0.00000	0.999974	
Co 228.616	3	Lin Thru 0	0.0	23.28	0.00000	0.999976	
Cr 267.716	3	Lin Thru 0	0.0	45.98	0.00000	0.999984	
Cu 324.752	3	Lin Thru 0	0.0	153.1	0.00000	0.999991	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0845	0.00000	0.999990	
K 766.490 Radial	3	Lin Thru 0	0.0	2.143	0.00000	0.999995	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0759	0.00000	0.999990	
Mn 257.610	3	Lin Thru 0	0.0	332.7	0.00000	0.999894	
Mo 202.031	3	Lin Thru 0	0.0	10.11	0.00000	0.999961	
Na 589.592 Radia	2	Lin Thru 0	0.0	2.004	0.00000	0.999999	

Ni 231.604	3	Lin Thru 0	0.0	17.83	0.00000	0.999964
P 214.914	3	Lin Thru 0	0.0	0.6023	0.00000	0.999963
Pb 220.353	3	Lin Thru 0	0.0	3.814	0.00000	0.999959
S 181.975 Axial	3	Lin Thru 0	0.0	0.3142	0.00000	0.999967
Sb 206.836	3	Lin Thru 0	0.0	1.121	0.00000	0.999978
Se 196.026	3	Lin Thru 0	0.0	1.064	0.00000	0.999962
SiO2	3	Lin Thru 0	0.0	5.539	0.00000	0.999985
Si 251.611	3	Lin Thru 0	0.0	14.71	0.00000	0.999987
Sn 189.927	3	Lin Thru 0	0.0	2.569	0.00000	0.999950
Sr 421.552	3	Lin Thru 0	0.0	168.2	0.00000	1.000000
Ti 334.940	3	Lin Thru 0	0.0	427.6	0.00000	0.999998
Tl 190.801	3	Lin Thru 0	0.0	1.024	0.00000	0.999960
U 409.014	3	Lin Thru 0	0.0	11.01	0.00000	0.999993
V 292.402	3	Lin Thru 0	0.0	84.70	0.00000	0.999994
Zn 213.857	3	Lin Thru 0	0.0	43.43	0.00000	0.999939

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/16/2010 13:56:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99945.7	99945.7	103 %		13:57:23
1	Al 396.153Radial†	10634.7	10418.1	4961.7 µg/L	4961.7 ppb	13:57:23
1	Ca 317.933Radial†	14480.5	13637.8	4963.1 µg/L	4963.1 ppb	13:57:23
1	Fe 238.204 Radial†	451.0	424.8	5035.4 µg/L	5035.4 ppb	13:57:44
1	K 766.490 Radial†	5776.3	5108.5	2384.0 µg/L	2384.0 ppb	13:57:23
1	Mg 279.077 IEC†	410.2	389.2	5135.4 µg/L	5135.4 ppb	13:57:44
1	Na 589.592 Radial†	5193.0	4848.4	2419.9 µg/L	2419.9 ppb	13:57:23
1	Sr 421.552†	90141.5	87154.4	518.12 µg/L	518.12 ppb	13:57:23
1	Sc 361.383	2114320.9	2114320.9	101.01 %		13:58:48
1	Y 371.029	1441880.8	1441880.8	100.63 %		13:58:48
1	Ag 328.068†	31503.5	31647.7	257.94 µg/L	257.94 ppb	13:58:53
1	As 188.979†	333.9	333.8	491.09 µg/L	491.09 ppb	13:59:14
1	B 249.677†	11823.0	11405.0	515.75 µg/L	515.75 ppb	13:58:53
1	Ba 233.527†	23518.4	23290.9	510.31 µg/L	510.31 ppb	13:58:53
1	Be 313.107†	457938.9	454503.3	266.85 µg/L	266.85 ppb	13:58:48
1	Cd 226.502†	21241.4	21198.9	503.85 µg/L	503.85 ppb	13:58:53
1	Co 228.616†	12109.8	11940.2	512.43 µg/L	512.43 ppb	13:58:53
1	Cr 267.716†	23238.8	22925.4	498.94 µg/L	498.94 ppb	13:58:53
1	Cu 324.752†	83176.1	77964.9	510.18 µg/L	510.18 ppb	13:58:53
1	Mn 257.610†	177529.9	176435.7	530.22 µg/L	530.22 ppb	13:58:48
1	Mo 202.031†	5774.7	5711.7	565.37 µg/L	565.37 ppb	13:59:14
1	Ni 231.604†	9654.4	9180.7	514.37 µg/L	514.37 ppb	13:58:53
1	P 214.914†	1866.2	1575.1	2567.3 µg/L	2567.3 ppb	13:59:14
1	Pb 220.353†	2014.0	1963.6	515.56 µg/L	515.56 ppb	13:59:14
1	S 181.975 Axial†	841.6	810.7	2579.9 µg/L	2579.9 ppb	13:59:14
1	Sb 206.836†	616.5	587.6	527.70 µg/L	527.70 ppb	13:59:14
1	Se 196.026†	2837.8	2782.1	2626.3 µg/L	2626.3 ppb	13:59:14
1	SiO2†	61735.1	58336.0	10532 µg/L	10532 ppb	13:58:53
1	Si 251.611†	73401.3	72240.8	4911.2 µg/L	4911.2 ppb	13:58:53
1	Sn 189.927†	1479.9	1472.4	573.76 µg/L	573.76 ppb	13:59:14
1	Ti 334.940†	217908.1	216299.1	505.46 µg/L	505.46 ppb	13:58:48
1	Tl 190.801†	523.1	552.0	543.97 µg/L	543.97 ppb	13:59:14
1	U 409.014†	5561.7	5511.7	499.45 µg/L	499.45 ppb	13:58:53
1	V 292.402†	44746.7	44185.4	526.97 µg/L	526.97 ppb	13:58:53
1	Zn 213.857†	23850.3	22602.2	516.77 µg/L	516.77 ppb	13:58:53
2	Sc RADIAL	100715.7	100715.7	104 %		13:57:49
2	Al 396.153Radial†	10725.7	10426.7	4966.0 µg/L	4966.0 ppb	13:57:49
2	Ca 317.933Radial†	14488.3	13538.0	4926.8 µg/L	4926.8 ppb	13:57:49
2	Fe 238.204 Radial†	449.0	419.5	4972.5 µg/L	4972.5 ppb	13:58:10
2	K 766.490 Radial†	5822.1	5109.7	2384.6 µg/L	2384.6 ppb	13:57:49
2	Mg 279.077 IEC†	416.5	392.3	5175.6 µg/L	5175.6 ppb	13:58:10
2	Na 589.592 Radial†	5226.0	4841.6	2416.5 µg/L	2416.5 ppb	13:57:49
2	Sr 421.552†	90833.6	87152.1	518.11 µg/L	518.11 ppb	13:57:49
2	Sc 361.383	2122266.1	2122266.1	101.39 %		13:59:21
2	Y 371.029	1448400.7	1448400.7	101.08 %		13:59:21
2	Ag 328.068†	31661.8	31687.0	258.25 µg/L	258.25 ppb	13:59:27
2	As 188.979†	332.8	331.5	487.65 µg/L	487.65 ppb	13:59:47
2	B 249.677†	11881.3	11418.7	516.41 µg/L	516.41 ppb	13:59:27
2	Ba 233.527†	23693.3	23376.2	512.18 µg/L	512.18 ppb	13:59:27
2	Be 313.107†	459566.7	454411.5	266.80 µg/L	266.80 ppb	13:59:21
2	Cd 226.502†	21357.6	21234.8	504.71 µg/L	504.71 ppb	13:59:27
2	Co 228.616†	12210.4	11994.6	514.75 µg/L	514.75 ppb	13:59:27
2	Cr 267.716†	23436.5	23034.3	501.31 µg/L	501.31 ppb	13:59:27
2	Cu 324.752†	83758.0	78230.6	511.90 µg/L	511.90 ppb	13:59:27
2	Mn 257.610†	178049.4	176290.1	529.78 µg/L	529.78 ppb	13:59:21
2	Mo 202.031†	5680.3	5597.2	554.04 µg/L	554.04 ppb	13:59:47
2	Ni 231.604†	9693.7	9183.6	514.54 µg/L	514.54 ppb	13:59:27
2	P 214.914†	1830.4	1532.9	2496.8 µg/L	2496.8 ppb	13:59:47
2	Pb 220.353†	1974.9	1917.6	503.46 µg/L	503.46 ppb	13:59:47

2	S 181.975 Axial†	833.1	799.1	2543.2 µg/L	2543.2 ppb	13:59:47
2	Sb 206.836†	613.3	582.1	522.62 µg/L	522.62 ppb	13:59:47
2	Se 196.026†	2802.5	2736.6	2583.4 µg/L	2583.4 ppb	13:59:47
2	SiO2†	62170.4	58536.5	10568 µg/L	10568 ppb	13:59:27
2	Si 251.611†	74003.3	72562.5	4933.1 µg/L	4933.1 ppb	13:59:27
2	Sn 189.927†	1444.1	1431.7	557.90 µg/L	557.90 ppb	13:59:47
2	Ti 334.940†	218656.1	216229.2	505.30 µg/L	505.30 ppb	13:59:21
2	Tl 190.801†	522.5	549.4	541.49 µg/L	541.49 ppb	13:59:47
2	U 409.014†	5610.5	5539.2	501.96 µg/L	501.96 ppb	13:59:27
2	V 292.402†	44884.0	44155.0	526.53 µg/L	526.53 ppb	13:59:27
2	Zn 213.857†	23949.9	22612.0	516.99 µg/L	516.99 ppb	13:59:27
3	Sc RADIAL	100642.0	100642.0	104 %		13:58:16
3	Al 396.153Radial†	10698.5	10408.1	4959.0 µg/L	4959.0 ppb	13:58:16
3	Ca 317.933Radial†	14455.7	13516.9	4919.1 µg/L	4919.1 ppb	13:58:16
3	Fe 238.204 Radial†	451.9	422.6	5008.6 µg/L	5008.6 ppb	13:58:36
3	K 766.490 Radial†	5717.9	5013.6	2339.8 µg/L	2339.8 ppb	13:58:16
3	Mg 279.077 IEC†	411.4	387.7	5113.5 µg/L	5113.5 ppb	13:58:36
3	Na 589.592 Radial†	5192.1	4812.7	2402.0 µg/L	2402.0 ppb	13:58:16
3	Sr 421.552†	90503.1	86898.2	516.60 µg/L	516.60 ppb	13:58:16
3	Sc 361.383	2113439.8	2113439.8	100.97 %		13:59:54
3	Y 371.029	1442067.2	1442067.2	100.64 %		13:59:54
3	Ag 328.068†	29525.7	29701.9	241.91 µg/L	241.91 ppb	14:00:00
3	As 188.979†	279.5	280.1	411.91 µg/L	411.91 ppb	14:00:21
3	B 249.677†	11019.1	10613.8	479.75 µg/L	479.75 ppb	14:00:00
3	Ba 233.527†	21385.6	21188.3	464.22 µg/L	464.22 ppb	14:00:00
3	Be 313.107†	419133.8	416260.5	244.40 µg/L	244.40 ppb	13:59:54
3	Cd 226.502†	19161.1	19147.4	455.03 µg/L	455.03 ppb	14:00:00
3	Co 228.616†	10856.6	10704.1	459.32 µg/L	459.32 ppb	14:00:00
3	Cr 267.716†	20175.8	19901.5	433.13 µg/L	433.13 ppb	14:00:00
3	Cu 324.752†	75195.8	70095.7	458.78 µg/L	458.78 ppb	14:00:00
3	Mn 257.610†	162921.4	162041.0	486.96 µg/L	486.96 ppb	13:59:54
3	Mo 202.031†	4706.2	4655.8	460.89 µg/L	460.89 ppb	14:00:21
3	Ni 231.604†	8636.6	8176.6	458.12 µg/L	458.12 ppb	14:00:00
3	P 214.914†	1589.7	1302.0	2117.6 µg/L	2117.6 ppb	14:00:21
3	Pb 220.353†	1705.7	1659.1	435.58 µg/L	435.58 ppb	14:00:21
3	S 181.975 Axial†	735.0	705.3	2244.7 µg/L	2244.7 ppb	14:00:21
3	Sb 206.836†	518.9	491.2	440.70 µg/L	440.70 ppb	14:00:21
3	Se 196.026†	2434.0	2383.3	2251.5 µg/L	2251.5 ppb	14:00:21
3	SiO2†	57058.2	53729.6	9700.1 µg/L	9700.1 ppb	14:00:00
3	Si 251.611†	67611.4	66536.9	4523.4 µg/L	4523.4 ppb	14:00:00
3	Sn 189.927†	1175.9	1172.0	456.80 µg/L	456.80 ppb	14:00:21
3	Ti 334.940†	198210.0	196880.4	460.06 µg/L	460.06 ppb	13:59:54
3	Tl 190.801†	461.1	490.8	483.79 µg/L	483.79 ppb	14:00:21
3	U 409.014†	4826.7	4786.1	433.57 µg/L	433.57 ppb	14:00:00
3	V 292.402†	39492.8	39000.6	464.74 µg/L	464.74 ppb	14:00:00
3	Zn 213.857†	21512.4	20296.6	464.02 µg/L	464.02 ppb	14:00:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2116675.6	101.13 %	0.232			0.23%
Sc RADIAL	100434.5	104 %	0.4			0.42%
Y 371.029	1444116.3	100.78 %	0.259			0.26%
Ag 328.068†	31012.2	252.70 µg/L	9.345	252.70 ppb	9.345	3.70%
QC value within limits for Ag 328.068 Recovery = 101.08%						
Al 396.153Radial†	10417.6	4962.2 µg/L	3.52	4962.2 ppb	3.52	0.07%
QC value within limits for Al 396.153Radial Recovery = 99.24%						
As 188.979†	315.1	463.55 µg/L	44.757	463.55 ppb	44.757	9.66%
QC value within limits for As 188.979 Recovery = 92.71%						
B 249.677†	11145.9	503.97 µg/L	20.977	503.97 ppb	20.977	4.16%
QC value within limits for B 249.677 Recovery = 100.79%						
Ba 233.527†	22618.5	495.57 µg/L	27.168	495.57 ppb	27.168	5.48%
QC value within limits for Ba 233.527 Recovery = 99.11%						
Be 313.107†	441725.1	259.35 µg/L	12.947	259.35 ppb	12.947	4.99%
QC value within limits for Be 313.107 Recovery = 103.74%						
Ca 317.933Radial†	13564.2	4936.3 µg/L	23.49	4936.3 ppb	23.49	0.48%
QC value within limits for Ca 317.933Radial Recovery = 98.73%						
Cd 226.502†	20527.0	487.87 µg/L	28.437	487.87 ppb	28.437	5.83%
QC value within limits for Cd 226.502 Recovery = 97.57%						
Co 228.616†	11546.3	495.50 µg/L	31.354	495.50 ppb	31.354	6.33%

Cr	267.716†	21953.7	477.79 µg/L	38.695	477.79 ppb	38.695	8.10%
Cu	324.752†	75430.4	493.62 µg/L	30.188	493.62 ppb	30.188	6.12%
Fe	238.204 Radial†	422.3	5005.5 µg/L	31.56	5005.5 ppb	31.56	0.63%
K	766.490 Radial†	5077.3	2369.5 µg/L	25.73	2369.5 ppb	25.73	1.09%
Mg	279.077 IEC†	389.7	5141.5 µg/L	31.48	5141.5 ppb	31.48	0.61%
Mn	257.610†	171589.0	515.65 µg/L	24.851	515.65 ppb	24.851	4.82%
Mo	202.031†	5321.6	526.77 µg/L	57.328	526.77 ppb	57.328	10.88%
Na	589.592 Radial†	4834.2	2412.8 µg/L	9.47	2412.8 ppb	9.47	0.39%
Ni	231.604†	8847.0	495.68 µg/L	32.524	495.68 ppb	32.524	6.56%
P	214.914†	1470.0	2393.9 µg/L	241.87	2393.9 ppb	241.87	10.10%
Pb	220.353†	1846.8	484.87 µg/L	43.115	484.87 ppb	43.115	8.89%
S	181.975 Axial†	771.7	2456.0 µg/L	183.85	2456.0 ppb	183.85	7.49%
Sb	206.836†	553.6	497.01 µg/L	48.831	497.01 ppb	48.831	9.82%
Se	196.026†	2634.0	2487.1 µg/L	205.14	2487.1 ppb	205.14	8.25%
SiO2†		56867.4	10267 µg/L	490.9	10267 ppb	490.9	4.78%
Si	251.611†	70446.7	4789.2 µg/L	230.45	4789.2 ppb	230.45	4.81%
Sn	189.927†	1358.7	529.49 µg/L	63.445	529.49 ppb	63.445	11.98%
Sr	421.552†	87068.2	517.61 µg/L	0.875	517.61 ppb	0.875	0.17%
Ti	334.940†	209802.9	490.27 µg/L	26.168	490.27 ppb	26.168	5.34%
Tl	190.801†	530.7	523.08 µg/L	34.051	523.08 ppb	34.051	6.51%
U	409.014†	5279.0	478.33 µg/L	38.781	478.33 ppb	38.781	8.11%
V	292.402†	42447.0	506.08 µg/L	35.801	506.08 ppb	35.801	7.07%
Zn	213.857†	21836.9	499.26 µg/L	30.520	499.26 ppb	30.520	6.11%

QC value within limits for Co 228.616 Recovery = 99.10%
 QC value within limits for Cr 267.716 Recovery = 95.56%
 QC value within limits for Cu 324.752 Recovery = 98.72%
 QC value within limits for Fe 238.204 Radial Recovery = 100.11%
 QC value within limits for K 766.490 Radial Recovery = 94.78%
 QC value within limits for Mg 279.077 IEC Recovery = 102.83%
 QC value within limits for Mn 257.610 Recovery = 103.13%
 QC value within limits for Mo 202.031 Recovery = 105.35%
 QC value within limits for Na 589.592 Radial Recovery = 96.51%
 QC value within limits for Ni 231.604 Recovery = 99.14%
 QC value within limits for P 214.914 Recovery = 95.76%
 QC value within limits for Pb 220.353 Recovery = 96.97%
 QC value within limits for S 181.975 Axial Recovery = 98.24%
 QC value within limits for Sb 206.836 Recovery = 99.40%
 QC value within limits for Se 196.026 Recovery = 99.48%
 QC value within limits for SiO2 Recovery = 95.99%
 QC value within limits for Si 251.611 Recovery = 95.78%
 QC value within limits for Sn 189.927 Recovery = 105.90%
 QC value within limits for Sr 421.552 Recovery = 103.52%
 QC value within limits for Ti 334.940 Recovery = 98.05%
 QC value within limits for Tl 190.801 Recovery = 104.62%
 QC value within limits for U 409.014 Recovery = 95.67%
 QC value within limits for V 292.402 Recovery = 101.22%
 QC value within limits for Zn 213.857 Recovery = 99.85%

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/16/2010 14:00:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98878.3	98878.3	102 %		14:01:01
1	Al 396.153Radial†	-142.3	-20.0	-9.5824 µg/L	-9.5824 ppb	14:01:01
1	Ca 317.933Radial†	360.4	-32.5	-11.815 µg/L	-11.815 ppb	14:01:22
1	Fe 238.204 Radial†	14.8	2.6	30.450 µg/L	30.450 ppb	14:01:22
1	K 766.490 Radial†	418.0	-76.2	-35.567 µg/L	-35.567 ppb	14:01:01
1	Mg 279.077 IEC†	9.3	1.2	15.202 µg/L	15.202 ppb	14:01:22
1	Na 589.592 Radial†	185.1	0.6	0.3180 µg/L	0.3180 ppb	14:01:01
1	Sr 421.552†	119.7	-22.3	-0.1323 µg/L	-0.1323 ppb	14:01:01
1	Sc 361.383	2093188.4	2093188.4	100.00 %		14:02:23
1	Y 371.029	1429929.2	1429929.2	99.795 %		14:02:23
1	Ag 328.068†	-530.5	-70.3	-0.5637 µg/L	-0.5637 ppb	14:02:29
1	As 188.979†	-2.2	1.1	1.5852 µg/L	1.5852 ppb	14:02:49
1	B 249.677†	312.8	13.4	0.5924 µg/L	0.5924 ppb	14:02:29
1	Ba 233.527†	-4.3	4.1	0.0899 µg/L	0.0899 ppb	14:02:49
1	Be 313.107†	-1082.3	76.6	0.0449 µg/L	0.0449 ppb	14:02:29
1	Cd 226.502†	-168.9	1.6	0.0345 µg/L	0.0345 ppb	14:02:49
1	Co 228.616†	38.1	-10.0	-0.4293 µg/L	-0.4293 ppb	14:02:49
1	Cr 267.716†	48.0	-32.2	-0.7015 µg/L	-0.7015 ppb	14:02:29
1	Cu 324.752†	4412.7	35.9	0.2399 µg/L	0.2399 ppb	14:02:29
1	Mn 257.610†	-696.0	-9.0	-0.0262 µg/L	-0.0262 ppb	14:02:49
1	Mo 202.031†	17.2	12.1	1.1957 µg/L	1.1957 ppb	14:02:49
1	Ni 231.604†	356.5	-20.4	-1.1452 µg/L	-1.1452 ppb	14:02:49
1	P 214.914†	267.6	-4.8	-8.0633 µg/L	-8.0633 ppb	14:02:49
1	Pb 220.353†	33.6	3.4	0.9019 µg/L	0.9019 ppb	14:02:49
1	S 181.975 Axial†	23.4	0.9	2.7755 µg/L	2.7755 ppb	14:02:49
1	Sb 206.836†	25.0	2.2	2.0202 µg/L	2.0202 ppb	14:02:49
1	Se 196.026†	25.9	-1.5	-1.2774 µg/L	-1.2774 ppb	14:02:49
1	SiO2†	2754.4	-25.4	-4.5897 µg/L	-4.5897 ppb	14:02:29
1	Si 251.611†	426.2	2.1	0.1440 µg/L	0.1440 ppb	14:02:49
1	Sn 189.927†	-0.7	6.8	2.6268 µg/L	2.6268 ppb	14:02:49
1	Ti 334.940†	-488.2	89.0	0.2068 µg/L	0.2068 ppb	14:02:29
1	Tl 190.801†	-35.7	-1.6	-1.5349 µg/L	-1.5349 ppb	14:02:49
1	U 409.014†	-35.4	-29.5	-2.6859 µg/L	-2.6859 ppb	14:02:29
1	V 292.402†	92.2	-20.1	-0.2365 µg/L	-0.2365 ppb	14:02:29
1	Zn 213.857†	694.1	-314.7	-7.2440 µg/L	-7.2440 ppb	14:02:49
2	Sc RADIAL	97865.4	97865.4	101 %		14:01:27
2	Al 396.153Radial†	-126.8	-6.1	-2.9435 µg/L	-2.9435 ppb	14:01:27
2	Ca 317.933Radial†	362.1	-27.2	-9.8807 µg/L	-9.8807 ppb	14:01:47
2	Fe 238.204 Radial†	12.9	0.8	9.9891 µg/L	9.9891 ppb	14:01:47
2	K 766.490 Radial†	411.9	-78.0	-36.400 µg/L	-36.400 ppb	14:01:27
2	Mg 279.077 IEC†	11.2	3.1	40.653 µg/L	40.653 ppb	14:01:47
2	Na 589.592 Radial†	186.4	3.8	1.9010 µg/L	1.9010 ppb	14:01:27
2	Sr 421.552†	106.6	-34.0	-0.2022 µg/L	-0.2022 ppb	14:01:27
2	Sc 361.383	2104830.6	2104830.6	100.56 %		14:02:55
2	Y 371.029	1442517.7	1442517.7	100.67 %		14:02:55
2	Ag 328.068†	-488.0	-25.1	-0.2033 µg/L	-0.2033 ppb	14:03:01
2	As 188.979†	-4.3	-1.0	-1.4916 µg/L	-1.4916 ppb	14:03:22
2	B 249.677†	332.6	31.3	1.4168 µg/L	1.4168 ppb	14:03:01
2	Ba 233.527†	-1.9	6.5	0.1414 µg/L	0.1414 ppb	14:03:22
2	Be 313.107†	-1052.8	111.9	0.0657 µg/L	0.0657 ppb	14:03:01
2	Cd 226.502†	-168.8	2.7	0.0619 µg/L	0.0619 ppb	14:03:22
2	Co 228.616†	44.8	-3.5	-0.1498 µg/L	-0.1498 ppb	14:03:22
2	Cr 267.716†	69.2	-11.4	-0.2483 µg/L	-0.2483 ppb	14:03:01
2	Cu 324.752†	4345.3	-55.6	-0.3613 µg/L	-0.3613 ppb	14:03:01
2	Mn 257.610†	-711.9	-21.0	-0.0652 µg/L	-0.0652 ppb	14:03:22
2	Mo 202.031†	27.8	22.5	2.2254 µg/L	2.2254 ppb	14:03:22
2	Ni 231.604†	362.7	-16.2	-0.9109 µg/L	-0.9109 ppb	14:03:22
2	P 214.914†	268.4	-5.5	-9.1439 µg/L	-9.1439 ppb	14:03:22
2	Pb 220.353†	28.8	-1.5	-0.3967 µg/L	-0.3967 ppb	14:03:22

2	S 181.975 Axial†	21.2	-1.4	-4.5519 µg/L	-4.5519 ppb	14:03:22
2	Sb 206.836†	34.9	12.0	10.707 µg/L	10.707 ppb	14:03:22
2	Se 196.026†	17.8	-9.6	-9.0158 µg/L	-9.0158 ppb	14:03:22
2	SiO2†	2763.3	-31.9	-5.7561 µg/L	-5.7561 ppb	14:03:01
2	Si 251.611†	425.4	-1.0	-0.0708 µg/L	-0.0708 ppb	14:03:22
2	Sn 189.927†	-4.2	3.3	1.2784 µg/L	1.2784 ppb	14:03:22
2	Ti 334.940†	-463.0	116.9	0.2699 µg/L	0.2699 ppb	14:03:01
2	Tl 190.801†	-37.3	-3.0	-2.9282 µg/L	-2.9282 ppb	14:03:22
2	U 409.014†	-2.6	3.2	0.2885 µg/L	0.2885 ppb	14:03:01
2	V 292.402†	76.3	-36.4	-0.4141 µg/L	-0.4141 ppb	14:03:01
2	Zn 213.857†	695.2	-317.5	-7.3089 µg/L	-7.3089 ppb	14:03:22
3	Sc RADIAL	98474.2	98474.2	102 %		14:01:53
3	Al 396.153Radial†	-101.8	19.3	9.1663 µg/L	9.1663 ppb	14:01:53
3	Ca 317.933Radial†	363.5	-28.0	-10.188 µg/L	-10.188 ppb	14:02:13
3	Fe 238.204 Radial†	11.5	-0.7	-7.9882 µg/L	-7.9882 ppb	14:02:13
3	K 766.490 Radial†	504.8	10.9	5.0664 µg/L	5.0664 ppb	14:01:53
3	Mg 279.077 IEC†	8.6	0.4	5.8894 µg/L	5.8894 ppb	14:02:13
3	Na 589.592 Radial†	170.1	-13.4	-6.6870 µg/L	-6.6870 ppb	14:01:53
3	Sr 421.552†	121.2	-20.3	-0.1205 µg/L	-0.1205 ppb	14:01:53
3	Sc 361.383	2113179.1	2113179.1	100.96 %		14:03:28
3	Y 371.029	1448101.8	1448101.8	101.06 %		14:03:28
3	Ag 328.068†	-468.7	-4.1	-0.0340 µg/L	-0.0340 ppb	14:03:33
3	As 188.979†	-3.8	-0.5	-0.7547 µg/L	-0.7547 ppb	14:03:54
3	B 249.677†	302.2	0.0	0.0043 µg/L	0.0043 ppb	14:03:33
3	Ba 233.527†	-6.5	2.0	0.0434 µg/L	0.0434 ppb	14:03:54
3	Be 313.107†	-1083.7	85.5	0.0502 µg/L	0.0502 ppb	14:03:33
3	Cd 226.502†	-158.7	13.4	0.3186 µg/L	0.3186 ppb	14:03:54
3	Co 228.616†	36.5	-12.0	-0.5125 µg/L	-0.5125 ppb	14:03:54
3	Cr 267.716†	63.5	-17.3	-0.3764 µg/L	-0.3764 ppb	14:03:33
3	Cu 324.752†	4351.9	-66.1	-0.4333 µg/L	-0.4333 ppb	14:03:33
3	Mn 257.610†	-722.6	-28.8	-0.0874 µg/L	-0.0874 ppb	14:03:54
3	Mo 202.031†	21.2	15.8	1.5657 µg/L	1.5657 ppb	14:03:54
3	Ni 231.604†	370.2	-10.2	-0.5706 µg/L	-0.5706 ppb	14:03:54
3	P 214.914†	270.8	-4.2	-6.8446 µg/L	-6.8446 ppb	14:03:54
3	Pb 220.353†	41.8	11.2	2.9432 µg/L	2.9432 ppb	14:03:54
3	S 181.975 Axial†	17.7	-5.0	-15.964 µg/L	-15.964 ppb	14:03:54
3	Sb 206.836†	24.6	1.6	1.4824 µg/L	1.4824 ppb	14:03:54
3	Se 196.026†	23.1	-4.4	-4.2103 µg/L	-4.2103 ppb	14:03:54
3	SiO2†	2761.4	-44.6	-8.0543 µg/L	-8.0543 ppb	14:03:33
3	Si 251.611†	427.7	-0.5	-0.0318 µg/L	-0.0318 ppb	14:03:54
3	Sn 189.927†	-2.9	4.6	1.7858 µg/L	1.7858 ppb	14:03:54
3	Ti 334.940†	-517.8	64.3	0.1498 µg/L	0.1498 ppb	14:03:33
3	Tl 190.801†	-32.6	1.8	1.7516 µg/L	1.7516 ppb	14:03:54
3	U 409.014†	37.3	42.7	3.8804 µg/L	3.8804 ppb	14:03:33
3	V 292.402†	105.8	-7.5	-0.0725 µg/L	-0.0725 ppb	14:03:33
3	Zn 213.857†	682.6	-332.8	-7.6580 µg/L	-7.6580 ppb	14:03:54

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2103732.7	100.51 %	0.480			0.48%
Sc RADIAL	98406.0	102 %	0.5			0.52%
Y 371.029	1440182.9	100.51 %	0.650			0.65%
Ag 328.068†	-33.2	-0.2670 µg/L	0.27050	-0.2670 ppb	0.27050	101.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.3	-1.1199 µg/L	9.50643	-1.1199 ppb	9.50643	848.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.2203 µg/L	1.60649	-0.2203 ppb	1.60649	729.07%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	14.9	0.6712 µg/L	0.70954	0.6712 ppb	0.70954	105.72%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.2	0.0916 µg/L	0.04902	0.0916 ppb	0.04902	53.52%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	91.3	0.0536 µg/L	0.01078	0.0536 ppb	0.01078	20.12%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-29.2	-10.628 µg/L	1.0398	-10.628 ppb	1.0398	9.78%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.9	0.1383 µg/L	0.15671	0.1383 ppb	0.15671	113.31%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.5	-0.3639 µg/L	0.18997	-0.3639 ppb	0.18997	52.21%

Cr	267.716†	-20.3	-0.4421 µg/L	0.23363	-0.4421 ppb	0.23363	52.85%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-28.6	-0.1849 µg/L	0.36967	-0.1849 ppb	0.36967	199.95%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.9	10.817 µg/L	19.2327	10.817 ppb	19.2327	177.80%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-47.8	-22.300 µg/L	23.7038	-22.300 ppb	23.7038	106.29%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.6	20.581 µg/L	17.9950	20.581 ppb	17.9950	87.43%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-19.6	-0.0596 µg/L	0.03099	-0.0596 ppb	0.03099	52.00%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	16.8	1.6623 µg/L	0.52156	1.6623 ppb	0.52156	31.38%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-3.0	-1.4893 µg/L	4.57035	-1.4893 ppb	4.57035	306.88%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-15.6	-0.8756 µg/L	0.28889	-0.8756 ppb	0.28889	32.99%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-4.9	-8.0173 µg/L	1.15037	-8.0173 ppb	1.15037	14.35%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	4.4	1.1495 µg/L	1.68366	1.1495 ppb	1.68366	146.47%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.9	-5.9135 µg/L	9.44368	-5.9135 ppb	9.44368	159.70%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	5.3	4.7365 µg/L	5.17748	4.7365 ppb	5.17748	109.31%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-5.2	-4.8345 µg/L	3.90679	-4.8345 ppb	3.90679	80.81%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-34.0	-6.1334 µg/L	1.76283	-6.1334 ppb	1.76283	28.74%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	0.2	0.0138 µg/L	0.11444	0.0138 ppb	0.11444	829.65%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	4.9	1.8970 µg/L	0.68105	1.8970 ppb	0.68105	35.90%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-25.5	-0.1517 µg/L	0.04414	-0.1517 ppb	0.04414	29.10%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	90.1	0.2088 µg/L	0.06007	0.2088 ppb	0.06007	28.77%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.9	-0.9038 µg/L	2.40286	-0.9038 ppb	2.40286	265.85%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	5.5	0.4943 µg/L	3.28796	0.4943 ppb	3.28796	665.14%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-21.4	-0.2411 µg/L	0.17084	-0.2411 ppb	0.17084	70.87%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-321.7	-7.4036 µg/L	0.22266	-7.4036 ppb	0.22266	3.01%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/16/2010 14:04:03

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	99135.6	99135.6	102 %		14:04:34
1	Al 396.153Radial†	319.8	431.5	205.75 µg/L	205.75 ppb	14:04:34
1	Ca 317.933Radial†	976.8	568.4	206.83 µg/L	206.83 ppb	14:04:54
1	Fe 238.204 Radial†	19.8	7.4	87.080 µg/L	87.080 ppb	14:04:54
1	K 766.490 Radial†	804.0	299.6	139.83 µg/L	139.83 ppb	14:04:34
1	Mg 279.077 IEC†	31.9	23.2	305.37 µg/L	305.37 ppb	14:04:54
1	Na 589.592 Radial†	798.4	598.9	298.91 µg/L	298.91 ppb	14:04:34
1	Sr 421.552†	1004.2	841.0	4.9998 µg/L	4.9998 ppb	14:04:34
1	Sc 361.383	2092379.1	2092379.1	99.965 %		14:05:56
1	Y 371.029	1432026.5	1432026.5	99.941 %		14:05:56
1	Ag 328.068†	171.0	631.3	5.1099 µg/L	5.1099 ppb	14:06:02
1	As 188.979†	18.0	21.2	31.333 µg/L	31.333 ppb	14:06:22
1	B 249.677†	1373.0	1074.1	48.707 µg/L	48.707 ppb	14:06:22
1	Ba 233.527†	246.0	254.5	5.5747 µg/L	5.5747 ppb	14:06:22
1	Be 313.107†	7555.8	8717.3	5.1199 µg/L	5.1199 ppb	14:06:02
1	Cd 226.502†	42.2	212.8	5.0548 µg/L	5.0548 ppb	14:06:22
1	Co 228.616†	156.2	108.2	4.6480 µg/L	4.6480 ppb	14:06:22
1	Cr 267.716†	299.8	219.6	4.7801 µg/L	4.7801 ppb	14:06:22
1	Cu 324.752†	5988.3	1613.7	10.556 µg/L	10.556 ppb	14:06:02
1	Mn 257.610†	2771.2	3459.2	10.381 µg/L	10.381 ppb	14:06:22
1	Mo 202.031†	122.7	117.6	11.643 µg/L	11.643 ppb	14:06:22
1	Ni 231.604†	475.7	98.9	5.5441 µg/L	5.5441 ppb	14:06:22
1	P 214.914†	373.9	101.6	167.74 µg/L	167.74 ppb	14:06:22
1	Pb 220.353†	69.3	39.2	10.246 µg/L	10.246 ppb	14:06:22
1	S 181.975 Axial†	58.8	36.3	115.39 µg/L	115.39 ppb	14:06:22
1	Sb 206.836†	40.6	17.9	16.105 µg/L	16.105 ppb	14:06:22
1	Se 196.026†	56.2	28.9	27.211 µg/L	27.211 ppb	14:06:22
1	SiO2†	3946.4	1168.0	210.87 µg/L	210.87 ppb	14:06:02
1	Si 251.611†	1875.8	1452.4	98.739 µg/L	98.739 ppb	14:06:22
1	Sn 189.927†	22.1	29.6	11.534 µg/L	11.534 ppb	14:06:22
1	Ti 334.940†	1641.2	2219.0	5.1680 µg/L	5.1680 ppb	14:06:02
1	Tl 190.801†	-6.3	27.8	27.294 µg/L	27.294 ppb	14:06:22
1	U 409.014†	616.5	622.5	56.498 µg/L	56.498 ppb	14:06:02
1	V 292.402†	554.5	442.4	5.3704 µg/L	5.3704 ppb	14:06:02
1	Zn 213.857†	1334.7	326.3	7.4505 µg/L	7.4505 ppb	14:06:22
2	Sc RADIAL	99015.1	99015.1	102 %		14:05:00
2	Al 396.153Radial†	335.2	447.0	213.16 µg/L	213.16 ppb	14:05:00
2	Ca 317.933Radial†	968.2	561.2	204.22 µg/L	204.22 ppb	14:05:20
2	Fe 238.204 Radial†	18.1	5.7	68.037 µg/L	68.037 ppb	14:05:20
2	K 766.490 Radial†	782.7	279.7	130.55 µg/L	130.55 ppb	14:05:00
2	Mg 279.077 IEC†	34.3	25.5	336.87 µg/L	336.87 ppb	14:05:20
2	Na 589.592 Radial†	766.7	568.9	283.93 µg/L	283.93 ppb	14:05:00
2	Sr 421.552†	1007.8	845.7	5.0274 µg/L	5.0274 ppb	14:05:00
2	Sc 361.383	2103084.1	2103084.1	100.48 %		14:06:28
2	Y 371.029	1439658.8	1439658.8	100.47 %		14:06:28
2	Ag 328.068†	79.0	538.9	4.3590 µg/L	4.3590 ppb	14:06:34
2	As 188.979†	16.8	20.0	29.449 µg/L	29.449 ppb	14:06:54
2	B 249.677†	1371.9	1066.1	48.352 µg/L	48.352 ppb	14:06:54
2	Ba 233.527†	235.0	242.3	5.3067 µg/L	5.3067 ppb	14:06:54
2	Be 313.107†	7484.7	8608.0	5.0557 µg/L	5.0557 ppb	14:06:34
2	Cd 226.502†	32.0	202.4	4.8093 µg/L	4.8093 ppb	14:06:54
2	Co 228.616†	160.3	111.5	4.7870 µg/L	4.7870 ppb	14:06:54
2	Cr 267.716†	295.9	214.3	4.6625 µg/L	4.6625 ppb	14:06:54
2	Cu 324.752†	6013.7	1608.5	10.519 µg/L	10.519 ppb	14:06:34
2	Mn 257.610†	2763.7	3437.6	10.313 µg/L	10.313 ppb	14:06:54
2	Mo 202.031†	111.4	105.7	10.466 µg/L	10.466 ppb	14:06:54
2	Ni 231.604†	470.8	91.6	5.1355 µg/L	5.1355 ppb	14:06:54
2	P 214.914†	357.6	83.5	137.69 µg/L	137.69 ppb	14:06:54
2	Pb 220.353†	71.7	41.2	10.788 µg/L	10.788 ppb	14:06:54

2	S 181.975 Axial†	55.5	32.7	104.16 µg/L	104.16 ppb	14:06:54
2	Sb 206.836†	34.7	11.8	10.612 µg/L	10.612 ppb	14:06:54
2	Se 196.026†	61.9	34.3	32.143 µg/L	32.143 ppb	14:06:54
2	SiO2†	3980.4	1181.7	213.35 µg/L	213.35 ppb	14:06:34
2	Si 251.611†	1861.7	1428.7	97.131 µg/L	97.131 ppb	14:06:54
2	Sn 189.927†	22.6	30.0	11.687 µg/L	11.687 ppb	14:06:54
2	Ti 334.940†	1635.6	2205.1	5.1330 µg/L	5.1330 ppb	14:06:34
2	Tl 190.801†	-12.4	21.8	21.380 µg/L	21.380 ppb	14:06:54
2	U 409.014†	568.8	571.9	51.905 µg/L	51.905 ppb	14:06:34
2	V 292.402†	458.4	343.9	4.1959 µg/L	4.1959 ppb	14:06:34
2	Zn 213.857†	1347.2	331.9	7.5805 µg/L	7.5805 ppb	14:06:54
3	Sc RADIAL	98662.9	98662.9	102 %		14:05:25
3	Al 396.153Radial†	307.8	421.3	200.90 µg/L	200.90 ppb	14:05:25
3	Ca 317.933Radial†	966.0	562.4	204.66 µg/L	204.66 ppb	14:05:46
3	Fe 238.204 Radial†	21.0	8.7	102.55 µg/L	102.55 ppb	14:05:46
3	K 766.490 Radial†	794.6	294.2	137.28 µg/L	137.28 ppb	14:05:25
3	Mg 279.077 IEC†	33.5	24.9	328.04 µg/L	328.04 ppb	14:05:46
3	Na 589.592 Radial†	784.5	589.0	293.98 µg/L	293.98 ppb	14:05:25
3	Sr 421.552†	965.0	807.2	4.7989 µg/L	4.7989 ppb	14:05:25
3	Sc 361.383	2083397.0	2083397.0	99.536 %		14:07:00
3	Y 371.029	1425472.4	1425472.4	99.484 %		14:07:00
3	Ag 328.068†	101.2	561.8	4.5487 µg/L	4.5487 ppb	14:07:06
3	As 188.979†	17.7	21.0	31.021 µg/L	31.021 ppb	14:07:26
3	B 249.677†	1265.5	972.1	44.067 µg/L	44.067 ppb	14:07:26
3	Ba 233.527†	190.0	199.3	4.3663 µg/L	4.3663 ppb	14:07:26
3	Be 313.107†	6871.8	8062.7	4.7355 µg/L	4.7355 ppb	14:07:06
3	Cd 226.502†	12.3	182.9	4.3402 µg/L	4.3402 ppb	14:07:26
3	Co 228.616†	129.0	81.6	3.5039 µg/L	3.5039 ppb	14:07:26
3	Cr 267.716†	255.4	176.4	3.8390 µg/L	3.8390 ppb	14:07:26
3	Cu 324.752†	5895.5	1546.3	10.119 µg/L	10.119 ppb	14:07:06
3	Mn 257.610†	2245.9	2943.3	8.8301 µg/L	8.8301 ppb	14:07:26
3	Mo 202.031†	103.5	98.8	9.7817 µg/L	9.7817 ppb	14:07:26
3	Ni 231.604†	450.3	75.5	4.2322 µg/L	4.2322 ppb	14:07:26
3	P 214.914†	353.7	83.0	136.85 µg/L	136.85 ppb	14:07:26
3	Pb 220.353†	65.1	35.2	9.2083 µg/L	9.2083 ppb	14:07:26
3	S 181.975 Axial†	53.0	30.7	97.569 µg/L	97.569 ppb	14:07:26
3	Sb 206.836†	30.2	7.6	6.8898 µg/L	6.8898 ppb	14:07:26
3	Se 196.026†	58.3	31.2	29.401 µg/L	29.401 ppb	14:07:26
3	SiO2†	3940.6	1179.3	212.90 µg/L	212.90 ppb	14:07:06
3	Si 251.611†	1695.4	1279.3	86.969 µg/L	86.969 ppb	14:07:26
3	Sn 189.927†	19.8	27.3	10.646 µg/L	10.646 ppb	14:07:26
3	Ti 334.940†	1430.7	2014.6	4.6882 µg/L	4.6882 ppb	14:07:06
3	Tl 190.801†	-12.1	21.9	21.490 µg/L	21.490 ppb	14:07:26
3	U 409.014†	522.0	530.3	48.122 µg/L	48.122 ppb	14:07:06
3	V 292.402†	489.6	379.6	4.6018 µg/L	4.6018 ppb	14:07:06
3	Zn 213.857†	1250.7	247.7	5.6441 µg/L	5.6441 ppb	14:07:26

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2092953.4	99.993 %	0.4709			0.47%
Sc RADIAL	98937.8	102 %	0.3			0.25%
Y 371.029	1432385.9	99.966 %	0.4955			0.50%
Ag 328.068†	577.3	4.6725 µg/L	0.39048	4.6725 ppb	0.39048	8.36%
QC value within limits for Ag 328.068 Recovery = 93.45%						
Al 396.153Radial†	433.3	206.61 µg/L	6.174	206.61 ppb	6.174	2.99%
QC value within limits for Al 396.153Radial Recovery = 103.30%						
As 188.979†	20.7	30.601 µg/L	1.0098	30.601 ppb	1.0098	3.30%
QC value within limits for As 188.979 Recovery = 102.00%						
B 249.677†	1037.4	47.042 µg/L	2.5830	47.042 ppb	2.5830	5.49%
QC value within limits for B 249.677 Recovery = 94.08%						
Ba 233.527†	232.0	5.0826 µg/L	0.63463	5.0826 ppb	0.63463	12.49%
QC value within limits for Ba 233.527 Recovery = 101.65%						
Be 313.107†	8462.7	4.9704 µg/L	0.20593	4.9704 ppb	0.20593	4.14%
QC value within limits for Be 313.107 Recovery = 99.41%						
Ca 317.933Radial†	564.0	205.24 µg/L	1.399	205.24 ppb	1.399	0.68%
QC value within limits for Ca 317.933Radial Recovery = 102.62%						
Cd 226.502†	199.4	4.7347 µg/L	0.36306	4.7347 ppb	0.36306	7.67%
QC value within limits for Cd 226.502 Recovery = 94.69%						
Co 228.616†	100.4	4.3130 µg/L	0.70411	4.3130 ppb	0.70411	16.33%

	QC value within limits for Co	228.616	Recovery = 86.26%				
Cr	267.716†	203.4	4.4272 µg/L	0.51280	4.4272 ppb	0.51280	11.58%
	QC value within limits for Cr	267.716	Recovery = 88.54%				
Cu	324.752†	1589.5	10.398 µg/L	0.2423	10.398 ppb	0.2423	2.33%
	QC value within limits for Cu	324.752	Recovery = 103.98%				
Fe	238.204 Radial†	7.3	85.888 µg/L	17.2853	85.888 ppb	17.2853	20.13%
	QC value within limits for Fe	238.204 Radial	Recovery = 85.89%				
K	766.490 Radial†	291.2	135.89 µg/L	4.794	135.89 ppb	4.794	3.53%
	QC value within limits for K	766.490 Radial	Recovery = 90.59%				
Mg	279.077 IEC†	24.5	323.43 µg/L	16.250	323.43 ppb	16.250	5.02%
	QC value within limits for Mg	279.077 IEC	Recovery = 107.81%				
Mn	257.610†	3280.0	9.8413 µg/L	0.87640	9.8413 ppb	0.87640	8.91%
	QC value within limits for Mn	257.610	Recovery = 98.41%				
Mo	202.031†	107.4	10.630 µg/L	0.9415	10.630 ppb	0.9415	8.86%
	QC value within limits for Mo	202.031	Recovery = 106.30%				
Na	589.592 Radial†	585.6	292.27 µg/L	7.636	292.27 ppb	7.636	2.61%
	QC value within limits for Na	589.592 Radial	Recovery = 97.42%				
Ni	231.604†	88.7	4.9706 µg/L	0.67133	4.9706 ppb	0.67133	13.51%
	QC value within limits for Ni	231.604	Recovery = 99.41%				
P	214.914†	89.4	147.43 µg/L	17.599	147.43 ppb	17.599	11.94%
	QC value within limits for P	214.914	Recovery = 98.29%				
Pb	220.353†	38.5	10.081 µg/L	0.8026	10.081 ppb	0.8026	7.96%
	QC value within limits for Pb	220.353	Recovery = 100.81%				
S	181.975 Axial†	33.2	105.71 µg/L	9.013	105.71 ppb	9.013	8.53%
	QC value within limits for S	181.975 Axial	Recovery = 105.71%				
Sb	206.836†	12.4	11.202 µg/L	4.6357	11.202 ppb	4.6357	41.38%
	QC value within limits for Sb	206.836	Recovery = 112.02%				
Se	196.026†	31.5	29.585 µg/L	2.4709	29.585 ppb	2.4709	8.35%
	QC value within limits for Se	196.026	Recovery = 98.62%				
SiO2†	1176.3	212.37 µg/L	1.320	212.37 ppb	1.320	0.62%	
	QC value within limits for SiO2		Recovery = 99.70%				
Si	251.611†	1386.8	94.280 µg/L	6.3819	94.280 ppb	6.3819	6.77%
	QC value within limits for Si	251.611	Recovery = 94.28%				
Sn	189.927†	28.9	11.289 µg/L	0.5618	11.289 ppb	0.5618	4.98%
	QC value within limits for Sn	189.927	Recovery = 112.89%				
Sr	421.552†	831.3	4.9420 µg/L	0.12476	4.9420 ppb	0.12476	2.52%
	QC value within limits for Sr	421.552	Recovery = 98.84%				
Ti	334.940†	2146.2	4.9964 µg/L	0.26749	4.9964 ppb	0.26749	5.35%
	QC value within limits for Ti	334.940	Recovery = 99.93%				
Tl	190.801†	23.9	23.388 µg/L	3.3834	23.388 ppb	3.3834	14.47%
	QC value within limits for Tl	190.801	Recovery = 116.94%				
U	409.014†	574.9	52.175 µg/L	4.1942	52.175 ppb	4.1942	8.04%
	QC value within limits for U	409.014	Recovery = 104.35%				
V	292.402†	388.6	4.7227 µg/L	0.59653	4.7227 ppb	0.59653	12.63%
	QC value within limits for V	292.402	Recovery = 94.45%				
Zn	213.857†	302.0	6.8917 µg/L	1.08243	6.8917 ppb	1.08243	15.71%
	QC value less than the lower limit for Zn	213.857	Recovery = 68.92%				
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 3/16/2010 14:07:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95101.3	95101.3	98.3 %		14:08:15
1	Al 396.153Radial†	1068948.1	1088029.1	519390 µg/L	519390 ppb	14:08:10
1	Ca 317.933Radial†	1322895.4	1345976.5	489830 µg/L	489830 ppb	14:08:10
1	Fe 238.204 Radial†	15758.7	16026.3	189550 µg/L	189550 ppb	14:08:15
1	K 766.490 Radial†	183.6	-298.5	-139.29 µg/L	-139.29 ppb	14:08:15
1	Mg 279.077 IEC†	37323.7	37977.8	500470 µg/L	500470 ppb	14:08:15
1	Na 589.592 Radial†	173.3	-4.2	-2.1132 µg/L	-2.1132 ppb	14:08:15
1	Sr 421.552†	723.2	596.6	3.5466 µg/L	3.5466 ppb	14:08:15
1	Sc 361.383	1962419.5	1962419.5	93.756 %		14:08:51
1	Y 371.029	1328103.7	1328103.7	92.688 %		14:08:51
1	Ag 328.068†	-2109.5	-1789.7	0.3332 µg/L	0.3332 ppb	14:09:12
1	As 188.979†	26.5	31.5	-36.469 µg/L	-36.469 ppb	14:09:12
1	B 249.677†	1192.3	972.4	-54.785 µg/L	-54.785 ppb	14:08:51
1	Ba 233.527†	311.3	340.4	7.4797 µg/L	7.4797 ppb	14:09:12
1	Be 313.107†	-1694.4	-648.4	-0.3927 µg/L	-0.3927 ppb	14:08:51
1	Cd 226.502†	836.0	1062.3	3.8277 µg/L	3.8277 ppb	14:09:12
1	Co 228.616†	117.7	77.5	3.2585 µg/L	3.2585 ppb	14:09:12
1	Cr 267.716†	-8.7	-89.5	-1.9348 µg/L	-1.9348 ppb	14:09:12
1	Cu 324.752†	-794.8	-5224.4	1.5123 µg/L	1.5123 ppb	14:09:12
1	Mn 257.610†	6547.1	7670.0	0.5282 µg/L	0.5282 ppb	14:08:51
1	Mo 202.031†	-76.6	-86.9	-1.3920 µg/L	-1.3920 ppb	14:09:12
1	Ni 231.604†	290.1	-67.5	-1.3258 µg/L	-1.3258 ppb	14:09:12
1	P 214.914†	300.2	47.8	78.143 µg/L	78.143 ppb	14:09:12
1	Pb 220.353†	-135.1	-174.3	-3.5676 µg/L	-3.5676 ppb	14:09:12
1	S 181.975 Axial†	-17.9	-41.7	-132.62 µg/L	-132.62 ppb	14:09:12
1	Sb 206.836†	23.5	2.4	-5.3575 µg/L	-5.3575 ppb	14:09:12
1	Se 196.026†	-173.4	-212.3	-12.241 µg/L	-12.241 ppb	14:09:12
1	SiO2†	2437.2	-180.3	-32.546 µg/L	-32.546 ppb	14:09:12
1	Si 251.611†	451.7	57.7	3.9218 µg/L	3.9218 ppb	14:09:12
1	Sn 189.927†	-90.6	-89.2	15.477 µg/L	15.477 ppb	14:09:12
1	Ti 334.940†	11734.0	13092.7	-1.1982 µg/L	-1.1982 ppb	14:08:51
1	Tl 190.801†	-5.5	28.3	-40.482 µg/L	-40.482 ppb	14:09:12
1	U 409.014†	-85.6	-85.5	-63.991 µg/L	-63.991 ppb	14:08:51
1	V 292.402†	1637.5	1634.2	-4.8417 µg/L	-4.8417 ppb	14:09:12
1	Zn 213.857†	2250.2	1391.2	-5.2885 µg/L	-5.2885 ppb	14:09:12
2	Sc RADIAL	94743.4	94743.4	97.9 %		14:08:27
2	Al 396.153Radial†	1071081.9	1094319.4	522390 µg/L	522390 ppb	14:08:21
2	Ca 317.933Radial†	1325360.9	1353582.1	492600 µg/L	492600 ppb	14:08:21
2	Fe 238.204 Radial†	15661.2	15987.3	189090 µg/L	189090 ppb	14:08:27
2	K 766.490 Radial†	156.2	-325.8	-152.03 µg/L	-152.03 ppb	14:08:27
2	Mg 279.077 IEC†	37248.3	38044.3	501350 µg/L	501350 ppb	14:08:27
2	Na 589.592 Radial†	229.2	53.5	26.712 µg/L	26.712 ppb	14:08:27
2	Sr 421.552†	690.4	565.9	3.3641 µg/L	3.3641 ppb	14:08:27
2	Sc 361.383	1958596.1	1958596.1	93.574 %		14:09:20
2	Y 371.029	1328310.8	1328310.8	92.703 %		14:09:20
2	Ag 328.068†	-2099.7	-1783.7	0.3431 µg/L	0.3431 ppb	14:09:41
2	As 188.979†	19.8	24.4	-47.282 µg/L	-47.282 ppb	14:09:41
2	B 249.677†	1155.4	935.4	-56.223 µg/L	-56.223 ppb	14:09:20
2	Ba 233.527†	296.3	325.0	7.1421 µg/L	7.1421 ppb	14:09:41
2	Be 313.107†	-1675.4	-631.6	-0.3827 µg/L	-0.3827 ppb	14:09:20
2	Cd 226.502†	836.2	1064.2	3.9252 µg/L	3.9252 ppb	14:09:41
2	Co 228.616†	119.8	79.9	3.3643 µg/L	3.3643 ppb	14:09:41
2	Cr 267.716†	-14.4	-95.6	-2.0676 µg/L	-2.0676 ppb	14:09:41
2	Cu 324.752†	-833.5	-5267.5	1.1444 µg/L	1.1444 ppb	14:09:41
2	Mn 257.610†	6564.5	7702.4	0.5389 µg/L	0.5389 ppb	14:09:20
2	Mo 202.031†	-59.6	-68.9	0.3706 µg/L	0.3706 ppb	14:09:41
2	Ni 231.604†	281.1	-76.5	-1.8354 µg/L	-1.8354 ppb	14:09:41
2	P 214.914†	298.1	46.2	76.648 µg/L	76.648 ppb	14:09:41
2	Pb 220.353†	-119.4	-157.8	0.9868 µg/L	0.9868 ppb	14:09:41

2	S 181.975 Axial†	-36.9	-61.9	-197.09 µg/L	-197.09 ppb	14:09:41
2	Sb 206.836†	14.8	-6.9	-13.630 µg/L	-13.630 ppb	14:09:41
2	Se 196.026†	-170.9	-209.9	-12.396 µg/L	-12.396 ppb	14:09:41
2	SiO2†	2462.8	-147.8	-26.690 µg/L	-26.690 ppb	14:09:41
2	Si 251.611†	450.0	56.8	3.8591 µg/L	3.8591 ppb	14:09:41
2	Sn 189.927†	-95.2	-94.3	13.772 µg/L	13.772 ppb	14:09:41
2	Ti 334.940†	11708.0	13089.3	-1.2316 µg/L	-1.2316 ppb	14:09:20
2	Tl 190.801†	-0.2	33.9	-35.621 µg/L	-35.621 ppb	14:09:41
2	U 409.014†	-71.1	-70.2	-62.706 µg/L	-62.706 ppb	14:09:20
2	V 292.402†	1595.5	1592.7	-5.2578 µg/L	-5.2578 ppb	14:09:41
2	Zn 213.857†	2260.4	1406.8	-4.9565 µg/L	-4.9565 ppb	14:09:41
3	Sc RADIAL	94615.8	94615.8	97.8 %		14:08:39
3	Al 396.153Radial†	1070126.8	1094818.2	522630 µg/L	522630 ppb	14:08:33
3	Ca 317.933Radial†	1321933.3	1351902.1	491990 µg/L	491990 ppb	14:08:33
3	Fe 238.204 Radial†	15752.5	16102.2	190450 µg/L	190450 ppb	14:08:39
3	K 766.490 Radial†	346.7	-130.6	-60.965 µg/L	-60.965 ppb	14:08:39
3	Mg 279.077 IEC†	37295.7	38144.1	502660 µg/L	502660 ppb	14:08:39
3	Na 589.592 Radial†	176.8	0.2	0.1120 µg/L	0.1120 ppb	14:08:39
3	Sr 421.552†	727.4	604.7	3.5948 µg/L	3.5948 ppb	14:08:39
3	Sc 361.383	1957230.1	1957230.1	93.508 %		14:09:49
3	Y 371.029	1328849.1	1328849.1	92.740 %		14:09:49
3	Ag 328.068†	-2090.5	-1775.4	0.5143 µg/L	0.5143 ppb	14:10:09
3	As 188.979†	27.1	32.2	-35.852 µg/L	-35.852 ppb	14:10:09
3	B 249.677†	1079.8	855.5	-60.559 µg/L	-60.559 ppb	14:09:49
3	Ba 233.527†	289.5	318.0	6.9890 µg/L	6.9890 ppb	14:10:09
3	Be 313.107†	-1694.6	-653.4	-0.3956 µg/L	-0.3956 ppb	14:09:49
3	Cd 226.502†	841.7	1070.7	3.9264 µg/L	3.9264 ppb	14:10:09
3	Co 228.616†	97.9	56.7	2.3643 µg/L	2.3643 ppb	14:10:09
3	Cr 267.716†	-18.6	-100.1	-2.1662 µg/L	-2.1662 ppb	14:10:09
3	Cu 324.752†	-774.4	-5204.9	1.8089 µg/L	1.8089 ppb	14:10:09
3	Mn 257.610†	6613.9	7760.1	0.7041 µg/L	0.7041 ppb	14:09:49
3	Mo 202.031†	-53.8	-62.6	1.0417 µg/L	1.0417 ppb	14:10:09
3	Ni 231.604†	295.6	-60.8	-0.9382 µg/L	-0.9382 ppb	14:10:09
3	P 214.914†	309.6	58.6	96.340 µg/L	96.340 ppb	14:10:09
3	Pb 220.353†	-120.4	-159.0	0.7035 µg/L	0.7035 ppb	14:10:09
3	S 181.975 Axial†	-31.1	-55.8	-177.44 µg/L	-177.44 ppb	14:10:09
3	Sb 206.836†	23.5	2.4	-5.3232 µg/L	-5.3232 ppb	14:10:09
3	Se 196.026†	-197.2	-238.2	-35.579 µg/L	-35.579 ppb	14:10:09
3	SiO2†	2453.8	-155.6	-28.094 µg/L	-28.094 ppb	14:10:09
3	Si 251.611†	446.0	52.8	3.5919 µg/L	3.5919 ppb	14:10:09
3	Sn 189.927†	-86.3	-84.9	17.393 µg/L	17.393 ppb	14:10:09
3	Ti 334.940†	11750.2	13143.2	-1.2193 µg/L	-1.2193 ppb	14:09:49
3	Tl 190.801†	-4.4	29.4	-39.609 µg/L	-39.609 ppb	14:10:09
3	U 409.014†	-10.1	-5.0	-56.935 µg/L	-56.935 ppb	14:09:49
3	V 292.402†	1598.6	1597.3	-5.3658 µg/L	-5.3658 ppb	14:10:09
3	Zn 213.857†	2255.7	1403.5	-5.1752 µg/L	-5.1752 ppb	14:10:09

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1959415.2	93.613 %	0.1285			0.14%
Sc RADIAL	94820.2	98.0 %	0.26			0.27%
Y 371.029	1328421.2	92.711 %	0.0269			0.03%
Ag 328.068†	-1783.0	0.3969 µg/L	0.10183	0.3969 ppb	0.10183	25.66%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1092388.9	521470 µg/L	1806.3	521470 ppb	1806.3	0.35%
QC value within limits for Al 396.153Radial Recovery = 104.29%						
As 188.979†	29.4	-39.868 µg/L	6.4283	-39.868 ppb	6.4283	16.12%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	921.1	-57.189 µg/L	3.0060	-57.189 ppb	3.0060	5.26%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	327.8	7.2036 µg/L	0.25105	7.2036 ppb	0.25105	3.49%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-644.5	-0.3903 µg/L	0.00673	-0.3903 ppb	0.00673	1.72%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1350486.9	491470 µg/L	1454.0	491470 ppb	1454.0	0.30%
QC value within limits for Ca 317.933Radial Recovery = 98.29%						
Cd 226.502†	1065.7	3.8931 µg/L	0.05662	3.8931 ppb	0.05662	1.45%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	71.4	2.9957 µg/L	0.54934	2.9957 ppb	0.54934	18.34%

Cr	267.716†	-95.1	-2.0562 µg/L	0.11610	-2.0562 ppb	0.11610	5.65%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-5232.3	1.4885 µg/L	0.33291	1.4885 ppb	0.33291	22.37%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	16038.6	189700 µg/L	691.3	189700 ppb	691.3	0.36%
QC value within limits for Fe 238.204 Radial Recovery = 94.85%							
K	766.490 Radial†	-251.6	-117.43 µg/L	49.312	-117.43 ppb	49.312	41.99%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	38055.4	501490 µg/L	1102.7	501490 ppb	1102.7	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 100.30%							
Mn	257.610†	7710.8	0.5904 µg/L	0.09865	0.5904 ppb	0.09865	16.71%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-72.8	0.0068 µg/L	1.25699	0.0068 ppb	1.25699	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	16.5	8.2368 µg/L	16.03833	8.2368 ppb	16.03833	194.71%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-68.3	-1.3665 µg/L	0.44997	-1.3665 ppb	0.44997	32.93%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	50.9	83.710 µg/L	10.9632	83.710 ppb	10.9632	13.10%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-163.7	-0.6258 µg/L	2.55166	-0.6258 ppb	2.55166	407.75%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-53.1	-169.05 µg/L	33.044	-169.05 ppb	33.044	19.55%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-0.7	-8.1034 µg/L	4.78578	-8.1034 ppb	4.78578	59.06%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-220.2	-20.072 µg/L	13.4298	-20.072 ppb	13.4298	66.91%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-161.2	-29.110 µg/L	3.0573	-29.110 ppb	3.0573	10.50%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	55.8	3.7909 µg/L	0.17521	3.7909 ppb	0.17521	4.62%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-89.5	15.547 µg/L	1.8114	15.547 ppb	1.8114	11.65%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	589.0	3.5018 µg/L	0.12168	3.5018 ppb	0.12168	3.47%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	13108.4	-1.2163 µg/L	0.01687	-1.2163 ppb	0.01687	1.39%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	30.5	-38.571 µg/L	2.5916	-38.571 ppb	2.5916	6.72%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-53.6	-61.211 µg/L	3.7580	-61.211 ppb	3.7580	6.14%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	1608.1	-5.1551 µg/L	0.27672	-5.1551 ppb	0.27672	5.37%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	1400.5	-5.1401 µg/L	0.16878	-5.1401 ppb	0.16878	3.28%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 104
 Date Collected: 3/16/2010 14:10:20
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSAB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94053.1	94053.1	97.2 %		14:10:57
1	Al 396.153Radial†	1067713.2	1098883.6	524560 µg/L	524560 ppb	14:10:52
1	Ca 317.933Radial†	1313723.3	1351543.5	491860 µg/L	491860 ppb	14:10:52
1	Fe 238.204 Radial†	15574.9	16015.9	189440 µg/L	189440 ppb	14:10:57
1	K 766.490 Radial†	11413.8	11260.4	5255.0 µg/L	5255.0 ppb	14:10:57
1	Mg 279.077 IEC†	37024.0	38092.7	501990 µg/L	501990 ppb	14:10:57
1	Na 589.592 Radial†	10371.5	10492.5	5236.9 µg/L	5236.9 ppb	14:10:57
1	Sr 421.552†	84533.3	86852.3	516.33 µg/L	516.33 ppb	14:10:52
1	Sc 361.383	1945677.3	1945677.3	92.956 %		14:11:35
1	Y 371.029	1321275.4	1321275.4	92.212 %		14:11:35
1	Ag 328.068†	28537.8	31160.5	268.35 µg/L	268.35 ppb	14:11:35
1	As 188.979†	352.2	382.2	480.63 µg/L	480.63 ppb	14:11:56
1	B 249.677†	11895.7	12497.7	469.11 µg/L	469.11 ppb	14:11:35
1	Ba 233.527†	21530.7	23170.5	507.72 µg/L	507.72 ppb	14:11:56
1	Be 313.107†	391033.5	421822.4	247.64 µg/L	247.64 ppb	14:11:35
1	Cd 226.502†	19152.1	20773.9	472.85 µg/L	472.85 ppb	14:11:56
1	Co 228.616†	9873.1	10573.1	453.56 µg/L	453.56 ppb	14:11:56
1	Cr 267.716†	21065.8	22581.8	491.48 µg/L	491.48 ppb	14:11:56
1	Cu 324.752†	79293.3	80925.0	564.18 µg/L	564.18 ppb	14:11:35
1	Mn 257.610†	159425.0	172192.2	494.88 µg/L	494.88 ppb	14:11:35
1	Mo 202.031†	4814.2	5173.9	519.16 µg/L	519.16 ppb	14:11:56
1	Ni 231.604†	7809.6	8024.5	451.99 µg/L	451.99 ppb	14:11:56
1	P 214.914†	1791.6	1655.0	2696.6 µg/L	2696.6 ppb	14:11:56
1	Pb 220.353†	1636.8	1730.7	496.31 µg/L	496.31 ppb	14:11:56
1	S 181.975 Axial†	767.2	802.8	2555.0 µg/L	2555.0 ppb	14:11:56
1	Sb 206.836†	588.4	610.2	539.79 µg/L	539.79 ppb	14:11:56
1	Se 196.026†	2310.6	2458.3	2495.9 µg/L	2495.9 ppb	14:11:56
1	SiO2†	60072.3	61844.4	11165 µg/L	11165 ppb	14:11:35
1	Si 251.611†	71989.3	77020.1	5236.1 µg/L	5236.1 ppb	14:11:35
1	Sn 189.927†	1167.8	1263.7	542.42 µg/L	542.42 ppb	14:11:56
1	Ti 334.940†	217593.7	234658.8	516.82 µg/L	516.82 ppb	14:11:35
1	Tl 190.801†	446.3	514.2	439.15 µg/L	439.15 ppb	14:11:56
1	U 409.014†	5107.8	5500.6	443.11 µg/L	443.11 ppb	14:11:35
1	V 292.402†	42830.7	45963.8	524.13 µg/L	524.13 ppb	14:11:35
1	Zn 213.857†	21890.3	22540.2	478.65 µg/L	478.65 ppb	14:11:56
2	Sc RADIAL	93638.4	93638.4	96.7 %		14:11:09
2	Al 396.153Radial†	1069334.2	1105424.8	527690 µg/L	527690 ppb	14:11:03
2	Ca 317.933Radial†	1320981.3	1365032.5	496760 µg/L	496760 ppb	14:11:03
2	Fe 238.204 Radial†	15571.4	16083.3	190240 µg/L	190240 ppb	14:11:09
2	K 766.490 Radial†	11415.1	11313.8	5279.9 µg/L	5279.9 ppb	14:11:09
2	Mg 279.077 IEC†	37110.4	38350.8	505400 µg/L	505400 ppb	14:11:09
2	Na 589.592 Radial†	10420.1	10590.0	5285.5 µg/L	5285.5 ppb	14:11:09
2	Sr 421.552†	84800.8	87514.0	520.26 µg/L	520.26 ppb	14:11:03
2	Sc 361.383	1955393.4	1955393.4	93.421 %		14:12:05
2	Y 371.029	1326796.4	1326796.4	92.597 %		14:12:05
2	Ag 328.068†	28696.1	31177.3	268.53 µg/L	268.53 ppb	14:12:05
2	As 188.979†	357.9	386.3	486.04 µg/L	486.04 ppb	14:12:25
2	B 249.677†	11881.3	12418.7	465.10 µg/L	465.10 ppb	14:12:05
2	Ba 233.527†	21506.4	23029.4	504.63 µg/L	504.63 ppb	14:12:25
2	Be 313.107†	391632.1	420372.9	246.78 µg/L	246.78 ppb	14:12:05
2	Cd 226.502†	19130.2	20648.1	469.76 µg/L	469.76 ppb	14:12:25
2	Co 228.616†	9843.2	10488.4	449.92 µg/L	449.92 ppb	14:12:25
2	Cr 267.716†	21078.3	22482.6	489.32 µg/L	489.32 ppb	14:12:25
2	Cu 324.752†	79499.1	80721.4	563.00 µg/L	563.00 ppb	14:12:05
2	Mn 257.610†	159830.4	171773.9	493.44 µg/L	493.44 ppb	14:12:05
2	Mo 202.031†	4791.9	5124.3	514.28 µg/L	514.28 ppb	14:12:25
2	Ni 231.604†	7776.7	7947.5	447.69 µg/L	447.69 ppb	14:12:25
2	P 214.914†	1776.3	1629.0	2653.8 µg/L	2653.8 ppb	14:12:25
2	Pb 220.353†	1629.1	1713.6	492.08 µg/L	492.08 ppb	14:12:25

2	S 181.975 Axial†	761.6	792.7	2522.6 µg/L	2522.6 ppb	14:12:25
2	Sb 206.836†	574.0	591.7	523.15 µg/L	523.15 ppb	14:12:25
2	Se 196.026†	2291.8	2425.9	2465.0 µg/L	2465.0 ppb	14:12:25
2	SiO2†	60171.1	61629.1	11126 µg/L	11126 ppb	14:12:05
2	Si 251.611†	72027.3	76676.0	5212.7 µg/L	5212.7 ppb	14:12:05
2	Sn 189.927†	1166.0	1255.6	539.76 µg/L	539.76 ppb	14:12:25
2	Ti 334.940†	217901.4	233825.1	514.68 µg/L	514.68 ppb	14:12:05
2	Tl 190.801†	449.6	515.4	439.36 µg/L	439.36 ppb	14:12:25
2	U 409.014†	5127.6	5494.6	442.15 µg/L	442.15 ppb	14:12:05
2	V 292.402†	42839.5	45744.3	521.40 µg/L	521.40 ppb	14:12:05
2	Zn 213.857†	21866.3	22397.4	475.15 µg/L	475.15 ppb	14:12:25
3	Sc RADIAL	93917.0	93917.0	97.0 %		14:11:21
3	Al 396.153Radial†	1073322.7	1106256.3	528080 µg/L	528080 ppb	14:11:15
3	Ca 317.933Radial†	1326453.9	1366621.8	497340 µg/L	497340 ppb	14:11:15
3	Fe 238.204 Radial†	15607.0	16072.2	190110 µg/L	190110 ppb	14:11:21
3	K 766.490 Radial†	11611.4	11481.1	5358.0 µg/L	5358.0 ppb	14:11:21
3	Mg 279.077 IEC†	37262.6	38393.8	505960 µg/L	505960 ppb	14:11:21
3	Na 589.592 Radial†	10431.2	10569.6	5275.3 µg/L	5275.3 ppb	14:11:21
3	Sr 421.552†	85202.7	87668.1	521.18 µg/L	521.18 ppb	14:11:15
3	Sc 361.383	1947287.0	1947287.0	93.033 %		14:12:35
3	Y 371.029	1322583.6	1322583.6	92.303 %		14:12:35
3	Ag 328.068†	28534.1	31131.1	268.15 µg/L	268.15 ppb	14:12:35
3	As 188.979†	364.0	394.5	498.14 µg/L	498.14 ppb	14:12:55
3	B 249.677†	11968.2	12565.0	471.81 µg/L	471.81 ppb	14:12:35
3	Ba 233.527†	21563.0	23186.1	508.06 µg/L	508.06 ppb	14:12:55
3	Be 313.107†	389686.7	420026.9	246.58 µg/L	246.58 ppb	14:12:35
3	Cd 226.502†	19155.5	20760.5	472.45 µg/L	472.45 ppb	14:12:55
3	Co 228.616†	9854.9	10544.8	452.35 µg/L	452.35 ppb	14:12:55
3	Cr 267.716†	21056.0	22552.5	490.84 µg/L	490.84 ppb	14:12:55
3	Cu 324.752†	79207.3	80762.0	563.24 µg/L	563.24 ppb	14:12:35
3	Mn 257.610†	158800.3	171378.9	492.21 µg/L	492.21 ppb	14:12:35
3	Mo 202.031†	4816.0	5171.5	518.95 µg/L	518.95 ppb	14:12:55
3	Ni 231.604†	7822.5	8031.4	452.39 µg/L	452.39 ppb	14:12:55
3	P 214.914†	1783.0	1644.1	2679.1 µg/L	2679.1 ppb	14:12:55
3	Pb 220.353†	1652.3	1745.8	500.58 µg/L	500.58 ppb	14:12:55
3	S 181.975 Axial†	786.5	822.9	2618.9 µg/L	2618.9 ppb	14:12:55
3	Sb 206.836†	583.5	604.5	534.62 µg/L	534.62 ppb	14:12:55
3	Se 196.026†	2320.8	2467.3	2503.0 µg/L	2503.0 ppb	14:12:55
3	SiO2†	59865.2	61568.4	11115 µg/L	11115 ppb	14:12:35
3	Si 251.611†	71749.0	76697.7	5214.2 µg/L	5214.2 ppb	14:12:35
3	Sn 189.927†	1160.6	1254.9	539.57 µg/L	539.57 ppb	14:12:55
3	Ti 334.940†	217063.3	233895.2	514.81 µg/L	514.81 ppb	14:12:35
3	Tl 190.801†	464.1	532.9	456.36 µg/L	456.36 ppb	14:12:55
3	U 409.014†	4969.9	5347.9	428.82 µg/L	428.82 ppb	14:12:35
3	V 292.402†	42719.6	45806.3	522.17 µg/L	522.17 ppb	14:12:35
3	Zn 213.857†	21894.2	22524.9	478.04 µg/L	478.04 ppb	14:12:55

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1949452.6	93.137 %	0.2488			0.27%
Sc RADIAL	93869.5	97.0 %	0.22			0.23%
Y 371.029	1323551.8	92.371 %	0.2013			0.22%
Ag 328.068†	31156.3	268.35 µg/L	0.188	268.35 ppb	0.188	0.07%
QC value within limits for Ag 328.068 Recovery = 107.34%						
Al 396.153Radial†	1103521.6	526780 µg/L	1927.7	526780 ppb	1927.7	0.37%
QC value within limits for Al 396.153Radial Recovery = 105.36%						
As 188.979†	387.7	488.27 µg/L	8.962	488.27 ppb	8.962	1.84%
QC value within limits for As 188.979 Recovery = 97.65%						
B 249.677†	12493.8	468.67 µg/L	3.376	468.67 ppb	3.376	0.72%
QC value within limits for B 249.677 Recovery = 93.73%						
Ba 233.527†	23128.7	506.80 µg/L	1.889	506.80 ppb	1.889	0.37%
QC value within limits for Ba 233.527 Recovery = 101.36%						
Be 313.107†	420740.7	247.00 µg/L	0.559	247.00 ppb	0.559	0.23%
QC value within limits for Be 313.107 Recovery = 98.80%						
Ca 317.933Radial†	1361065.9	495320 µg/L	3015.0	495320 ppb	3015.0	0.61%
QC value within limits for Ca 317.933Radial Recovery = 99.06%						
Cd 226.502†	20727.5	471.69 µg/L	1.679	471.69 ppb	1.679	0.36%
QC value within limits for Cd 226.502 Recovery = 94.34%						
Co 228.616†	10535.4	451.94 µg/L	1.855	451.94 ppb	1.855	0.41%

Cr	267.716†	22538.9	490.55 µg/L	1.109	490.55 ppb	1.109	0.23%
Cu	324.752†	80802.8	563.48 µg/L	0.623	563.48 ppb	0.623	0.11%
Fe	238.204 Radial†	16057.1	189930 µg/L	427.6	189930 ppb	427.6	0.23%
K	766.490 Radial†	11351.7	5297.6 µg/L	53.73	5297.6 ppb	53.73	1.01%
Mg	279.077 IEC†	38279.1	504450 µg/L	2146.3	504450 ppb	2146.3	0.43%
Mn	257.610†	171781.7	493.51 µg/L	1.338	493.51 ppb	1.338	0.27%
Mo	202.031†	5156.5	517.46 µg/L	2.757	517.46 ppb	2.757	0.53%
Na	589.592 Radial†	10550.7	5265.9 µg/L	25.65	5265.9 ppb	25.65	0.49%
Ni	231.604†	8001.1	450.69 µg/L	2.606	450.69 ppb	2.606	0.58%
P	214.914†	1642.7	2676.5 µg/L	21.56	2676.5 ppb	21.56	0.81%
Pb	220.353†	1730.0	496.32 µg/L	4.247	496.32 ppb	4.247	0.86%
S	181.975 Axial†	806.1	2565.5 µg/L	48.98	2565.5 ppb	48.98	1.91%
Sb	206.836†	602.2	532.52 µg/L	8.516	532.52 ppb	8.516	1.60%
Se	196.026†	2450.5	2488.0 µg/L	20.20	2488.0 ppb	20.20	0.81%
SiO2†		61680.7	11136 µg/L	26.2	11136 ppb	26.2	0.24%
Si	251.611†	76798.0	5221.0 µg/L	13.10	5221.0 ppb	13.10	0.25%
Sn	189.927†	1258.1	540.58 µg/L	1.593	540.58 ppb	1.593	0.29%
Sr	421.552†	87344.8	519.25 µg/L	2.577	519.25 ppb	2.577	0.50%
Ti	334.940†	234126.3	515.44 µg/L	1.201	515.44 ppb	1.201	0.23%
Tl	190.801†	520.8	444.95 µg/L	9.875	444.95 ppb	9.875	2.22%
U	409.014†	5447.7	438.03 µg/L	7.992	438.03 ppb	7.992	1.82%
V	292.402†	45838.2	522.57 µg/L	1.410	522.57 ppb	1.410	0.27%
Zn	213.857†	22487.5	477.28 µg/L	1.868	477.28 ppb	1.868	0.39%

QC value within limits for Co 228.616 Recovery = 90.39%

QC value within limits for Cr 267.716 Recovery = 98.11%

QC value within limits for Cu 324.752 Recovery = 112.70%

QC value within limits for Fe 238.204 Radial Recovery = 94.96%

QC value within limits for K 766.490 Radial Recovery = 105.95%

QC value within limits for Mg 279.077 IEC Recovery = 100.89%

QC value within limits for Mn 257.610 Recovery = 98.70%

QC value within limits for Mo 202.031 Recovery = 103.49%

QC value within limits for Na 589.592 Radial Recovery = 105.32%

QC value within limits for Ni 231.604 Recovery = 90.14%

QC value within limits for P 214.914 Recovery = 107.06%

QC value within limits for Pb 220.353 Recovery = 99.26%

QC value within limits for S 181.975 Axial Recovery = 102.62%

QC value within limits for Sb 206.836 Recovery = 106.50%

QC value within limits for Se 196.026 Recovery = 99.52%

QC value within limits for SiO2 Recovery = 104.12%

QC value within limits for Si 251.611 Recovery = 104.42%

QC value within limits for Sn 189.927 Recovery = 108.12%

QC value within limits for Sr 421.552 Recovery = 103.85%

QC value within limits for Ti 334.940 Recovery = 103.09%

QC value within limits for Tl 190.801 Recovery = 88.99%

QC value within limits for U 409.014 Recovery = 87.61%

QC value within limits for V 292.402 Recovery = 104.51%

QC value within limits for Zn 213.857 Recovery = 95.46%

All analyte(s) passed QC.

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

Autosampler Location: 105
 Date Collected: 3/16/2010 14:13:05
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94671.6	94671.6	97.8	%		14:13:43
1	Al 396.153Radial†	1052553.7	1076206.9	513750	µg/L	513750 ppb	14:13:37
1	Ca 317.933Radial†	1303993.2	1332763.8	485020	µg/L	485020 ppb	14:13:37
1	Fe 238.204 Radial†	36882.6	37695.2	445850	µg/L	445850 ppb	14:13:43
1	K 766.490 Radial†	172.0	-309.5	-144.42	µg/L	-144.42 ppb	14:13:43
1	Mg 279.077 IEC†	36592.3	37402.5	492610	µg/L	492610 ppb	14:13:43
1	Na 589.592 Radial†	974327.3	995931.5	497070	µg/L	497070 ppb	14:13:37
1	Sr 421.552†	2085.8	1993.0	11.848	µg/L	11.848 ppb	14:13:43
1	Sc 361.383	1930212.6	1930212.6	92.218	%		14:14:20
1	Y 371.029	1301817.0	1301817.0	90.854	%		14:14:20
1	Ag 328.068†	-3823.3	-3685.8	4.9184	µg/L	4.9184 ppb	14:14:20
1	As 188.979†	17.9	22.7	-80.580	µg/L	-80.580 ppb	14:14:40
1	B 249.677†	1804.8	1657.7	-157.40	µg/L	-157.40 ppb	14:14:20
1	Ba 233.527†	678.1	743.8	16.329	µg/L	16.329 ppb	14:14:40
1	Be 313.107†	-8849.1	-8437.1	-4.9718	µg/L	-4.9718 ppb	14:14:20
1	Cd 226.502†	2127.4	2477.5	8.5043	µg/L	8.5043 ppb	14:14:40
1	Co 228.616†	261.1	235.0	10.000	µg/L	10.000 ppb	14:14:40
1	Cr 267.716†	320.3	267.1	5.8303	µg/L	5.8303 ppb	14:14:40
1	Cu 324.752†	-6537.4	-11465.8	8.9291	µg/L	8.9291 ppb	14:14:40
1	Mn 257.610†	7529.5	8852.0	19.764	µg/L	19.764 ppb	14:14:20
1	Mo 202.031†	-172.5	-192.2	-2.0792	µg/L	-2.0792 ppb	14:14:40
1	Ni 231.604†	236.0	-120.9	-0.9993	µg/L	-0.9993 ppb	14:14:40
1	P 214.914†	484.7	253.2	213.82	µg/L	213.82 ppb	14:14:40
1	Pb 220.353†	-37.2	-70.5	11.668	µg/L	11.668 ppb	14:14:40
1	S 181.975 Axial†	-37.7	-63.4	-201.85	µg/L	-201.85 ppb	14:14:40
1	Sb 206.836†	25.3	4.7	-3.4783	µg/L	-3.4783 ppb	14:14:40
1	Se 196.026†	-396.6	-457.4	578.46	µg/L	578.46 ppb	14:14:40
1	SiO2†	2429.0	-145.8	-26.319	µg/L	-26.319 ppb	14:14:40
1	Si 251.611†	-163.3	-601.2	-40.870	µg/L	-40.870 ppb	14:14:40
1	Sn 189.927†	-66.1	-64.2	23.478	µg/L	23.478 ppb	14:14:40
1	Ti 334.940†	14501.8	16302.9	6.8316	µg/L	6.8316 ppb	14:14:20
1	Tl 190.801†	-15.4	17.4	4.7966	µg/L	4.7966 ppb	14:14:40
1	U 409.014†	155144.5	168243.4	15185	µg/L	15185 ppb	14:14:20
1	V 292.402†	2802.0	2926.2	-6.2992	µg/L	-6.2992 ppb	14:14:40
1	Zn 213.857†	3662.1	2962.3	19.218	µg/L	19.218 ppb	14:14:40
2	Sc RADIAL	93000.2	93000.2	96.1	%		14:13:55
2	Al 396.153Radial†	1058319.8	1101546.9	525840	µg/L	525840 ppb	14:13:49
2	Ca 317.933Radial†	1303650.5	1356365.9	493610	µg/L	493610 ppb	14:13:49
2	Fe 238.204 Radial†	36394.2	37864.7	447850	µg/L	447850 ppb	14:13:55
2	K 766.490 Radial†	137.2	-342.5	-159.84	µg/L	-159.84 ppb	14:13:55
2	Mg 279.077 IEC†	35947.3	37403.5	492620	µg/L	492620 ppb	14:13:55
2	Na 589.592 Radial†	976667.6	1016269.0	507220	µg/L	507220 ppb	14:13:49
2	Sr 421.552†	2073.2	2018.2	11.998	µg/L	11.998 ppb	14:13:55
2	Sc 361.383	1922376.9	1922376.9	91.843	%		14:14:49
2	Y 371.029	1299994.3	1299994.3	90.727	%		14:14:49
2	Ag 328.068†	-3842.1	-3723.1	4.7666	µg/L	4.7666 ppb	14:14:49
2	As 188.979†	13.6	18.1	-88.665	µg/L	-88.665 ppb	14:15:10
2	B 249.677†	1879.9	1747.5	-154.37	µg/L	-154.37 ppb	14:14:49
2	Ba 233.527†	658.6	725.6	15.929	µg/L	15.929 ppb	14:15:10
2	Be 313.107†	-8932.7	-8567.2	-5.0479	µg/L	-5.0479 ppb	14:14:49
2	Cd 226.502†	2128.6	2488.2	8.5322	µg/L	8.5322 ppb	14:15:10
2	Co 228.616†	267.7	243.4	10.360	µg/L	10.360 ppb	14:15:10
2	Cr 267.716†	313.8	261.5	5.7077	µg/L	5.7077 ppb	14:15:10
2	Cu 324.752†	-6590.9	-11552.9	8.7371	µg/L	8.7371 ppb	14:15:10
2	Mn 257.610†	7522.4	8877.5	19.959	µg/L	19.959 ppb	14:14:49
2	Mo 202.031†	-173.5	-194.0	-2.1781	µg/L	-2.1781 ppb	14:15:10
2	Ni 231.604†	243.2	-112.1	-0.4755	µg/L	-0.4755 ppb	14:15:10
2	P 214.914†	482.4	252.9	215.24	µg/L	215.24 ppb	14:15:10
2	Pb 220.353†	-66.4	-102.5	4.2527	µg/L	4.2527 ppb	14:15:10

2	S 181.975 Axial†	-39.5	-65.5	-208.49 µg/L	-208.49 ppb	14:15:10
2	Sb 206.836†	23.1	2.4	-5.6216 µg/L	-5.6216 ppb	14:15:10
2	Se 196.026†	-399.3	-462.0	579.58 µg/L	579.58 ppb	14:15:10
2	SiO2†	2411.3	-154.3	-27.852 µg/L	-27.852 ppb	14:15:10
2	Si 251.611†	-170.8	-610.1	-41.477 µg/L	-41.477 ppb	14:15:10
2	Sn 189.927†	-70.6	-69.5	22.257 µg/L	22.257 ppb	14:15:10
2	Ti 334.940†	14098.6	15928.0	6.0897 µg/L	6.0897 ppb	14:14:49
2	Tl 190.801†	-9.8	23.5	9.3441 µg/L	9.3441 ppb	14:15:10
2	U 409.014†	154229.8	167933.2	15156 µg/L	15156 ppb	14:14:49
2	V 292.402†	2718.0	2847.1	-7.5184 µg/L	-7.5184 ppb	14:15:10
2	Zn 213.857†	3679.4	2997.4	19.928 µg/L	19.928 ppb	14:15:10
3	Sc RADIAL	93668.6	93668.6	96.8 %		14:14:07
3	Al 396.153Radial†	1029545.6	1063955.3	507900 µg/L	507900 ppb	14:14:01
3	Ca 317.933Radial†	1263359.0	1305051.6	474940 µg/L	474940 ppb	14:14:01
3	Fe 238.204 Radial†	36666.1	37875.4	447980 µg/L	447980 ppb	14:14:07
3	K 766.490 Radial†	271.0	-205.4	-95.841 µg/L	-95.841 ppb	14:14:07
3	Mg 279.077 IEC†	36314.2	37515.7	494100 µg/L	494100 ppb	14:14:07
3	Na 589.592 Radial†	954659.7	986275.4	492250 µg/L	492250 ppb	14:14:01
3	Sr 421.552†	2056.0	1985.1	11.801 µg/L	11.801 ppb	14:14:07
3	Sc 361.383	1929969.6	1929969.6	92.206 %		14:15:18
3	Y 371.029	1302939.9	1302939.9	90.932 %		14:15:18
3	Ag 328.068†	-3867.6	-3734.3	4.6914 µg/L	4.6914 ppb	14:15:18
3	As 188.979†	21.9	27.0	-73.269 µg/L	-73.269 ppb	14:15:39
3	B 249.677†	1873.9	1732.9	-155.10 µg/L	-155.10 ppb	14:15:18
3	Ba 233.527†	642.9	705.7	15.495 µg/L	15.495 ppb	14:15:39
3	Be 313.107†	-8935.8	-8532.2	-5.0272 µg/L	-5.0272 ppb	14:15:18
3	Cd 226.502†	2136.7	2487.8	8.5107 µg/L	8.5107 ppb	14:15:39
3	Co 228.616†	258.3	232.1	9.8760 µg/L	9.8760 ppb	14:15:39
3	Cr 267.716†	324.6	271.8	5.9341 µg/L	5.9341 ppb	14:15:39
3	Cu 324.752†	-6600.1	-11534.7	8.8800 µg/L	8.8800 ppb	14:15:39
3	Mn 257.610†	7518.4	8840.9	19.756 µg/L	19.756 ppb	14:15:18
3	Mo 202.031†	-176.5	-196.5	-2.4240 µg/L	-2.4240 ppb	14:15:39
3	Ni 231.604†	264.9	-89.6	0.7884 µg/L	0.7884 ppb	14:15:39
3	P 214.914†	473.2	240.8	189.98 µg/L	189.98 ppb	14:15:39
3	Pb 220.353†	-47.6	-81.8	8.3479 µg/L	8.3479 ppb	14:15:39
3	S 181.975 Axial†	-44.0	-70.3	-223.71 µg/L	-223.71 ppb	14:15:39
3	Sb 206.836†	29.1	8.8	0.3352 µg/L	0.3352 ppb	14:15:39
3	Se 196.026†	-420.9	-483.8	560.34 µg/L	560.34 ppb	14:15:39
3	SiO2†	2418.3	-157.0	-28.351 µg/L	-28.351 ppb	14:15:39
3	Si 251.611†	-177.1	-616.1	-41.886 µg/L	-41.886 ppb	14:15:39
3	Sn 189.927†	-59.9	-57.5	25.124 µg/L	25.124 ppb	14:15:39
3	Ti 334.940†	14000.3	15761.0	5.2872 µg/L	5.2872 ppb	14:15:18
3	Tl 190.801†	-11.8	21.3	10.939 µg/L	10.939 ppb	14:15:39
3	U 409.014†	154639.4	167716.8	15137 µg/L	15137 ppb	14:15:18
3	V 292.402†	2785.0	2908.1	-6.8359 µg/L	-6.8359 ppb	14:15:39
3	Zn 213.857†	3676.3	2978.2	19.393 µg/L	19.393 ppb	14:15:39

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1927519.7	92.089 %	0.2129			0.23%
Sc RADIAL	93780.1	96.9 %	0.87			0.90%
Y 371.029	1301583.7	90.838 %	0.1037			0.11%
Ag 328.068†	-3714.4	4.7921 µg/L	0.11566	4.7921 ppb	0.11566	2.41%
Al 396.153Radial†	1080569.7	515830 µg/L	9152.0	515830 ppb	9152.0	1.77%
QC value within limits for Al 396.153Radial Recovery = 103.17%						
As 188.979†	22.6	-80.838 µg/L	7.7012	-80.838 ppb	7.7012	9.53%
B 249.677†	1712.7	-155.63 µg/L	1.582	-155.63 ppb	1.582	1.02%
Ba 233.527†	725.0	15.918 µg/L	0.4170	15.918 ppb	0.4170	2.62%
Be 313.107†	-8512.2	-5.0156 µg/L	0.03934	-5.0156 ppb	0.03934	0.78%
Ca 317.933Radial†	1331393.7	484520 µg/L	9347.2	484520 ppb	9347.2	1.93%
QC value within limits for Ca 317.933Radial Recovery = 96.90%						
Cd 226.502†	2484.5	8.5158 µg/L	0.01463	8.5158 ppb	0.01463	0.17%
Co 228.616†	236.8	10.079 µg/L	0.2515	10.079 ppb	0.2515	2.50%
Cr 267.716†	266.8	5.8240 µg/L	0.11337	5.8240 ppb	0.11337	1.95%
Cu 324.752†	-11517.8	8.8487 µg/L	0.09973	8.8487 ppb	0.09973	1.13%
Fe 238.204 Radial†	37811.8	447230 µg/L	1195.1	447230 ppb	1195.1	0.27%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.45%						
K 766.490 Radial†	-285.8	-133.37 µg/L	33.401	-133.37 ppb	33.401	25.04%
Mg 279.077 IEC†	37440.6	493110 µg/L	856.8	493110 ppb	856.8	0.17%

QC value within limits for Mg 279.077 IEC Recovery = 98.62%

Mn 257.610†	8856.8	19.826 µg/L	0.1146	19.826 ppb	0.1146	0.58%
Mo 202.031†	-194.3	-2.2271 µg/L	0.17753	-2.2271 ppb	0.17753	7.97%
Na 589.592 Radial†	999492.0	498850 µg/L	7641.5	498850 ppb	7641.5	1.53%

QC value within limits for Na 589.592 Radial Recovery = 99.77%

Ni 231.604†	-107.5	-0.2288 µg/L	0.91903	-0.2288 ppb	0.91903	401.61%
P 214.914†	249.0	206.35 µg/L	14.190	206.35 ppb	14.190	6.88%
Pb 220.353†	-84.9	8.0896 µg/L	3.71451	8.0896 ppb	3.71451	45.92%
S 181.975 Axial†	-66.4	-211.35 µg/L	11.205	-211.35 ppb	11.205	5.30%
Sb 206.836†	5.3	-2.9216 µg/L	3.01721	-2.9216 ppb	3.01721	103.27%
Se 196.026†	-467.8	572.79 µg/L	10.799	572.79 ppb	10.799	1.89%
SiO2†	-152.4	-27.508 µg/L	1.0586	-27.508 ppb	1.0586	3.85%
Si 251.611†	-609.1	-41.411 µg/L	0.5110	-41.411 ppb	0.5110	1.23%
Sn 189.927†	-63.7	23.619 µg/L	1.4387	23.619 ppb	1.4387	6.09%
Sr 421.552†	1998.8	11.882 µg/L	0.1030	11.882 ppb	0.1030	0.87%
Ti 334.940†	15997.3	6.0695 µg/L	0.77238	6.0695 ppb	0.77238	12.73%
Tl 190.801†	20.7	8.3600 µg/L	3.18740	8.3600 ppb	3.18740	38.13%
U 409.014†	167964.5	15159 µg/L	23.9	15159 ppb	23.9	0.16%

QC value within limits for U 409.014 Recovery = 101.06%

V 292.402†	2893.8	-6.8845 µg/L	0.61106	-6.8845 ppb	0.61106	8.88%
Zn 213.857†	2979.3	19.513 µg/L	0.3701	19.513 ppb	0.3701	1.90%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 3/16/2010 14:15:48

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	98681.8	98681.8	102 %		14:16:27
1	Al 396.153Radial†	791.1	895.2	209.10 µg/L	209.10 ppb	14:16:27
1	Ca 317.933Radial†	535.8	140.2	51.021 µg/L	51.021 ppb	14:16:48
1	Fe 238.204 Radial†	13.8	1.5	230.85 µg/L	230.85 ppb	14:16:48
1	K 766.490 Radial†	672389.6	659002.6	307540 µg/L	307540 ppb	14:16:22
1	Mg 279.077 IEC†	1.2	-6.8	89.344 µg/L	89.344 ppb	14:16:48
1	Na 589.592 Radial†	1192.9	989.4	493.81 µg/L	493.81 ppb	14:16:27
1	Sr 421.552†	1723920.8	1690703.1	10051 µg/L	10051 ppb	14:16:22
1	Sc 361.383	2094408.5	2094408.5	100.06 %		14:18:17
1	Y 371.029	1416408.2	1416408.2	98.851 %		14:18:17
1	Ag 328.068†	-7353.2	-6888.4	14.447 µg/L	14.447 ppb	14:18:22
1	As 188.979†	6782.6	6781.6	10004 µg/L	10004 ppb	14:18:22
1	B 249.677†	114492.3	114121.9	5220.5 µg/L	5220.5 ppb	14:18:17
1	Ba 233.527†	703458.1	703029.8	15394 µg/L	15394 ppb	14:18:17
1	Be 313.107†	5088373.7	5086373.9	2984.7 µg/L	2984.7 ppb	14:18:17
1	Cd 226.502†	428448.1	428352.7	10192 µg/L	10192 ppb	14:18:17
1	Co 228.616†	233468.5	233275.6	10010 µg/L	10010 ppb	14:18:17
1	Cr 267.716†	1192875.4	1192054.7	25933 µg/L	25933 ppb	14:18:17
1	Cu 324.752†	3276740.2	3270329.5	21360 µg/L	21360 ppb	14:18:17
1	Mn 257.610†	3337256.3	3335871.6	10026 µg/L	10026 ppb	14:18:17
1	Mo 202.031†	107438.2	107366.4	10624 µg/L	10624 ppb	14:18:17
1	Ni 231.604†	184095.1	183603.9	10286 µg/L	10286 ppb	14:18:17
1	P 214.914†	11782.2	11502.5	17003 µg/L	17003 ppb	14:18:22
1	Pb 220.353†	100441.1	100348.6	26306 µg/L	26306 ppb	14:18:17
1	S 181.975 Axial†	16785.8	16752.9	53316 µg/L	53316 ppb	14:18:22
1	Sb 206.836†	11913.2	11883.1	10481 µg/L	10481 ppb	14:18:22
1	Se 196.026†	10987.9	10953.8	10295 µg/L	10295 ppb	14:18:22
1	SiO2†	568840.9	565708.1	102130 µg/L	102130 ppb	14:18:17
1	Si 251.611†	700803.3	699944.2	47585 µg/L	47585 ppb	14:18:17
1	Sn 189.927†	27684.3	27674.6	10774 µg/L	10774 ppb	14:18:22
1	Ti 334.940†	4321206.8	4319101.7	10100 µg/L	10100 ppb	14:18:17
1	Tl 190.801†	10260.1	10287.9	10137 µg/L	10137 ppb	14:18:22
1	U 409.014†	-2540.8	-2533.4	-230.03 µg/L	-230.03 ppb	14:18:17
1	V 292.402†	896151.0	895482.4	10709 µg/L	10709 ppb	14:18:17
1	Zn 213.857†	669754.7	668330.1	15308 µg/L	15308 ppb	14:18:17
2	Sc RADIAL	99227.5	99227.5	103 %		14:16:59
2	Al 396.153Radial†	807.9	907.3	220.62 µg/L	220.62 ppb	14:16:59
2	Ca 317.933Radial†	550.5	151.7	55.210 µg/L	55.210 ppb	14:17:20
2	Fe 238.204 Radial†	12.3	0.1	207.63 µg/L	207.63 ppb	14:17:20
2	K 766.490 Radial†	672362.4	655349.3	305840 µg/L	305840 ppb	14:16:54
2	Mg 279.077 IEC†	3.5	-4.6	112.96 µg/L	112.96 ppb	14:17:20
2	Na 589.592 Radial†	953.1	749.0	373.85 µg/L	373.85 ppb	14:16:59
2	Sr 421.552†	1725788.1	1683225.9	10007 µg/L	10007 ppb	14:16:54
2	Sc 361.383	2089385.6	2089385.6	99.822 %		14:18:39
2	Y 371.029	1413119.1	1413119.1	98.622 %		14:18:39
2	Ag 328.068†	-7199.9	-6752.5	13.635 µg/L	13.635 ppb	14:18:44
2	As 188.979†	6777.4	6792.7	10020 µg/L	10020 ppb	14:18:44
2	B 249.677†	111616.5	111516.0	5101.0 µg/L	5101.0 ppb	14:18:39
2	Ba 233.527†	684041.7	685268.9	15005 µg/L	15005 ppb	14:18:39
2	Be 313.107†	4943607.3	4953574.4	2906.8 µg/L	2906.8 ppb	14:18:39
2	Cd 226.502†	415843.7	416755.2	9916.5 µg/L	9916.5 ppb	14:18:39
2	Co 228.616†	226279.8	226634.9	9725.4 µg/L	9725.4 ppb	14:18:39
2	Cr 267.716†	1154499.0	1156475.8	25159 µg/L	25159 ppb	14:18:39
2	Cu 324.752†	3189838.7	3191145.5	20843 µg/L	20843 ppb	14:18:39
2	Mn 257.610†	3244580.4	3251048.3	9770.9 µg/L	9770.9 ppb	14:18:39
2	Mo 202.031†	104357.4	104538.2	10344 µg/L	10344 ppb	14:18:39
2	Ni 231.604†	178790.3	178732.0	10013 µg/L	10013 ppb	14:18:39
2	P 214.914†	11635.4	11383.7	16857 µg/L	16857 ppb	14:18:44
2	Pb 220.353†	97684.4	97828.2	25645 µg/L	25645 ppb	14:18:39

2	S 181.975 Axial†	16765.1	16772.5	53378 µg/L	53378 ppb	14:18:44
2	Sb 206.836†	11775.4	11773.7	10387 µg/L	10387 ppb	14:18:44
2	Se 196.026†	10902.5	10894.6	10239 µg/L	10239 ppb	14:18:44
2	SiO2†	556612.3	554824.3	100170 µg/L	100170 ppb	14:18:39
2	Si 251.611†	685339.5	686136.5	46646 µg/L	46646 ppb	14:18:39
2	Sn 189.927†	27024.0	27079.5	10543 µg/L	10543 ppb	14:18:44
2	Ti 334.940†	4200749.2	4208811.1	9841.8 µg/L	9841.8 ppb	14:18:39
2	Tl 190.801†	10259.2	10311.6	10158 µg/L	10158 ppb	14:18:44
2	U 409.014†	-2647.1	-2646.0	-240.25 µg/L	-240.25 ppb	14:18:39
2	V 292.402†	869628.3	871065.4	10417 µg/L	10417 ppb	14:18:39
2	Zn 213.857†	651634.3	651786.5	14929 µg/L	14929 ppb	14:18:39
3	Sc RADIAL	99146.3	99146.3	102 %		14:17:31
3	Al 396.153Radial†	797.8	898.1	232.76 µg/L	232.76 ppb	14:17:31
3	Ca 317.933Radial†	569.3	170.5	62.044 µg/L	62.044 ppb	14:17:52
3	Fe 238.204 Radial†	9.5	-2.7	157.97 µg/L	157.97 ppb	14:17:52
3	K 766.490 Radial†	679640.4	662991.4	309410 µg/L	309410 ppb	14:17:26
3	Mg 279.077 IEC†	3.3	-4.8	97.740 µg/L	97.740 ppb	14:17:52
3	Na 589.592 Radial†	823.9	623.8	311.32 µg/L	311.32 ppb	14:17:31
3	Sr 421.552†	1744621.8	1702990.6	10124 µg/L	10124 ppb	14:17:26
3	Sc 361.383	2074927.8	2074927.8	99.131 %		14:19:01
3	Y 371.029	1405489.5	1405489.5	98.089 %		14:19:01
3	Ag 328.068†	-6195.3	-5789.4	15.820 µg/L	15.820 ppb	14:19:06
3	As 188.979†	5965.2	6020.7	8880.9 µg/L	8880.9 ppb	14:19:06
3	B 249.677†	105435.4	106059.9	4849.4 µg/L	4849.4 ppb	14:19:01
3	Ba 233.527†	631768.9	637312.9	13955 µg/L	13955 ppb	14:19:01
3	Be 313.107†	4524269.0	4565069.7	2678.8 µg/L	2678.8 ppb	14:19:01
3	Cd 226.502†	382998.0	386524.4	9197.1 µg/L	9197.1 ppb	14:19:01
3	Co 228.616†	206754.1	208517.6	8948.0 µg/L	8948.0 ppb	14:19:01
3	Cr 267.716†	1033219.0	1042191.9	22673 µg/L	22673 ppb	14:19:01
3	Cu 324.752†	2919414.1	2940617.5	19207 µg/L	19207 ppb	14:19:01
3	Mn 257.610†	2964203.2	2990862.7	8988.9 µg/L	8988.9 ppb	14:19:01
3	Mo 202.031†	95577.7	96410.0	9539.9 µg/L	9539.9 ppb	14:19:01
3	Ni 231.604†	163249.9	164303.4	9204.7 µg/L	9204.7 ppb	14:19:01
3	P 214.914†	10085.8	9901.8	14546 µg/L	14546 ppb	14:19:06
3	Pb 220.353†	91212.7	91981.7	24113 µg/L	24113 ppb	14:19:01
3	S 181.975 Axial†	14772.3	14879.2	47353 µg/L	47353 ppb	14:19:06
3	Sb 206.836†	10303.5	10371.1	9150.9 µg/L	9150.9 ppb	14:19:06
3	Se 196.026†	9625.3	9682.3	9099.5 µg/L	9099.5 ppb	14:19:06
3	SiO2†	522275.8	524072.2	94614 µg/L	94614 ppb	14:19:01
3	Si 251.611†	642711.8	647919.2	44048 µg/L	44048 ppb	14:19:01
3	Sn 189.927†	22954.8	23163.3	9018.1 µg/L	9018.1 ppb	14:19:06
3	Ti 334.940†	3845959.1	3880234.9	9073.5 µg/L	9073.5 ppb	14:19:01
3	Tl 190.801†	9385.1	9501.4	9359.7 µg/L	9359.7 ppb	14:19:06
3	U 409.014†	-2244.4	-2258.2	-205.04 µg/L	-205.04 ppb	14:19:01
3	V 292.402†	793039.4	799875.7	9565.0 µg/L	9565.0 ppb	14:19:01
3	Zn 213.857†	598338.9	602572.7	13802 µg/L	13802 ppb	14:19:01

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2086240.6	99.672 %	0.4832			0.48%
Sc RADIAL	99018.5	102 %	0.3			0.30%
Y 371.029	1411672.3	98.521 %	0.3909			0.40%
Ag 328.068†	-6476.8	14.634 µg/L	1.1045	14.634 ppb	1.1045	7.55%
Al 396.153Radial†	900.2	220.83 µg/L	11.829	220.83 ppb	11.829	5.36%
As 188.979†	6531.7	9635.0 µg/L	653.12	9635.0 ppb	653.12	6.78%
QC value within limits for As 188.979 Recovery = 96.35%						
B 249.677†	110565.9	5057.0 µg/L	189.40	5057.0 ppb	189.40	3.75%
QC value within limits for B 249.677 Recovery = 101.14%						
Ba 233.527†	675203.9	14785 µg/L	744.5	14785 ppb	744.5	5.04%
QC value within limits for Ba 233.527 Recovery = 98.57%						
Be 313.107†	4868339.3	2856.7 µg/L	158.97	2856.7 ppb	158.97	5.56%
QC value within limits for Be 313.107 Recovery = 95.22%						
Ca 317.933Radial†	154.1	56.092 µg/L	5.5643	56.092 ppb	5.5643	9.92%
Cd 226.502†	410544.1	9768.6 µg/L	513.88	9768.6 ppb	513.88	5.26%
QC value within limits for Cd 226.502 Recovery = 97.69%						
Co 228.616†	222809.4	9561.3 µg/L	549.94	9561.3 ppb	549.94	5.75%
QC value within limits for Co 228.616 Recovery = 95.61%						
Cr 267.716†	1130240.8	24588 µg/L	1703.3	24588 ppb	1703.3	6.93%
QC value within limits for Cr 267.716 Recovery = 98.35%						

Cu 324.752†	3134030.8	20470 µg/L	1124.2	20470 ppb	1124.2	5.49%
QC value within limits for Cu 324.752 Recovery = 102.35%						
Fe 238.204 Radial†	-0.4	198.81 µg/L	37.228	198.81 ppb	37.228	18.73%
K 766.490 Radial†	659114.4	307600 µg/L	1783.8	307600 ppb	1783.8	0.58%
QC value within limits for K 766.490 Radial Recovery = 102.53%						
Mg 279.077 IEC†	-5.4	100.01 µg/L	11.971	100.01 ppb	11.971	11.97%
Mn 257.610†	3192594.2	9595.2 µg/L	540.32	9595.2 ppb	540.32	5.63%
QC value within limits for Mn 257.610 Recovery = 95.95%						
Mo 202.031†	102771.5	10169 µg/L	562.8	10169 ppb	562.8	5.53%
QC value within limits for Mo 202.031 Recovery = 101.69%						
Na 589.592 Radial†	787.4	392.99 µg/L	92.737	392.99 ppb	92.737	23.60%
Ni 231.604†	175546.4	9834.5 µg/L	562.28	9834.5 ppb	562.28	5.72%
QC value within limits for Ni 231.604 Recovery = 98.35%						
P 214.914†	10929.3	16135 µg/L	1378.0	16135 ppb	1378.0	8.54%
QC value within limits for P 214.914 Recovery = 107.57%						
Pb 220.353†	96719.5	25355 µg/L	1125.2	25355 ppb	1125.2	4.44%
QC value within limits for Pb 220.353 Recovery = 101.42%						
S 181.975 Axial†	16134.8	51349 µg/L	3460.9	51349 ppb	3460.9	6.74%
QC value within limits for S 181.975 Axial Recovery = 102.70%						
Sb 206.836†	11342.6	10006 µg/L	742.2	10006 ppb	742.2	7.42%
QC value within limits for Sb 206.836 Recovery = 100.06%						
Se 196.026†	10510.2	9877.7 µg/L	674.53	9877.7 ppb	674.53	6.83%
QC value within limits for Se 196.026 Recovery = 98.78%						
SiO2†	548201.5	98970 µg/L	3898.4	98970 ppb	3898.4	3.94%
QC value within limits for SiO2 Recovery = 92.50%						
Si 251.611†	678000.0	46093 µg/L	1832.2	46093 ppb	1832.2	3.97%
QC value within limits for Si 251.611 Recovery = 92.19%						
Sn 189.927†	25972.5	10112 µg/L	954.2	10112 ppb	954.2	9.44%
QC value within limits for Sn 189.927 Recovery = 101.12%						
Sr 421.552†	1692306.5	10061 µg/L	59.3	10061 ppb	59.3	0.59%
QC value within limits for Sr 421.552 Recovery = 100.61%						
Ti 334.940†	4136049.2	9671.7 µg/L	533.86	9671.7 ppb	533.86	5.52%
QC value within limits for Ti 334.940 Recovery = 96.72%						
Tl 190.801†	10033.6	9884.8 µg/L	454.85	9884.8 ppb	454.85	4.60%
QC value within limits for Tl 190.801 Recovery = 98.85%						
U 409.014†	-2479.2	-225.11 µg/L	18.114	-225.11 ppb	18.114	8.05%
V 292.402†	855474.5	10230 µg/L	594.4	10230 ppb	594.4	5.81%
QC value within limits for V 292.402 Recovery = 102.30%						
Zn 213.857†	640896.4	14679 µg/L	783.2	14679 ppb	783.2	5.34%
QC value within limits for Zn 213.857 Recovery = 97.86%						
All analyte(s) passed QC.						

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

Autosampler Location: 7
 Date Collected: 3/16/2010 14:19:16
 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	96143.7	96143.7	99.3 %		14:19:49
1	Al 396.153Radial†	11038.5	11231.8	5349.9 µg/L	5349.9 ppb	14:19:49
1	Ca 317.933Radial†	15099.4	14815.4	5391.6 µg/L	5391.6 ppb	14:19:49
1	Fe 238.204 Radial†	455.2	446.3	5290.4 µg/L	5290.4 ppb	14:20:10
1	K 766.490 Radial†	12866.8	12467.7	5818.5 µg/L	5818.5 ppb	14:19:49
1	Mg 279.077 IEC†	419.1	414.0	5461.4 µg/L	5461.4 ppb	14:20:10
1	Na 589.592 Radial†	21569.8	21533.9	10748 µg/L	10748 ppb	14:19:49
1	Sr 421.552†	89244.2	89703.2	533.27 µg/L	533.27 ppb	14:19:49
1	Sc 361.383	2053030.7	2053030.7	98.085 %		14:21:14
1	Y 371.029	1399252.1	1399252.1	97.654 %		14:21:14
1	Ag 328.068†	64579.1	66300.0	536.34 µg/L	536.34 ppb	14:21:19
1	As 188.979†	371.5	382.0	562.27 µg/L	562.27 ppb	14:21:40
1	B 249.677†	11993.7	11928.5	539.45 µg/L	539.45 ppb	14:21:19
1	Ba 233.527†	24289.8	24772.4	542.75 µg/L	542.75 ppb	14:21:19
1	Be 313.107†	899098.1	917808.5	539.06 µg/L	539.06 ppb	14:21:14
1	Cd 226.502†	22186.8	22790.5	541.69 µg/L	541.69 ppb	14:21:19
1	Co 228.616†	12490.1	12685.9	544.39 µg/L	544.39 ppb	14:21:19
1	Cr 267.716†	24782.3	25185.8	548.11 µg/L	548.11 ppb	14:21:19
1	Cu 324.752†	86511.5	83823.7	548.49 µg/L	548.49 ppb	14:21:19
1	Mn 257.610†	178314.2	182482.0	548.39 µg/L	548.39 ppb	14:21:14
1	Mo 202.031†	5731.9	5838.7	577.95 µg/L	577.95 ppb	14:21:40
1	Ni 231.604†	9929.4	9746.3	546.07 µg/L	546.07 ppb	14:21:19
1	P 214.914†	1912.6	1677.6	2733.3 µg/L	2733.3 ppb	14:21:40
1	Pb 220.353†	2093.4	2104.1	552.35 µg/L	552.35 ppb	14:21:40
1	S 181.975 Axial†	364.4	349.0	1110.7 µg/L	1110.7 ppb	14:21:40
1	Sb 206.836†	665.8	656.1	588.43 µg/L	588.43 ppb	14:21:40
1	Se 196.026†	607.4	592.0	568.59 µg/L	568.59 ppb	14:21:40
1	SiO2†	34121.9	32008.2	5778.6 µg/L	5778.6 ppb	14:21:19
1	Si 251.611†	39350.6	39694.7	2698.6 µg/L	2698.6 ppb	14:21:19
1	Sn 189.927†	1425.4	1460.6	569.20 µg/L	569.20 ppb	14:21:40
1	Ti 334.940†	227703.2	232725.5	543.86 µg/L	543.86 ppb	14:21:14
1	Tl 190.801†	508.3	552.3	544.65 µg/L	544.65 ppb	14:21:40
1	U 409.014†	5907.2	6028.3	546.30 µg/L	546.30 ppb	14:21:19
1	V 292.402†	45127.9	45896.5	547.38 µg/L	547.38 ppb	14:21:19
1	Zn 213.857†	24156.1	23618.8	539.94 µg/L	539.94 ppb	14:21:19
2	Sc RADIAL	96569.8	96569.8	99.8 %		14:20:15
2	Al 396.153Radial†	11040.4	11184.6	5327.7 µg/L	5327.7 ppb	14:20:15
2	Ca 317.933Radial†	15064.2	14713.0	5354.4 µg/L	5354.4 ppb	14:20:15
2	Fe 238.204 Radial†	461.5	450.6	5340.9 µg/L	5340.9 ppb	14:20:36
2	K 766.490 Radial†	12643.2	12186.5	5687.2 µg/L	5687.2 ppb	14:20:15
2	Mg 279.077 IEC†	414.4	407.3	5373.6 µg/L	5373.6 ppb	14:20:36
2	Na 589.592 Radial†	21432.8	21300.7	10631 µg/L	10631 ppb	14:20:15
2	Sr 421.552†	89037.8	89099.8	529.69 µg/L	529.69 ppb	14:20:15
2	Sc 361.383	2051314.7	2051314.7	98.003 %		14:21:47
2	Y 371.029	1399692.0	1399692.0	97.684 %		14:21:47
2	Ag 328.068†	64493.4	66267.6	536.08 µg/L	536.08 ppb	14:21:53
2	As 188.979†	361.4	372.1	547.55 µg/L	547.55 ppb	14:22:13
2	B 249.677†	11992.2	11937.2	539.83 µg/L	539.83 ppb	14:21:53
2	Ba 233.527†	24241.5	24743.9	542.13 µg/L	542.13 ppb	14:21:53
2	Be 313.107†	895057.8	914452.7	537.09 µg/L	537.09 ppb	14:21:47
2	Cd 226.502†	22230.1	22853.6	543.18 µg/L	543.18 ppb	14:21:53
2	Co 228.616†	12463.4	12669.3	543.67 µg/L	543.67 ppb	14:21:53
2	Cr 267.716†	24819.4	25244.8	549.40 µg/L	549.40 ppb	14:21:53
2	Cu 324.752†	86217.7	83597.6	547.03 µg/L	547.03 ppb	14:21:53
2	Mn 257.610†	177397.5	181698.8	546.04 µg/L	546.04 ppb	14:21:47
2	Mo 202.031†	5571.8	5680.2	562.26 µg/L	562.26 ppb	14:22:13
2	Ni 231.604†	9903.7	9728.6	545.07 µg/L	545.07 ppb	14:21:53
2	P 214.914†	1880.5	1646.4	2681.4 µg/L	2681.4 ppb	14:22:13
2	Pb 220.353†	2075.2	2087.3	547.91 µg/L	547.91 ppb	14:22:13

2	S 181.975 Axial†	349.3	333.9	1062.7 µg/L	1062.7 ppb	14:22:13
2	Sb 206.836†	645.6	636.1	570.30 µg/L	570.30 ppb	14:22:13
2	Se 196.026†	594.6	579.4	557.00 µg/L	557.00 ppb	14:22:13
2	SiO2†	34063.4	31977.6	5773.1 µg/L	5773.1 ppb	14:21:53
2	Si 251.611†	39209.6	39584.4	2691.1 µg/L	2691.1 ppb	14:21:53
2	Sn 189.927†	1393.7	1429.5	557.09 µg/L	557.09 ppb	14:22:13
2	Ti 334.940†	226609.6	231803.8	541.71 µg/L	541.71 ppb	14:21:47
2	Tl 190.801†	504.5	548.9	541.22 µg/L	541.22 ppb	14:22:13
2	U 409.014†	5811.7	5935.9	537.90 µg/L	537.90 ppb	14:21:53
2	V 292.402†	45121.8	45928.8	547.63 µg/L	547.63 ppb	14:21:53
2	Zn 213.857†	24028.2	23508.9	537.42 µg/L	537.42 ppb	14:21:53
3	Sc RADIAL	97410.2	97410.2	101 %		14:20:41
3	Al 396.153Radial†	11042.1	11090.9	5284.9 µg/L	5284.9 ppb	14:20:41
3	Ca 317.933Radial†	15109.2	14627.4	5323.2 µg/L	5323.2 ppb	14:20:41
3	Fe 238.204 Radial†	462.5	447.6	5304.2 µg/L	5304.2 ppb	14:21:02
3	K 766.490 Radial†	12592.5	12026.8	5612.7 µg/L	5612.7 ppb	14:20:41
3	Mg 279.077 IEC†	416.8	406.2	5356.8 µg/L	5356.8 ppb	14:21:02
3	Na 589.592 Radial†	21538.2	21220.1	10591 µg/L	10591 ppb	14:20:41
3	Sr 421.552†	89376.9	88666.9	527.11 µg/L	527.11 ppb	14:20:41
3	Sc 361.383	2042567.9	2042567.9	97.585 %		14:22:20
3	Y 371.029	1393710.7	1393710.7	97.267 %		14:22:20
3	Ag 328.068†	59730.4	61668.6	498.70 µg/L	498.70 ppb	14:22:26
3	As 188.979†	305.3	316.1	465.05 µg/L	465.05 ppb	14:22:46
3	B 249.677†	10934.0	10905.2	492.88 µg/L	492.88 ppb	14:22:26
3	Ba 233.527†	21624.9	22168.4	485.68 µg/L	485.68 ppb	14:22:26
3	Be 313.107†	811235.9	832467.7	488.94 µg/L	488.94 ppb	14:22:20
3	Cd 226.502†	19667.4	20324.6	483.01 µg/L	483.01 ppb	14:22:26
3	Co 228.616†	10934.2	11156.7	478.71 µg/L	478.71 ppb	14:22:26
3	Cr 267.716†	21207.3	21651.8	471.21 µg/L	471.21 ppb	14:22:26
3	Cu 324.752†	76779.2	74302.3	486.31 µg/L	486.31 ppb	14:22:26
3	Mn 257.610†	161636.4	166322.8	499.83 µg/L	499.83 ppb	14:22:20
3	Mo 202.031†	4590.3	4698.7	465.15 µg/L	465.15 ppb	14:22:46
3	Ni 231.604†	8743.8	8583.2	480.91 µg/L	480.91 ppb	14:22:26
3	P 214.914†	1613.1	1380.7	2245.1 µg/L	2245.1 ppb	14:22:46
3	Pb 220.353†	1753.3	1766.6	463.71 µg/L	463.71 ppb	14:22:46
3	S 181.975 Axial†	317.3	302.6	962.92 µg/L	962.92 ppb	14:22:46
3	Sb 206.836†	550.8	541.7	485.43 µg/L	485.43 ppb	14:22:46
3	Se 196.026†	520.5	506.0	487.94 µg/L	487.94 ppb	14:22:46
3	SiO2†	31146.8	29137.8	5260.4 µg/L	5260.4 ppb	14:22:26
3	Si 251.611†	35648.0	36105.9	2454.6 µg/L	2454.6 ppb	14:22:26
3	Sn 189.927†	1126.5	1161.8	452.85 µg/L	452.85 ppb	14:22:46
3	Ti 334.940†	203810.2	209430.5	489.39 µg/L	489.39 ppb	14:22:20
3	Tl 190.801†	446.2	491.4	484.60 µg/L	484.60 ppb	14:22:46
3	U 409.014†	5034.2	5164.6	467.88 µg/L	467.88 ppb	14:22:26
3	V 292.402†	39193.5	40051.0	477.25 µg/L	477.25 ppb	14:22:26
3	Zn 213.857†	21239.8	20756.5	474.43 µg/L	474.43 ppb	14:22:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2048971.1	97.891 %	0.2681			0.27%
Sc RADIAL	96707.9	99.9 %	0.67			0.67%
Y 371.029	1397551.6	97.535 %	0.2327			0.24%
Ag 328.068†	64745.4	523.71 µg/L	21.660	523.71 ppb	21.660	4.14%
QC value within limits for Ag 328.068 Recovery = 104.74%						
Al 396.153Radial†	11169.1	5320.8 µg/L	33.00	5320.8 ppb	33.00	0.62%
QC value within limits for Al 396.153Radial Recovery = 106.42%						
As 188.979†	356.7	524.95 µg/L	52.399	524.95 ppb	52.399	9.98%
QC value within limits for As 188.979 Recovery = 104.99%						
B 249.677†	11590.3	524.05 µg/L	26.996	524.05 ppb	26.996	5.15%
QC value within limits for B 249.677 Recovery = 104.81%						
Ba 233.527†	23894.9	523.52 µg/L	32.774	523.52 ppb	32.774	6.26%
QC value within limits for Ba 233.527 Recovery = 104.70%						
Be 313.107†	888242.9	521.69 µg/L	28.386	521.69 ppb	28.386	5.44%
QC value within limits for Be 313.107 Recovery = 104.34%						
Ca 317.933Radial†	14718.6	5356.4 µg/L	34.25	5356.4 ppb	34.25	0.64%
QC value within limits for Ca 317.933Radial Recovery = 107.13%						
Cd 226.502†	21989.6	522.63 µg/L	34.319	522.63 ppb	34.319	6.57%
QC value within limits for Cd 226.502 Recovery = 104.53%						
Co 228.616†	12170.6	522.26 µg/L	37.716	522.26 ppb	37.716	7.22%

Cr	267.716†	24027.5	522.91 µg/L	44.777	522.91 ppb	44.777	8.56%
Cu	324.752†	80574.5	527.28 µg/L	35.488	527.28 ppb	35.488	6.73%
Fe	238.204 Radial†	448.2	5311.8 µg/L	26.14	5311.8 ppb	26.14	0.49%
K	766.490 Radial†	12227.0	5706.1 µg/L	104.19	5706.1 ppb	104.19	1.83%
Mg	279.077 IEC†	409.1	5397.2 µg/L	56.20	5397.2 ppb	56.20	1.04%
Mn	257.610†	176834.5	531.42 µg/L	27.383	531.42 ppb	27.383	5.15%
Mo	202.031†	5405.9	535.12 µg/L	61.102	535.12 ppb	61.102	11.42%
Na	589.592 Radial†	21351.5	10657 µg/L	81.3	10657 ppb	81.3	0.76%
Ni	231.604†	9352.7	524.02 µg/L	37.336	524.02 ppb	37.336	7.12%
P	214.914†	1568.2	2553.2 µg/L	268.15	2553.2 ppb	268.15	10.50%
Pb	220.353†	1986.0	521.32 µg/L	49.949	521.32 ppb	49.949	9.58%
S	181.975 Axial†	328.5	1045.4 µg/L	75.40	1045.4 ppb	75.40	7.21%
Sb	206.836†	611.3	548.05 µg/L	54.984	548.05 ppb	54.984	10.03%
Se	196.026†	559.1	537.84 µg/L	43.605	537.84 ppb	43.605	8.11%
SiO2†		31041.2	5604.0 µg/L	297.61	5604.0 ppb	297.61	5.31%
Si	251.611†	38461.7	2614.8 µg/L	138.75	2614.8 ppb	138.75	5.31%
Sn	189.927†	1350.7	526.38 µg/L	63.967	526.38 ppb	63.967	12.15%
Sr	421.552†	89156.6	530.02 µg/L	3.094	530.02 ppb	3.094	0.58%
Ti	334.940†	224653.3	524.98 µg/L	30.844	524.98 ppb	30.844	5.88%
Tl	190.801†	530.9	523.49 µg/L	33.721	523.49 ppb	33.721	6.44%
U	409.014†	5709.6	517.36 µg/L	43.060	517.36 ppb	43.060	8.32%
V	292.402†	43958.8	524.09 µg/L	40.562	524.09 ppb	40.562	7.74%
Zn	213.857†	22628.1	517.26 µg/L	37.115	517.26 ppb	37.115	7.18%

QC value within limits for Co 228.616 Recovery = 104.45%
 QC value within limits for Cr 267.716 Recovery = 104.58%
 QC value within limits for Cu 324.752 Recovery = 105.46%
 QC value within limits for Fe 238.204 Radial Recovery = 106.24%
 QC value greater than the upper limit for K 766.490 Radial Recovery = 114.12%
 QC value within limits for Mg 279.077 IEC Recovery = 107.94%
 QC value within limits for Mn 257.610 Recovery = 106.28%
 QC value within limits for Mo 202.031 Recovery = 107.02%
 QC value within limits for Na 589.592 Radial Recovery = 106.57%
 QC value within limits for Ni 231.604 Recovery = 104.80%
 QC value within limits for P 214.914 Recovery = 102.13%
 QC value within limits for Pb 220.353 Recovery = 104.26%
 QC value within limits for S 181.975 Axial Recovery = 104.54%
 QC value within limits for Sb 206.836 Recovery = 109.61%
 QC value within limits for Se 196.026 Recovery = 107.57%
 QC value within limits for SiO2 Recovery = 104.80%
 QC value within limits for Si 251.611 Recovery = 104.59%
 QC value within limits for Sn 189.927 Recovery = 105.28%
 QC value within limits for Sr 421.552 Recovery = 106.00%
 QC value within limits for Ti 334.940 Recovery = 105.00%
 QC value within limits for Tl 190.801 Recovery = 104.70%
 QC value within limits for U 409.014 Recovery = 103.47%
 QC value within limits for V 292.402 Recovery = 104.82%
 QC value within limits for Zn 213.857 Recovery = 103.45%

QC Failed. Continue with analysis.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 14:22:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97273.1	97273.1	101 %		14:23:26
1	Al 396.153Radial†	-101.7	18.1	8.5498 µg/L	8.5498 ppb	14:23:26
1	Ca 317.933Radial†	432.4	44.9	16.346 µg/L	16.346 ppb	14:23:46
1	Fe 238.204 Radial†	11.5	-0.5	-5.6288 µg/L	-5.6288 ppb	14:23:46
1	K 766.490 Radial†	816.1	326.7	152.44 µg/L	152.44 ppb	14:23:26
1	Mg 279.077 IEC†	12.4	4.3	57.123 µg/L	57.123 ppb	14:23:46
1	Na 589.592 Radial†	313.3	131.1	65.452 µg/L	65.452 ppb	14:23:26
1	Sr 421.552†	162.5	22.3	0.1324 µg/L	0.1324 ppb	14:23:26
1	Sc 361.383	2069842.9	2069842.9	98.888 %		14:24:48
1	Y 371.029	1419836.3	1419836.3	99.090 %		14:24:48
1	Ag 328.068†	-462.4	-7.4	-0.0560 µg/L	-0.0560 ppb	14:24:54
1	As 188.979†	-0.2	3.1	4.5320 µg/L	4.5320 ppb	14:25:14
1	B 249.677†	367.1	71.8	3.2621 µg/L	3.2621 ppb	14:25:14
1	Ba 233.527†	4.6	13.1	0.2871 µg/L	0.2871 ppb	14:25:14
1	Be 313.107†	-978.6	169.3	0.0991 µg/L	0.0991 ppb	14:24:54
1	Cd 226.502†	-169.8	-1.1	-0.0254 µg/L	-0.0254 ppb	14:25:14
1	Co 228.616†	55.1	7.7	0.3318 µg/L	0.3318 ppb	14:25:14
1	Cr 267.716†	74.7	-4.7	-0.1022 µg/L	-0.1022 ppb	14:25:14
1	Cu 324.752†	5003.5	683.0	4.4603 µg/L	4.4603 ppb	14:24:54
1	Mn 257.610†	-619.9	60.1	0.1766 µg/L	0.1766 ppb	14:25:14
1	Mo 202.031†	46.8	42.2	4.1769 µg/L	4.1769 ppb	14:25:14
1	Ni 231.604†	374.3	1.6	0.0893 µg/L	0.0893 ppb	14:25:14
1	P 214.914†	275.9	6.7	10.632 µg/L	10.632 ppb	14:25:14
1	Pb 220.353†	39.3	9.5	2.5133 µg/L	2.5133 ppb	14:25:14
1	S 181.975 Axial†	29.8	7.6	24.165 µg/L	24.165 ppb	14:25:14
1	Sb 206.836†	30.3	8.0	7.1667 µg/L	7.1667 ppb	14:25:14
1	Se 196.026†	27.1	0.1	-0.0088 µg/L	-0.0088 ppb	14:25:14
1	SiO2†	2792.7	44.4	8.0127 µg/L	8.0127 ppb	14:25:14
1	Si 251.611†	510.6	92.3	6.2745 µg/L	6.2745 ppb	14:25:14
1	Sn 189.927†	1.9	9.4	3.6485 µg/L	3.6485 ppb	14:25:14
1	Ti 334.940†	-180.6	394.6	0.9185 µg/L	0.9185 ppb	14:24:54
1	Tl 190.801†	-36.9	-3.2	-3.1351 µg/L	-3.1351 ppb	14:25:14
1	U 409.014†	-56.9	-51.7	-4.6952 µg/L	-4.6952 ppb	14:24:54
1	V 292.402†	157.7	47.1	0.5842 µg/L	0.5842 ppb	14:24:54
1	Zn 213.857†	1062.1	65.2	1.4904 µg/L	1.4904 ppb	14:25:14
2	Sc RADIAL	97912.2	97912.2	101 %		14:23:52
2	Al 396.153Radial†	-81.2	39.0	18.545 µg/L	18.545 ppb	14:23:52
2	Ca 317.933Radial†	415.9	25.8	9.3918 µg/L	9.3918 ppb	14:24:12
2	Fe 238.204 Radial†	13.3	1.2	14.332 µg/L	14.332 ppb	14:24:12
2	K 766.490 Radial†	789.4	295.0	137.65 µg/L	137.65 ppb	14:23:52
2	Mg 279.077 IEC†	9.7	1.6	20.668 µg/L	20.668 ppb	14:24:12
2	Na 589.592 Radial†	331.3	146.9	73.326 µg/L	73.326 ppb	14:23:52
2	Sr 421.552†	155.8	14.6	0.0869 µg/L	0.0869 ppb	14:23:52
2	Sc 361.383	2090786.4	2090786.4	99.889 %		14:25:20
2	Y 371.029	1430220.1	1430220.1	99.815 %		14:25:20
2	Ag 328.068†	-437.2	22.5	0.1797 µg/L	0.1797 ppb	14:25:26
2	As 188.979†	0.5	3.7	5.5105 µg/L	5.5105 ppb	14:25:46
2	B 249.677†	371.6	72.6	3.2889 µg/L	3.2889 ppb	14:25:46
2	Ba 233.527†	11.2	19.7	0.4296 µg/L	0.4296 ppb	14:25:46
2	Be 313.107†	-971.7	186.1	0.1090 µg/L	0.1090 ppb	14:25:26
2	Cd 226.502†	-160.3	10.1	0.2390 µg/L	0.2390 ppb	14:25:46
2	Co 228.616†	45.3	-2.7	-0.1163 µg/L	-0.1163 ppb	14:25:46
2	Cr 267.716†	85.1	4.9	0.1065 µg/L	0.1065 ppb	14:25:46
2	Cu 324.752†	5008.9	637.8	4.1686 µg/L	4.1686 ppb	14:25:26
2	Mn 257.610†	-635.3	51.0	0.1526 µg/L	0.1526 ppb	14:25:46
2	Mo 202.031†	38.0	32.9	3.2610 µg/L	3.2610 ppb	14:25:46
2	Ni 231.604†	381.7	5.2	0.2911 µg/L	0.2911 ppb	14:25:46
2	P 214.914†	269.5	-2.6	-4.6575 µg/L	-4.6575 ppb	14:25:46
2	Pb 220.353†	32.6	2.5	0.6481 µg/L	0.6481 ppb	14:25:46

2	S 181.975 Axial†	17.3	-5.2	-16.519 µg/L	-16.519 ppb	14:25:46
2	Sb 206.836†	31.0	8.3	7.4915 µg/L	7.4915 ppb	14:25:46
2	Se 196.026†	21.9	-5.4	-5.0218 µg/L	-5.0218 ppb	14:25:46
2	SiO2†	2769.7	-6.9	-1.2541 µg/L	-1.2541 ppb	14:25:46
2	Si 251.611†	494.6	71.0	4.8282 µg/L	4.8282 ppb	14:25:46
2	Sn 189.927†	7.4	14.9	5.7926 µg/L	5.7926 ppb	14:25:46
2	Ti 334.940†	-231.1	345.9	0.8073 µg/L	0.8073 ppb	14:25:26
2	Tl 190.801†	-31.4	2.7	2.6514 µg/L	2.6514 ppb	14:25:46
2	U 409.014†	42.5	48.4	4.3917 µg/L	4.3917 ppb	14:25:26
2	V 292.402†	84.8	-27.4	-0.2952 µg/L	-0.2952 ppb	14:25:26
2	Zn 213.857†	1056.2	48.5	1.1062 µg/L	1.1062 ppb	14:25:46
3	Sc RADIAL	97435.2	97435.2	101 %		14:24:17
3	Al 396.153Radial†	-99.4	20.5	9.7343 µg/L	9.7343 ppb	14:24:17
3	Ca 317.933Radial†	401.3	13.3	4.8493 µg/L	4.8493 ppb	14:24:38
3	Fe 238.204 Radial†	13.0	1.0	11.319 µg/L	11.319 ppb	14:24:38
3	K 766.490 Radial†	688.4	198.5	92.631 µg/L	92.631 ppb	14:24:17
3	Mg 279.077 IEC†	11.9	3.8	50.715 µg/L	50.715 ppb	14:24:38
3	Na 589.592 Radial†	294.1	111.6	55.687 µg/L	55.687 ppb	14:24:17
3	Sr 421.552†	174.3	33.8	0.2007 µg/L	0.2007 ppb	14:24:17
3	Sc 361.383	2071400.8	2071400.8	98.963 %		14:25:52
3	Y 371.029	1416537.4	1416537.4	98.860 %		14:25:52
3	Ag 328.068†	-444.1	11.4	0.0932 µg/L	0.0932 ppb	14:25:58
3	As 188.979†	-2.4	0.8	1.1894 µg/L	1.1894 ppb	14:26:18
3	B 249.677†	365.9	70.4	3.1890 µg/L	3.1890 ppb	14:26:18
3	Ba 233.527†	2.1	10.6	0.2313 µg/L	0.2313 ppb	14:26:18
3	Be 313.107†	-1030.5	117.6	0.0687 µg/L	0.0687 ppb	14:25:58
3	Cd 226.502†	-157.9	11.0	0.2614 µg/L	0.2614 ppb	14:26:18
3	Co 228.616†	50.9	3.3	0.1439 µg/L	0.1439 ppb	14:26:18
3	Cr 267.716†	76.5	-3.0	-0.0650 µg/L	-0.0650 ppb	14:26:18
3	Cu 324.752†	4919.6	594.5	3.8852 µg/L	3.8852 ppb	14:25:58
3	Mn 257.610†	-644.3	35.9	0.1053 µg/L	0.1053 ppb	14:26:18
3	Mo 202.031†	37.4	32.7	3.2322 µg/L	3.2322 ppb	14:26:18
3	Ni 231.604†	386.9	14.1	0.7904 µg/L	0.7904 ppb	14:26:18
3	P 214.914†	277.9	8.5	13.623 µg/L	13.623 ppb	14:26:18
3	Pb 220.353†	33.0	3.2	0.8333 µg/L	0.8333 ppb	14:26:18
3	S 181.975 Axial†	26.5	4.2	13.428 µg/L	13.428 ppb	14:26:18
3	Sb 206.836†	32.7	10.3	9.2792 µg/L	9.2792 ppb	14:26:18
3	Se 196.026†	28.4	1.4	1.2992 µg/L	1.2992 ppb	14:26:18
3	SiO2†	2763.6	12.8	2.3082 µg/L	2.3082 ppb	14:26:18
3	Si 251.611†	513.6	94.9	6.4527 µg/L	6.4527 ppb	14:26:18
3	Sn 189.927†	-8.3	-0.9	-0.3688 µg/L	-0.3688 ppb	14:26:18
3	Ti 334.940†	-202.7	372.5	0.8670 µg/L	0.8670 ppb	14:25:58
3	Tl 190.801†	-36.0	-2.2	-2.1722 µg/L	-2.1722 ppb	14:26:18
3	U 409.014†	-32.6	-27.2	-2.4694 µg/L	-2.4694 ppb	14:25:58
3	V 292.402†	118.4	7.4	0.1078 µg/L	0.1078 ppb	14:25:58
3	Zn 213.857†	993.5	-4.9	-0.1263 µg/L	-0.1263 ppb	14:26:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2077343.3	99.247 %	0.5574			0.56%
Sc RADIAL	97540.2	101 %	0.3			0.34%
Y 371.029	1422197.9	99.255 %	0.4983			0.50%
Ag 328.068†	8.9	0.0723 µg/L	0.11925	0.0723 ppb	0.11925	164.95%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	25.9	12.276 µg/L	5.4612	12.276 ppb	5.4612	44.49%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.5	3.7439 µg/L	2.26578	3.7439 ppb	2.26578	60.52%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	71.6	3.2467 µg/L	0.05170	3.2467 ppb	0.05170	1.59%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	14.4	0.3160 µg/L	0.10224	0.3160 ppb	0.10224	32.36%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	157.6	0.0923 µg/L	0.02100	0.0923 ppb	0.02100	22.75%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	28.0	10.196 µg/L	5.7901	10.196 ppb	5.7901	56.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.7	0.1583 µg/L	0.15952	0.1583 ppb	0.15952	100.75%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.8	0.1198 µg/L	0.22502	0.1198 ppb	0.22502	187.84%

Cr	267.716†	-0.9	-0.0202 µg/L	0.11133	-0.0202 ppb	0.11133	551.01%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	638.5	4.1714 µg/L	0.28755	4.1714 ppb	0.28755	6.89%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.6	6.6739 µg/L	10.76045	6.6739 ppb	10.76045	161.23%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	273.4	127.57 µg/L	31.154	127.57 ppb	31.154	24.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	3.2	42.835 µg/L	19.4630	42.835 ppb	19.4630	45.44%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	49.0	0.1448 µg/L	0.03630	0.1448 ppb	0.03630	25.06%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	35.9	3.5567 µg/L	0.53731	3.5567 ppb	0.53731	15.11%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	129.9	64.822 µg/L	8.8361	64.822 ppb	8.8361	13.63%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	7.0	0.3903 µg/L	0.36089	0.3903 ppb	0.36089	92.47%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	4.2	6.5325 µg/L	9.80561	6.5325 ppb	9.80561	150.10%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	5.1	1.3316 µg/L	1.02757	1.3316 ppb	1.02757	77.17%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.2	7.0248 µg/L	21.08394	7.0248 ppb	21.08394	300.14%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	8.9	7.9791 µg/L	1.13751	7.9791 ppb	1.13751	14.26%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.3	-1.2438 µg/L	3.33655	-1.2438 ppb	3.33655	268.25%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		16.7	3.0223 µg/L	4.67448	3.0223 ppb	4.67448	154.67%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	86.1	5.8518 µg/L	0.89093	5.8518 ppb	0.89093	15.22%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	7.8	3.0241 µg/L	3.12779	3.0241 ppb	3.12779	103.43%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	23.6	0.1400 µg/L	0.05727	0.1400 ppb	0.05727	40.91%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	371.0	0.8643 µg/L	0.05562	0.8643 ppb	0.05562	6.44%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.9	-0.8853 µg/L	3.10051	-0.8853 ppb	3.10051	350.23%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-10.2	-0.9243 µg/L	4.73639	-0.9243 ppb	4.73639	512.45%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	9.0	0.1323 µg/L	0.44020	0.1323 ppb	0.44020	332.82%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	36.2	0.8234 µg/L	0.84465	0.8234 ppb	0.84465	102.58%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/16/2010 14:35:59

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610A.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb
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Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 3/16/2010 13:44:38

IEC File: 011510.iec

MSF File:

Method Description:

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

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/16/2010 14:36:01

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	98836.5	98836.5	102 %		14:36:33
1	Al 396.153Radial†	10370.2	10274.6	4894.1 µg/L	4894.1 ppb	14:36:33
1	Ca 317.933Radial†	14110.2	13432.5	4888.4 µg/L	4888.4 ppb	14:36:33
1	Fe 238.204 Radial†	427.7	406.9	4822.9 µg/L	4822.9 ppb	14:36:53

1	K 766.490 Radial†	11236.5	10518.3	4908.7 µg/L	4908.7 ppb	14:36:33
1	Mg 279.077 IEC†	393.9	377.7	4983.6 µg/L	4983.6 ppb	14:36:53
1	Na 589.592 Radial†	20216.7	19617.1	9791.0 µg/L	9791.0 ppb	14:36:33
1	Sr 421.552†	84297.6	82411.2	489.92 µg/L	489.92 ppb	14:36:33
1	Sc 361.383	2089081.4	2089081.4	99.808 %		14:37:57
1	Y 371.029	1424616.3	1424616.3	99.424 %		14:37:57
1	Ag 328.068†	60837.8	61415.2	496.82 µg/L	496.82 ppb	14:38:02
1	As 188.979†	349.2	353.1	519.79 µg/L	519.79 ppb	14:38:23
1	B 249.677†	11212.2	10934.5	494.52 µg/L	494.52 ppb	14:38:02
1	Ba 233.527†	22850.3	22902.8	501.79 µg/L	501.79 ppb	14:38:02
1	Be 313.107†	843840.3	846625.8	497.25 µg/L	497.25 ppb	14:37:57
1	Cd 226.502†	20866.2	21077.0	500.97 µg/L	500.97 ppb	14:38:02
1	Co 228.616†	11722.0	11696.6	501.94 µg/L	501.94 ppb	14:38:02
1	Cr 267.716†	23307.4	23272.1	506.47 µg/L	506.47 ppb	14:38:02
1	Cu 324.752†	81383.5	77163.7	504.91 µg/L	504.91 ppb	14:38:02
1	Mn 257.610†	166969.2	167978.1	504.80 µg/L	504.80 ppb	14:37:57
1	Mo 202.031†	5238.2	5243.2	519.00 µg/L	519.00 ppb	14:38:23
1	Ni 231.604†	9339.5	8980.6	503.16 µg/L	503.16 ppb	14:38:02
1	P 214.914†	1812.2	1543.3	2514.4 µg/L	2514.4 ppb	14:38:23
1	Pb 220.353†	1972.9	1946.5	510.93 µg/L	510.93 ppb	14:38:23
1	S 181.975 Axial†	339.5	317.6	1010.8 µg/L	1010.8 ppb	14:38:23
1	Sb 206.836†	591.8	570.3	511.38 µg/L	511.38 ppb	14:38:23
1	Se 196.026†	566.6	540.4	519.03 µg/L	519.03 ppb	14:38:23
1	SiO2†	32389.2	29671.9	5356.8 µg/L	5356.8 ppb	14:38:02
1	Si 251.611†	37313.5	36961.3	2512.8 µg/L	2512.8 ppb	14:38:02
1	Sn 189.927†	1324.3	1334.3	519.96 µg/L	519.96 ppb	14:38:23
1	Ti 334.940†	211841.7	212827.3	497.36 µg/L	497.36 ppb	14:37:57
1	Tl 190.801†	479.9	514.9	507.66 µg/L	507.66 ppb	14:38:23
1	U 409.014†	5584.2	5600.8	507.57 µg/L	507.57 ppb	14:38:02
1	V 292.402†	42568.2	42538.0	507.21 µg/L	507.21 ppb	14:38:02
1	Zn 213.857†	23034.8	22070.4	504.60 µg/L	504.60 ppb	14:38:02
2	Sc RADIAL	99004.5	99004.5	102 %		14:36:59
2	Al 396.153Radial†	10332.8	10220.8	4868.7 µg/L	4868.7 ppb	14:36:59
2	Ca 317.933Radial†	14124.8	13423.3	4885.0 µg/L	4885.0 ppb	14:36:59
2	Fe 238.204 Radial†	430.9	409.3	4852.1 µg/L	4852.1 ppb	14:37:19
2	K 766.490 Radial†	11178.3	10442.7	4873.4 µg/L	4873.4 ppb	14:36:59
2	Mg 279.077 IEC†	392.8	376.0	4959.9 µg/L	4959.9 ppb	14:37:19
2	Na 589.592 Radial†	20214.1	19581.1	9773.0 µg/L	9773.0 ppb	14:36:59
2	Sr 421.552†	84106.4	82084.3	487.98 µg/L	487.98 ppb	14:36:59
2	Sc 361.383	2095270.2	2095270.2	100.10 %		14:38:30
2	Y 371.029	1432014.3	1432014.3	99.940 %		14:38:30
2	Ag 328.068†	61109.5	61506.7	497.56 µg/L	497.56 ppb	14:38:36
2	As 188.979†	335.1	338.0	497.39 µg/L	497.39 ppb	14:38:56
2	B 249.677†	11269.5	10958.5	495.60 µg/L	495.60 ppb	14:38:36
2	Ba 233.527†	22977.1	22961.8	503.08 µg/L	503.08 ppb	14:38:36
2	Be 313.107†	847681.5	847965.7	498.04 µg/L	498.04 ppb	14:38:30
2	Cd 226.502†	20932.4	21081.4	501.07 µg/L	501.07 ppb	14:38:36
2	Co 228.616†	11803.2	11743.0	503.92 µg/L	503.92 ppb	14:38:36
2	Cr 267.716†	23403.4	23299.0	507.05 µg/L	507.05 ppb	14:38:36
2	Cu 324.752†	81650.8	77189.9	505.08 µg/L	505.08 ppb	14:38:36
2	Mn 257.610†	167972.1	168485.8	506.33 µg/L	506.33 ppb	14:38:30
2	Mo 202.031†	5137.7	5127.2	507.53 µg/L	507.53 ppb	14:38:56
2	Ni 231.604†	9421.1	9034.5	506.18 µg/L	506.18 ppb	14:38:36
2	P 214.914†	1789.5	1515.2	2467.6 µg/L	2467.6 ppb	14:38:56
2	Pb 220.353†	1960.4	1928.2	506.10 µg/L	506.10 ppb	14:38:56
2	S 181.975 Axial†	335.1	312.2	993.60 µg/L	993.60 ppb	14:38:56
2	Sb 206.836†	580.8	557.5	499.79 µg/L	499.79 ppb	14:38:56
2	Se 196.026†	560.9	533.0	512.16 µg/L	512.16 ppb	14:38:56
2	SiO2†	32706.0	29892.5	5396.7 µg/L	5396.7 ppb	14:38:36
2	Si 251.611†	37567.7	37104.9	2522.5 µg/L	2522.5 ppb	14:38:36
2	Sn 189.927†	1297.9	1304.0	508.18 µg/L	508.18 ppb	14:38:56
2	Ti 334.940†	212305.2	212663.4	496.97 µg/L	496.97 ppb	14:38:30
2	Tl 190.801†	480.5	514.1	506.84 µg/L	506.84 ppb	14:38:56
2	U 409.014†	5618.0	5618.0	509.13 µg/L	509.13 ppb	14:38:36
2	V 292.402†	42740.8	42584.4	507.67 µg/L	507.67 ppb	14:38:36
2	Zn 213.857†	23124.0	22091.3	505.07 µg/L	505.07 ppb	14:38:36
3	Sc RADIAL	98781.4	98781.4	102 %		14:37:25
3	Al 396.153Radial†	10333.9	10244.7	4881.7 µg/L	4881.7 ppb	14:37:25
3	Ca 317.933Radial†	14028.2	13359.8	4861.9 µg/L	4861.9 ppb	14:37:25
3	Fe 238.204 Radial†	433.0	412.3	4885.9 µg/L	4885.9 ppb	14:37:45
3	K 766.490 Radial†	11220.3	10508.6	4904.2 µg/L	4904.2 ppb	14:37:25

3	Mg 279.077 IEC†	390.2	374.4	4937.4 µg/L	4937.4 ppb	14:37:45
3	Na 589.592 Radial†	20249.0	19659.9	9812.3 µg/L	9812.3 ppb	14:37:25
3	Sr 421.552†	84112.1	82275.6	489.12 µg/L	489.12 ppb	14:37:25
3	Sc 361.383	2077745.8	2077745.8	99.266 %		14:39:03
3	Y 371.029	1419580.7	1419580.7	99.073 %		14:39:03
3	Ag 328.068†	56985.6	57867.2	467.99 µg/L	467.99 ppb	14:39:09
3	As 188.979†	288.1	293.5	431.85 µg/L	431.85 ppb	14:39:29
3	B 249.677†	10392.6	10170.1	459.70 µg/L	459.70 ppb	14:39:09
3	Ba 233.527†	20740.1	20901.9	457.94 µg/L	457.94 ppb	14:39:09
3	Be 313.107†	778168.7	785081.3	461.11 µg/L	461.11 ppb	14:39:03
3	Cd 226.502†	18814.6	19124.3	454.50 µg/L	454.50 ppb	14:39:09
3	Co 228.616†	10524.0	10553.8	452.84 µg/L	452.84 ppb	14:39:09
3	Cr 267.716†	20281.8	20351.5	442.91 µg/L	442.91 ppb	14:39:09
3	Cu 324.752†	73645.8	69813.7	456.91 µg/L	456.91 ppb	14:39:09
3	Mn 257.610†	154366.9	156195.3	469.39 µg/L	469.39 ppb	14:39:03
3	Mo 202.031†	4283.5	4310.1	426.67 µg/L	426.67 ppb	14:39:29
3	Ni 231.604†	8432.9	8118.4	454.86 µg/L	454.86 ppb	14:39:09
3	P 214.914†	1562.5	1301.7	2116.8 µg/L	2116.8 ppb	14:39:29
3	Pb 220.353†	1694.8	1677.2	440.20 µg/L	440.20 ppb	14:39:29
3	S 181.975 Axial†	296.7	276.3	879.44 µg/L	879.44 ppb	14:39:29
3	Sb 206.836†	510.0	491.1	439.96 µg/L	439.96 ppb	14:39:29
3	Se 196.026†	487.8	464.1	447.58 µg/L	447.58 ppb	14:39:29
3	SiO2†	30169.0	27612.4	4985.0 µg/L	4985.0 ppb	14:39:09
3	Si 251.611†	34426.0	34256.4	2328.9 µg/L	2328.9 ppb	14:39:09
3	Sn 189.927†	1057.3	1072.5	418.05 µg/L	418.05 ppb	14:39:29
3	Ti 334.940†	193739.2	195748.9	457.42 µg/L	457.42 ppb	14:39:03
3	Tl 190.801†	433.9	471.3	464.66 µg/L	464.66 ppb	14:39:29
3	U 409.014†	4890.2	4932.2	446.86 µg/L	446.86 ppb	14:39:09
3	V 292.402†	37965.7	38134.1	454.30 µg/L	454.30 ppb	14:39:09
3	Zn 213.857†	20728.0	19872.4	454.28 µg/L	454.28 ppb	14:39:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2087365.8	99.726 %	0.4246			0.43%
Sc RADIAL	98874.1	102 %	0.1			0.12%
Y 371.029	1425403.8	99.479 %	0.4365			0.44%
Ag 328.068†	60263.0	487.46 µg/L	16.861	487.46 ppb	16.861	3.46%
QC value within limits for Ag 328.068 Recovery = 97.49%						
Al 396.153Radial†	10246.7	4881.5 µg/L	12.71	4881.5 ppb	12.71	0.26%
QC value within limits for Al 396.153Radial Recovery = 97.63%						
As 188.979†	328.2	483.01 µg/L	45.702	483.01 ppb	45.702	9.46%
QC value within limits for As 188.979 Recovery = 96.60%						
B 249.677†	10687.7	483.27 µg/L	20.423	483.27 ppb	20.423	4.23%
QC value within limits for B 249.677 Recovery = 96.65%						
Ba 233.527†	22255.5	487.60 µg/L	25.699	487.60 ppb	25.699	5.27%
QC value within limits for Ba 233.527 Recovery = 97.52%						
Be 313.107†	826557.6	485.46 µg/L	21.100	485.46 ppb	21.100	4.35%
QC value within limits for Be 313.107 Recovery = 97.09%						
Ca 317.933Radial†	13405.2	4878.4 µg/L	14.40	4878.4 ppb	14.40	0.30%
QC value within limits for Ca 317.933Radial Recovery = 97.57%						
Cd 226.502†	20427.6	485.51 µg/L	26.861	485.51 ppb	26.861	5.53%
QC value within limits for Cd 226.502 Recovery = 97.10%						
Co 228.616†	11331.1	486.23 µg/L	28.936	486.23 ppb	28.936	5.95%
QC value within limits for Co 228.616 Recovery = 97.25%						
Cr 267.716†	22307.6	485.48 µg/L	36.863	485.48 ppb	36.863	7.59%
QC value within limits for Cr 267.716 Recovery = 97.10%						
Cu 324.752†	74722.4	488.97 µg/L	27.761	488.97 ppb	27.761	5.68%
QC value within limits for Cu 324.752 Recovery = 97.79%						
Fe 238.204 Radial†	409.5	4853.7 µg/L	31.53	4853.7 ppb	31.53	0.65%
QC value within limits for Fe 238.204 Radial Recovery = 97.07%						
K 766.490 Radial†	10489.9	4895.4 µg/L	19.18	4895.4 ppb	19.18	0.39%
QC value within limits for K 766.490 Radial Recovery = 97.91%						
Mg 279.077 IEC†	376.0	4960.3 µg/L	23.09	4960.3 ppb	23.09	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 99.21%						
Mn 257.610†	164219.7	493.51 µg/L	20.897	493.51 ppb	20.897	4.23%
QC value within limits for Mn 257.610 Recovery = 98.70%						
Mo 202.031†	4893.5	484.40 µg/L	50.323	484.40 ppb	50.323	10.39%
QC value within limits for Mo 202.031 Recovery = 96.88%						
Na 589.592 Radial†	19619.4	9792.1 µg/L	19.70	9792.1 ppb	19.70	0.20%

QC value within limits for Na 589.592 Radial Recovery = 97.92%

Ni 231.604†	8711.1	488.07 µg/L	28.798	488.07 ppb	28.798	5.90%
QC value within limits for Ni 231.604 Recovery = 97.61%						
P 214.914†	1453.4	2366.3 µg/L	217.34	2366.3 ppb	217.34	9.19%
QC value within limits for P 214.914 Recovery = 94.65%						
Pb 220.353†	1850.6	485.74 µg/L	39.516	485.74 ppb	39.516	8.14%
QC value within limits for Pb 220.353 Recovery = 97.15%						
S 181.975 Axial†	302.0	961.26 µg/L	71.383	961.26 ppb	71.383	7.43%
QC value within limits for S 181.975 Axial Recovery = 96.13%						
Sb 206.836†	539.6	483.71 µg/L	38.331	483.71 ppb	38.331	7.92%
QC value within limits for Sb 206.836 Recovery = 96.74%						
Se 196.026†	512.5	492.92 µg/L	39.421	492.92 ppb	39.421	8.00%
QC value within limits for Se 196.026 Recovery = 98.58%						
SiO2†	29058.9	5246.2 µg/L	227.04	5246.2 ppb	227.04	4.33%
QC value within limits for SiO2 Recovery = 98.11%						
Si 251.611†	36107.5	2454.7 µg/L	109.10	2454.7 ppb	109.10	4.44%
QC value within limits for Si 251.611 Recovery = 98.19%						
Sn 189.927†	1236.9	482.06 µg/L	55.747	482.06 ppb	55.747	11.56%
QC value within limits for Sn 189.927 Recovery = 96.41%						
Sr 421.552†	82257.0	489.01 µg/L	0.977	489.01 ppb	0.977	0.20%
QC value within limits for Sr 421.552 Recovery = 97.80%						
Ti 334.940†	207079.9	483.92 µg/L	22.946	483.92 ppb	22.946	4.74%
QC value within limits for Ti 334.940 Recovery = 96.78%						
Tl 190.801†	500.1	493.05 µg/L	24.593	493.05 ppb	24.593	4.99%
QC value within limits for Tl 190.801 Recovery = 98.61%						
U 409.014†	5383.6	487.86 µg/L	35.510	487.86 ppb	35.510	7.28%
QC value within limits for U 409.014 Recovery = 97.57%						
V 292.402†	41085.5	489.72 µg/L	30.682	489.72 ppb	30.682	6.27%
QC value within limits for V 292.402 Recovery = 97.94%						
Zn 213.857†	21344.7	487.98 µg/L	29.186	487.98 ppb	29.186	5.98%
QC value within limits for Zn 213.857 Recovery = 97.60%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 14:39:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97923.2	97923.2	101 %		14:40:10
1	Al 396.153Radial†	-127.0	-6.2	-3.0132 µg/L	-3.0132 ppb	14:40:10
1	Ca 317.933Radial†	379.5	-10.1	-3.6906 µg/L	-3.6906 ppb	14:40:30
1	Fe 238.204 Radial†	13.1	1.0	11.304 µg/L	11.304 ppb	14:40:30
1	K 766.490 Radial†	514.7	23.4	10.898 µg/L	10.898 ppb	14:40:10
1	Mg 279.077 IEC†	8.1	0.0	0.6110 µg/L	0.6110 ppb	14:40:30
1	Na 589.592 Radial†	236.0	52.7	26.312 µg/L	26.312 ppb	14:40:10
1	Sr 421.552†	124.6	-16.2	-0.0965 µg/L	-0.0965 ppb	14:40:10
1	Sc 361.383	2069830.8	2069830.8	98.888 %		14:41:32
1	Y 371.029	1415716.5	1415716.5	98.803 %		14:41:32
1	Ag 328.068†	-548.9	-94.9	-0.7650 µg/L	-0.7650 ppb	14:41:38
1	As 188.979†	-2.5	0.8	1.1284 µg/L	1.1284 ppb	14:41:58
1	B 249.677†	335.6	40.0	1.8096 µg/L	1.8096 ppb	14:41:38
1	Ba 233.527†	-7.7	0.7	0.0133 µg/L	0.0133 ppb	14:41:58
1	Be 313.107†	-1007.1	140.4	0.0824 µg/L	0.0824 ppb	14:41:38
1	Cd 226.502†	-156.5	12.4	0.2920 µg/L	0.2920 ppb	14:41:58
1	Co 228.616†	39.8	-7.8	-0.3333 µg/L	-0.3333 ppb	14:41:58
1	Cr 267.716†	101.8	22.7	0.4934 µg/L	0.4934 ppb	14:41:38
1	Cu 324.752†	4549.2	223.7	1.4630 µg/L	1.4630 ppb	14:41:38
1	Mn 257.610†	-612.1	68.0	0.2049 µg/L	0.2049 ppb	14:41:58
1	Mo 202.031†	29.0	24.2	2.3924 µg/L	2.3924 ppb	14:41:58
1	Ni 231.604†	365.0	-7.8	-0.4362 µg/L	-0.4362 ppb	14:41:58
1	P 214.914†	270.2	0.8	1.1901 µg/L	1.1901 ppb	14:41:58
1	Pb 220.353†	29.1	-0.8	-0.1964 µg/L	-0.1964 ppb	14:41:58
1	S 181.975 Axial†	24.6	2.3	7.3601 µg/L	7.3601 ppb	14:41:58
1	Sb 206.836†	28.1	5.7	5.0982 µg/L	5.0982 ppb	14:41:58
1	Se 196.026†	27.2	0.2	0.2537 µg/L	0.2537 ppb	14:41:58
1	SiO2†	2772.4	23.8	4.2969 µg/L	4.2969 ppb	14:41:38
1	Si 215.611†	434.7	15.5	1.0525 µg/L	1.0525 ppb	14:41:58
1	Sn 189.927†	-2.4	5.1	1.9690 µg/L	1.9690 ppb	14:41:58
1	Ti 334.940†	-488.9	82.8	0.1936 µg/L	0.1936 ppb	14:41:38
1	Tl 190.801†	-32.9	0.8	0.8120 µg/L	0.8120 ppb	14:41:58
1	U 409.014†	2.0	7.8	0.7080 µg/L	0.7080 ppb	14:41:38
1	V 292.402†	58.8	-52.9	-0.6052 µg/L	-0.6052 ppb	14:41:38
1	Zn 213.857†	683.6	-317.5	-7.3122 µg/L	-7.3122 ppb	14:41:58
2	Sc RADIAL	97416.1	97416.1	101 %		14:40:36
2	Al 396.153Radial†	-106.0	14.0	6.6472 µg/L	6.6472 ppb	14:40:36
2	Ca 317.933Radial†	385.8	-2.0	-0.7354 µg/L	-0.7354 ppb	14:40:56
2	Fe 238.204 Radial†	13.2	1.1	13.143 µg/L	13.143 ppb	14:40:56
2	K 766.490 Radial†	484.3	-4.2	-1.9398 µg/L	-1.9398 ppb	14:40:36
2	Mg 279.077 IEC†	10.3	2.2	29.081 µg/L	29.081 ppb	14:40:56
2	Na 589.592 Radial†	221.0	39.0	19.447 µg/L	19.447 ppb	14:40:36
2	Sr 421.552†	148.5	8.2	0.0485 µg/L	0.0485 ppb	14:40:36
2	Sc 361.383	2086144.2	2086144.2	99.667 %		14:42:04
2	Y 371.029	1426251.6	1426251.6	99.538 %		14:42:04
2	Ag 328.068†	-589.9	-131.6	-1.0551 µg/L	-1.0551 ppb	14:42:10
2	As 188.979†	-0.7	2.6	3.7661 µg/L	3.7661 ppb	14:42:30
2	B 249.677†	317.1	18.8	0.8456 µg/L	0.8456 ppb	14:42:10
2	Ba 233.527†	4.0	12.4	0.2722 µg/L	0.2722 ppb	14:42:30
2	Be 313.107†	-987.6	168.0	0.0985 µg/L	0.0985 ppb	14:42:10
2	Cd 226.502†	-171.4	-1.3	-0.0335 µg/L	-0.0335 ppb	14:42:30
2	Co 228.616†	39.2	-8.7	-0.3740 µg/L	-0.3740 ppb	14:42:30
2	Cr 267.716†	66.2	-13.8	-0.3010 µg/L	-0.3010 ppb	14:42:10
2	Cu 324.752†	4518.2	156.6	1.0254 µg/L	1.0254 ppb	14:42:10
2	Mn 257.610†	-612.2	72.7	0.2173 µg/L	0.2173 ppb	14:42:30
2	Mo 202.031†	29.8	24.8	2.4526 µg/L	2.4526 ppb	14:42:30
2	Ni 231.604†	375.3	-0.3	-0.0180 µg/L	-0.0180 ppb	14:42:30
2	P 214.914†	266.0	-5.5	-9.1845 µg/L	-9.1845 ppb	14:42:30
2	Pb 220.353†	33.3	3.3	0.8585 µg/L	0.8585 ppb	14:42:30

2	S 181.975 Axial†	19.4	-3.1	-9.8857 µg/L	-9.8857 ppb	14:42:30
2	Sb 206.836†	33.4	10.8	9.6809 µg/L	9.6809 ppb	14:42:30
2	Se 196.026†	27.2	-0.0	0.0113 µg/L	0.0113 ppb	14:42:30
2	SiO2†	2745.6	-25.0	-4.5104 µg/L	-4.5104 ppb	14:42:10
2	Si 251.611†	444.0	21.4	1.4568 µg/L	1.4568 ppb	14:42:30
2	Sn 189.927†	4.6	12.1	4.7090 µg/L	4.7090 ppb	14:42:30
2	Ti 334.940†	-380.1	195.9	0.4557 µg/L	0.4557 ppb	14:42:10
2	Tl 190.801†	-32.4	1.6	1.6129 µg/L	1.6129 ppb	14:42:30
2	U 409.014†	12.1	17.9	1.6267 µg/L	1.6267 ppb	14:42:10
2	V 292.402†	120.3	8.3	0.1168 µg/L	0.1168 ppb	14:42:10
2	Zn 213.857†	677.0	-329.6	-7.5918 µg/L	-7.5918 ppb	14:42:30
3	Sc RADIAL	98240.0	98240.0	101 %		14:41:01
3	Al 396.153Radial†	-164.8	-43.1	-20.609 µg/L	-20.609 ppb	14:41:01
3	Ca 317.933Radial†	390.4	-0.7	-0.2496 µg/L	-0.2496 ppb	14:41:22
3	Fe 238.204 Radial†	12.5	0.4	4.3734 µg/L	4.3734 ppb	14:41:22
3	K 766.490 Radial†	536.7	43.4	20.244 µg/L	20.244 ppb	14:41:01
3	Mg 279.077 IEC†	13.6	5.4	71.694 µg/L	71.694 ppb	14:41:22
3	Na 589.592 Radial†	220.9	37.1	18.494 µg/L	18.494 ppb	14:41:01
3	Sr 421.552†	125.8	-15.5	-0.0922 µg/L	-0.0922 ppb	14:41:01
3	Sc 361.383	2101049.5	2101049.5	100.38 %		14:42:36
3	Y 371.029	1437937.2	1437937.2	100.35 %		14:42:36
3	Ag 328.068†	-490.1	-28.1	-0.2276 µg/L	-0.2276 ppb	14:42:42
3	As 188.979†	-5.7	-2.4	-3.6107 µg/L	-3.6107 ppb	14:43:02
3	B 249.677†	304.1	3.6	0.1626 µg/L	0.1626 ppb	14:42:42
3	Ba 233.527†	-2.5	5.9	0.1291 µg/L	0.1291 ppb	14:43:02
3	Be 313.107†	-941.4	221.0	0.1297 µg/L	0.1297 ppb	14:42:42
3	Cd 226.502†	-161.4	9.8	0.2310 µg/L	0.2310 ppb	14:43:02
3	Co 228.616†	41.6	-6.6	-0.2822 µg/L	-0.2822 ppb	14:43:02
3	Cr 267.716†	72.6	-7.9	-0.1720 µg/L	-0.1720 ppb	14:42:42
3	Cu 324.752†	4566.2	172.3	1.1262 µg/L	1.1262 ppb	14:42:42
3	Mn 257.610†	-622.5	66.8	0.1962 µg/L	0.1962 ppb	14:43:02
3	Mo 202.031†	32.4	27.1	2.6860 µg/L	2.6860 ppb	14:43:02
3	Ni 231.604†	364.6	-13.7	-0.7696 µg/L	-0.7696 ppb	14:43:02
3	P 214.914†	267.4	-6.0	-10.051 µg/L	-10.051 ppb	14:43:02
3	Pb 220.353†	39.5	9.2	2.4200 µg/L	2.4200 ppb	14:43:02
3	S 181.975 Axial†	25.9	3.2	10.281 µg/L	10.281 ppb	14:43:02
3	Sb 206.836†	29.8	7.0	6.2789 µg/L	6.2789 ppb	14:43:02
3	Se 196.026†	22.4	-5.0	-4.7585 µg/L	-4.7585 ppb	14:43:02
3	SiO2†	2754.3	-35.9	-6.4746 µg/L	-6.4746 ppb	14:42:42
3	Si 251.611†	439.8	14.1	0.9571 µg/L	0.9571 ppb	14:43:02
3	Sn 189.927†	-3.2	4.3	1.6676 µg/L	1.6676 ppb	14:43:02
3	Ti 334.940†	-455.0	123.9	0.2842 µg/L	0.2842 ppb	14:42:42
3	Tl 190.801†	-40.6	-6.4	-6.2256 µg/L	-6.2256 ppb	14:43:02
3	U 409.014†	-34.9	-28.9	-2.6292 µg/L	-2.6292 ppb	14:42:42
3	V 292.402†	81.7	-31.0	-0.3486 µg/L	-0.3486 ppb	14:42:42
3	Zn 213.857†	667.7	-343.7	-7.9163 µg/L	-7.9163 ppb	14:43:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2085674.9	99.645 %	0.7460			0.75%
Sc RADIAL	97859.8	101 %	0.4			0.42%
Y 371.029	1426635.1	99.565 %	0.7757			0.78%
Ag 328.068†	-84.9	-0.6826 µg/L	0.41989	-0.6826 ppb	0.41989	61.52%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-11.7	-5.6584 µg/L	13.81945	-5.6584 ppb	13.81945	244.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.3	0.4279 µg/L	3.73797	0.4279 ppb	3.73797	873.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	20.8	0.9392 µg/L	0.82745	0.9392 ppb	0.82745	88.10%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.3	0.1382 µg/L	0.12965	0.1382 ppb	0.12965	93.81%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	176.5	0.1036 µg/L	0.02406	0.1036 ppb	0.02406	23.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-4.3	-1.5585 µg/L	1.86230	-1.5585 ppb	1.86230	119.49%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1631 µg/L	0.17303	0.1631 ppb	0.17303	106.06%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-7.7	-0.3298 µg/L	0.04598	-0.3298 ppb	0.04598	13.94%

Cr	267.716†	0.3	0.0068 µg/L	0.42635	0.0068 ppb	0.42635	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	184.2	1.2049 µg/L	0.22917	1.2049 ppb	0.22917	19.02%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.8	9.6067 µg/L	4.62456	9.6067 ppb	4.62456	48.14%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	20.9	9.7340 µg/L	11.13749	9.7340 ppb	11.13749	114.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	2.6	33.795 µg/L	35.7751	33.795 ppb	35.7751	105.86%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	69.2	0.2061 µg/L	0.01063	0.2061 ppb	0.01063	5.15%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	25.4	2.5103 µg/L	0.15511	2.5103 ppb	0.15511	6.18%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	42.9	21.418 µg/L	4.2653	21.418 ppb	4.2653	19.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-7.3	-0.4080 µg/L	0.37661	-0.4080 ppb	0.37661	92.32%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-3.6	-6.0152 µg/L	6.25504	-6.0152 ppb	6.25504	103.99%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	3.9	1.0274 µg/L	1.31637	1.0274 ppb	1.31637	128.13%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.8	2.5852 µg/L	10.89844	2.5852 ppb	10.89844	421.57%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	7.8	7.0193 µg/L	2.37938	7.0193 ppb	2.37938	33.90%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.6	-1.4978 µg/L	2.82643	-1.4978 ppb	2.82643	188.70%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-12.3	-2.2294 µg/L	5.73660	-2.2294 ppb	5.73660	257.32%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	17.0	1.1555 µg/L	0.26528	1.1555 ppb	0.26528	22.96%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	7.1	2.7819 µg/L	1.67575	2.7819 ppb	1.67575	60.24%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-7.9	-0.0467 µg/L	0.08252	-0.0467 ppb	0.08252	176.63%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	134.2	0.3111 µg/L	0.13313	0.3111 ppb	0.13313	42.79%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.3	-1.2669 µg/L	4.31300	-1.2669 ppb	4.31300	340.44%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-1.1	-0.0982 µg/L	2.23954	-0.0982 ppb	2.23954	>999.9%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-25.2	-0.2790 µg/L	0.36598	-0.2790 ppb	0.36598	131.17%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-330.3	-7.6068 µg/L	0.30234	-7.6068 ppb	0.30234	3.97%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: LR1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 113

Date Collected: 3/16/2010 14:43:13

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	98821.0	98821.0	102 %		14:43:44
1	Al 396.153Radial†	-178.8	-55.9	-26.396 µg/L	-26.396 ppb	14:43:44
1	Ca 317.933Radial†	535.2	138.9	50.535 µg/L	50.535 ppb	14:44:05
1	Fe 238.204 Radial†	32349.8	31672.5	374610 µg/L	374610 ppb	14:43:44
1	K 766.490 Radial†	215.1	-274.7	-128.19 µg/L	-128.19 ppb	14:43:44
1	Mg 279.077 IEC†	9.1	0.9	-389.76 µg/L	-389.76 ppb	14:44:05
1	Na 589.592 Radial†	195.1	10.5	5.2457 µg/L	5.2457 ppb	14:43:44
1	Sr 421.552†	172.3	29.3	0.1742 µg/L	0.1742 ppb	14:43:44
1	Sc 361.383	2084224.1	2084224.1	99.576 %		14:45:07
1	Y 371.029	1417107.9	1417107.9	98.900 %		14:45:07
1	Ag 328.068†	-3119.9	-2673.0	7.5909 µg/L	7.5909 ppb	14:45:13
1	As 188.979†	-20.0	-16.8	-71.152 µg/L	-71.152 ppb	14:45:33
1	B 249.677†	1596.3	1303.8	-136.31 µg/L	-136.31 ppb	14:45:13
1	Ba 233.527†	526.6	537.3	11.817 µg/L	11.817 ppb	14:45:33
1	Be 313.107†	-1203.6	-49.9	-0.0293 µg/L	-0.0293 ppb	14:45:13
1	Cd 226.502†	1807.9	1986.2	4.8780 µg/L	4.8780 ppb	14:45:13
1	Co 228.616†	498.4	452.5	19.428 µg/L	19.428 ppb	14:45:33
1	Cr 267.716†	-156.8	-237.7	-5.1458 µg/L	-5.1458 ppb	14:45:33
1	Cu 324.752†	-2661.5	-7049.5	24.382 µg/L	24.382 ppb	14:45:13
1	Mn 257.610†	394.3	1082.9	25.431 µg/L	25.431 ppb	14:45:07
1	Mo 202.031†	-126.9	-132.6	1.1124 µg/L	1.1124 ppb	14:45:13
1	Ni 231.604†	290.6	-85.0	0.0781 µg/L	0.0781 ppb	14:45:33
1	P 214.914†	490.7	220.3	66.605 µg/L	66.605 ppb	14:45:33
1	Pb 220.353†	31.1	1.1	6.5378 µg/L	6.5378 ppb	14:45:33
1	S 181.975 Axial†	-11.0	-33.5	-106.76 µg/L	-106.76 ppb	14:45:33
1	Sb 206.836†	30.4	7.8	6.8064 µg/L	6.8064 ppb	14:45:33
1	Se 196.026†	-313.0	-341.6	870.20 µg/L	870.20 ppb	14:45:33
1	SiO2†	2521.1	-247.9	-44.756 µg/L	-44.756 ppb	14:45:13
1	Si 251.611†	-335.5	-761.0	-51.735 µg/L	-51.735 ppb	14:45:13
1	Sn 189.927†	6.7	14.2	3.7517 µg/L	3.7517 ppb	14:45:33
1	Ti 334.940†	-586.1	-11.4	-0.0268 µg/L	-0.0268 ppb	14:45:13
1	Tl 190.801†	-48.3	-14.4	38.883 µg/L	38.883 ppb	14:45:33
1	U 409.014†	842.3	851.7	25.258 µg/L	25.258 ppb	14:45:13
1	V 292.402†	3256.1	3157.6	-10.295 µg/L	-10.295 ppb	14:45:13
1	Zn 213.857†	2607.2	1609.5	19.356 µg/L	19.356 ppb	14:45:33
2	Sc RADIAL	99842.3	99842.3	103 %		14:44:10
2	Al 396.153Radial†	-178.8	-54.0	-25.554 µg/L	-25.554 ppb	14:44:10
2	Ca 317.933Radial†	539.3	137.5	50.047 µg/L	50.047 ppb	14:44:30
2	Fe 238.204 Radial†	33033.7	32011.3	378620 µg/L	378620 ppb	14:44:10
2	K 766.490 Radial†	304.8	-189.9	-88.622 µg/L	-88.622 ppb	14:44:10
2	Mg 279.077 IEC†	7.6	-0.6	-414.47 µg/L	-414.47 ppb	14:44:30
2	Na 589.592 Radial†	164.4	-21.2	-10.605 µg/L	-10.605 ppb	14:44:10
2	Sr 421.552†	162.0	17.6	0.1049 µg/L	0.1049 ppb	14:44:10
2	Sc 361.383	2091219.4	2091219.4	99.910 %		14:45:40
2	Y 371.029	1421954.5	1421954.5	99.238 %		14:45:40
2	Ag 328.068†	-3184.1	-2726.8	7.4846 µg/L	7.4846 ppb	14:45:45
2	As 188.979†	-17.9	-14.7	-68.458 µg/L	-68.458 ppb	14:46:06
2	B 249.677†	1789.5	1491.7	-129.87 µg/L	-129.87 ppb	14:45:45
2	Ba 233.527†	513.2	522.1	11.491 µg/L	11.491 ppb	14:46:06
2	Be 313.107†	-1359.3	-201.7	-0.1185 µg/L	-0.1185 ppb	14:45:45
2	Cd 226.502†	1831.6	2003.9	4.8452 µg/L	4.8452 ppb	14:45:45
2	Co 228.616†	493.2	445.6	19.134 µg/L	19.134 ppb	14:46:06
2	Cr 267.716†	-134.5	-214.8	-4.6475 µg/L	-4.6475 ppb	14:46:06
2	Cu 324.752†	-2689.9	-7069.0	25.009 µg/L	25.009 ppb	14:45:45
2	Mn 257.610†	393.8	1081.1	25.664 µg/L	25.664 ppb	14:45:40
2	Mo 202.031†	-109.5	-114.7	3.0356 µg/L	3.0356 ppb	14:45:45
2	Ni 231.604†	306.4	-70.2	0.9606 µg/L	0.9606 ppb	14:46:06
2	P 214.914†	483.1	211.1	48.045 µg/L	48.045 ppb	14:46:06
2	Pb 220.353†	29.8	-0.4	6.2257 µg/L	6.2257 ppb	14:46:06

2	S 181.975 Axial†	-10.1	-32.6	-103.86 µg/L	-103.86 ppb	14:46:06
2	Sb 206.836†	27.2	4.5	3.8854 µg/L	3.8854 ppb	14:46:06
2	Se 196.026†	-283.9	-311.5	911.29 µg/L	911.29 ppb	14:46:06
2	SiO2†	2523.9	-253.6	-45.778 µg/L	-45.778 ppb	14:45:45
2	Si 251.611†	-329.6	-754.0	-51.259 µg/L	-51.259 ppb	14:45:45
2	Sn 189.927†	6.1	13.5	3.4694 µg/L	3.4694 ppb	14:46:06
2	Ti 334.940†	-618.7	-42.0	-0.0969 µg/L	-0.0969 ppb	14:45:45
2	Tl 190.801†	-37.2	-3.1	50.423 µg/L	50.423 ppb	14:46:06
2	U 409.014†	812.9	819.4	21.773 µg/L	21.773 ppb	14:45:45
2	V 292.402†	3490.7	3381.5	-8.1489 µg/L	-8.1489 ppb	14:45:45
2	Zn 213.857†	2565.2	1558.6	17.993 µg/L	17.993 ppb	14:46:06
3	Sc RADIAL	99677.7	99677.7	103 %		14:44:36
3	Al 396.153Radial†	-155.3	-31.5	-14.776 µg/L	-14.776 ppb	14:44:36
3	Ca 317.933Radial†	528.9	128.2	46.672 µg/L	46.672 ppb	14:44:56
3	Fe 238.204 Radial†	32875.1	31910.2	377420 µg/L	377420 ppb	14:44:36
3	K 766.490 Radial†	294.8	-199.0	-92.893 µg/L	-92.893 ppb	14:44:36
3	Mg 279.077 IEC†	7.7	-0.5	-412.23 µg/L	-412.23 ppb	14:44:56
3	Na 589.592 Radial†	161.9	-23.4	-11.685 µg/L	-11.685 ppb	14:44:36
3	Sr 421.552†	176.2	31.7	0.1884 µg/L	0.1884 ppb	14:44:36
3	Sc 361.383	2105079.9	2105079.9	100.57 %		14:46:12
3	Y 371.029	1432585.5	1432585.5	99.980 %		14:46:12
3	Ag 328.068†	-2786.9	-2310.8	10.699 µg/L	10.699 ppb	14:46:18
3	As 188.979†	-17.2	-13.9	-67.117 µg/L	-67.117 ppb	14:46:38
3	B 249.677†	1598.6	1290.2	-138.40 µg/L	-138.40 ppb	14:46:18
3	Ba 233.527†	433.9	439.9	9.6824 µg/L	9.6824 ppb	14:46:38
3	Be 313.107†	-1273.7	-107.6	-0.0633 µg/L	-0.0633 ppb	14:46:18
3	Cd 226.502†	1605.4	1766.9	-0.6542 µg/L	-0.6542 ppb	14:46:18
3	Co 228.616†	416.2	365.8	15.702 µg/L	15.702 ppb	14:46:38
3	Cr 267.716†	-104.3	-183.9	-3.9778 µg/L	-3.9778 ppb	14:46:38
3	Cu 324.752†	-1793.0	-6159.5	30.724 µg/L	30.724 ppb	14:46:18
3	Mn 257.610†	355.9	1040.9	25.472 µg/L	25.472 ppb	14:46:12
3	Mo 202.031†	-121.5	-125.9	1.8831 µg/L	1.8831 ppb	14:46:18
3	Ni 231.604†	295.1	-83.4	0.2080 µg/L	0.2080 ppb	14:46:38
3	P 214.914†	452.0	177.0	-8.1559 µg/L	-8.1559 ppb	14:46:38
3	Pb 220.353†	20.5	-9.8	3.7501 µg/L	3.7501 ppb	14:46:38
3	S 181.975 Axial†	-14.7	-37.1	-118.10 µg/L	-118.10 ppb	14:46:38
3	Sb 206.836†	25.2	2.4	1.9419 µg/L	1.9419 ppb	14:46:38
3	Se 196.026†	-243.8	-269.8	946.68 µg/L	946.68 ppb	14:46:38
3	SiO2†	2566.6	-227.8	-41.125 µg/L	-41.125 ppb	14:46:18
3	Si 251.611†	-232.9	-655.6	-44.573 µg/L	-44.573 ppb	14:46:18
3	Sn 189.927†	16.4	23.7	7.4439 µg/L	7.4439 ppb	14:46:38
3	Ti 334.940†	-491.8	88.3	0.2077 µg/L	0.2077 ppb	14:46:18
3	Tl 190.801†	-49.7	-15.3	38.380 µg/L	38.380 ppb	14:46:38
3	U 409.014†	646.8	648.9	6.4562 µg/L	6.4562 ppb	14:46:18
3	V 292.402†	3078.4	2948.6	-13.131 µg/L	-13.131 ppb	14:46:18
3	Zn 213.857†	2219.2	1197.7	9.7345 µg/L	9.7345 ppb	14:46:38

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2093507.8	100.02 %	0.507			0.51%
Sc RADIAL	99447.0	103 %	0.6			0.55%
Y 371.029	1423882.6	99.373 %	0.5525			0.56%
Ag 328.068†	-2570.2	8.5913 µg/L	1.82565	8.5913 ppb	1.82565	21.25%
Al 396.153Radial†	-47.1	-22.242 µg/L	6.4792	-22.242 ppb	6.4792	29.13%
As 188.979†	-15.1	-68.909 µg/L	2.0548	-68.909 ppb	2.0548	2.98%
B 249.677†	1361.9	-134.86 µg/L	4.443	-134.86 ppb	4.443	3.29%
Ba 233.527†	499.7	10.997 µg/L	1.1498	10.997 ppb	1.1498	10.46%
Be 313.107†	-119.7	-0.0704 µg/L	0.04500	-0.0704 ppb	0.04500	63.96%
Ca 317.933Radial†	134.9	49.085 µg/L	2.1034	49.085 ppb	2.1034	4.29%
Cd 226.502†	1919.0	3.0230 µg/L	3.18456	3.0230 ppb	3.18456	105.34%
Co 228.616†	421.3	18.088 µg/L	2.0714	18.088 ppb	2.0714	11.45%
Cr 267.716†	-212.1	-4.5904 µg/L	0.58607	-4.5904 ppb	0.58607	12.77%
Cu 324.752†	-6759.3	26.705 µg/L	3.4949	26.705 ppb	3.4949	13.09%
Fe 238.204 Radial†	31864.6	376880 µg/L	2057.4	376880 ppb	2057.4	0.55%
K 766.490 Radial†	-221.2	-103.24 µg/L	21.719	-103.24 ppb	21.719	21.04%
Mg 279.077 IEC†	-0.1	-405.49 µg/L	13.665	-405.49 ppb	13.665	3.37%
Mn 257.610†	1068.3	25.522 µg/L	0.1245	25.522 ppb	0.1245	0.49%
Mo 202.031†	-124.4	2.0104 µg/L	0.96787	2.0104 ppb	0.96787	48.14%
Na 589.592 Radial†	-11.4	-5.6815 µg/L	9.47860	-5.6815 ppb	9.47860	166.83%

Ni 231.604†	-79.6	0.4156 µg/L	0.47650	0.4156 ppb	0.47650	114.66%
P 214.914†	202.8	35.498 µg/L	38.9276	35.498 ppb	38.9276	109.66%
Pb 220.353†	-3.0	5.5045 µg/L	1.52739	5.5045 ppb	1.52739	27.75%
S 181.975 Axial†	-34.4	-109.57 µg/L	7.528	-109.57 ppb	7.528	6.87%
Sb 206.836†	4.9	4.2112 µg/L	2.44856	4.2112 ppb	2.44856	58.14%
Se 196.026†	-307.6	909.39 µg/L	38.277	909.39 ppb	38.277	4.21%
SiO2†	-243.1	-43.886 µg/L	2.4454	-43.886 ppb	2.4454	5.57%
Si 251.611†	-723.5	-49.189 µg/L	4.0046	-49.189 ppb	4.0046	8.14%
Sn 189.927†	17.2	4.8883 µg/L	2.21766	4.8883 ppb	2.21766	45.37%
Sr 421.552†	26.2	0.1558 µg/L	0.04465	0.1558 ppb	0.04465	28.65%
Ti 334.940†	11.6	0.0280 µg/L	0.15950	0.0280 ppb	0.15950	569.88%
Tl 190.801†	-10.9	42.562 µg/L	6.8126	42.562 ppb	6.8126	16.01%
U 409.014†	773.4	17.829 µg/L	10.0021	17.829 ppb	10.0021	56.10%
V 292.402†	3162.6	-10.525 µg/L	2.4992	-10.525 ppb	2.4992	23.74%
Zn 213.857†	1455.3	15.695 µg/L	5.2065	15.695 ppb	5.2065	33.17%

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 14:46:48

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	100002.2	100002.2	103 %		14:47:20
1	Al 396.153Radial†	10332.5	10119.8	4820.0 µg/L	4820.0 ppb	14:47:20
1	Ca 317.933Radial†	14133.6	13294.1	4838.0 µg/L	4838.0 ppb	14:47:20
1	Fe 238.204 Radial†	442.3	416.2	4933.0 µg/L	4933.0 ppb	14:47:40
1	K 766.490 Radial†	11169.4	10325.1	4818.5 µg/L	4818.5 ppb	14:47:20
1	Mg 279.077 IEC†	391.4	370.8	4892.3 µg/L	4892.3 ppb	14:47:40
1	Na 589.592 Radial†	20261.8	19430.0	9697.6 µg/L	9697.6 ppb	14:47:20
1	Sr 421.552†	84170.7	81326.2	483.47 µg/L	483.47 ppb	14:47:20
1	Sc 361.383	2066641.5	2066641.5	98.736 %		14:48:44
1	Y 371.029	1412477.4	1412477.4	98.577 %		14:48:44
1	Ag 328.068†	61390.7	62637.1	506.69 µg/L	506.69 ppb	14:48:49
1	As 188.979†	349.1	356.8	525.22 µg/L	525.22 ppb	14:49:10
1	B 249.677†	11270.0	11115.0	502.67 µg/L	502.67 ppb	14:48:49
1	Ba 233.527†	23001.0	23304.0	510.58 µg/L	510.58 ppb	14:48:49
1	Be 313.107†	843291.4	855250.1	502.32 µg/L	502.32 ppb	14:48:44
1	Cd 226.502†	21022.1	21461.9	510.11 µg/L	510.11 ppb	14:48:49
1	Co 228.616†	11785.4	11888.3	510.17 µg/L	510.17 ppb	14:48:49
1	Cr 267.716†	23536.2	23757.4	517.03 µg/L	517.03 ppb	14:48:49
1	Cu 324.752†	81807.9	78478.9	513.52 µg/L	513.52 ppb	14:48:49
1	Mn 257.610†	167086.9	169913.7	510.63 µg/L	510.63 ppb	14:48:44
1	Mo 202.031†	5263.5	5325.8	527.18 µg/L	527.18 ppb	14:49:10
1	Ni 231.604†	9383.0	9126.2	511.32 µg/L	511.32 ppb	14:48:49
1	P 214.914†	1823.7	1574.6	2565.5 µg/L	2565.5 ppb	14:49:10
1	Pb 220.353†	1974.7	1969.8	517.04 µg/L	517.04 ppb	14:49:10
1	S 181.975 Axial†	336.2	318.0	1012.0 µg/L	1012.0 ppb	14:49:10
1	Sb 206.836†	588.1	572.9	513.78 µg/L	513.78 ppb	14:49:10
1	Se 196.026†	567.9	547.9	526.47 µg/L	526.47 ppb	14:49:10
1	SiO2†	32606.5	30244.3	5460.2 µg/L	5460.2 ppb	14:48:49
1	Si 251.611†	37492.2	37548.2	2552.7 µg/L	2552.7 ppb	14:48:49
1	Sn 189.927†	1323.2	1347.6	525.15 µg/L	525.15 ppb	14:49:10
1	Ti 334.940†	210964.0	214243.0	500.67 µg/L	500.67 ppb	14:48:44
1	Tl 190.801†	487.8	528.2	520.65 µg/L	520.65 ppb	14:49:10
1	U 409.014†	5653.2	5731.4	519.43 µg/L	519.43 ppb	14:48:49
1	V 292.402†	42793.6	43229.3	515.45 µg/L	515.45 ppb	14:48:49
1	Zn 213.857†	23185.4	22473.4	513.83 µg/L	513.83 ppb	14:48:49
2	Sc RADIAL	99966.1	99966.1	103 %		14:47:46
2	Al 396.153Radial†	10273.1	10065.8	4794.5 µg/L	4794.5 ppb	14:47:46
2	Ca 317.933Radial†	14142.8	13307.9	4843.0 µg/L	4843.0 ppb	14:47:46
2	Fe 238.204 Radial†	441.1	415.1	4920.8 µg/L	4920.8 ppb	14:48:06
2	K 766.490 Radial†	11149.8	10310.1	4811.5 µg/L	4811.5 ppb	14:47:46
2	Mg 279.077 IEC†	390.5	370.1	4882.2 µg/L	4882.2 ppb	14:48:06
2	Na 589.592 Radial†	20227.3	19403.8	9684.5 µg/L	9684.5 ppb	14:47:46
2	Sr 421.552†	84211.8	81395.4	483.89 µg/L	483.89 ppb	14:47:46
2	Sc 361.383	2071164.5	2071164.5	98.952 %		14:49:17
2	Y 371.029	1413074.0	1413074.0	98.618 %		14:49:17
2	Ag 328.068†	61209.6	62318.0	504.13 µg/L	504.13 ppb	14:49:23
2	As 188.979†	344.6	351.5	517.31 µg/L	517.31 ppb	14:49:43
2	B 249.677†	11263.6	11083.6	501.25 µg/L	501.25 ppb	14:49:23
2	Ba 233.527†	23001.4	23253.5	509.47 µg/L	509.47 ppb	14:49:23
2	Be 313.107†	843189.8	853282.2	501.16 µg/L	501.16 ppb	14:49:17
2	Cd 226.502†	21025.2	21418.5	509.08 µg/L	509.08 ppb	14:49:23
2	Co 228.616†	11793.6	11870.5	509.40 µg/L	509.40 ppb	14:49:23
2	Cr 267.716†	23441.7	23609.9	513.82 µg/L	513.82 ppb	14:49:23
2	Cu 324.752†	81544.7	78032.0	510.60 µg/L	510.60 ppb	14:49:23
2	Mn 257.610†	167292.2	169751.6	510.14 µg/L	510.14 ppb	14:49:17
2	Mo 202.031†	5156.4	5205.9	515.32 µg/L	515.32 ppb	14:49:43
2	Ni 231.604†	9416.1	9139.0	512.04 µg/L	512.04 ppb	14:49:23
2	P 214.914†	1805.9	1552.6	2529.1 µg/L	2529.1 ppb	14:49:43
2	Pb 220.353†	1972.7	1963.4	515.34 µg/L	515.34 ppb	14:49:43

2	S 181.975 Axial†	340.3	321.4	1022.7 µg/L	1022.7 ppb	14:49:43
2	Sb 206.836†	583.1	566.6	507.97 µg/L	507.97 ppb	14:49:43
2	Se 196.026†	561.1	539.7	518.78 µg/L	518.78 ppb	14:49:43
2	SiO2†	32606.6	30172.4	5447.2 µg/L	5447.2 ppb	14:49:23
2	Si 251.611†	37482.7	37455.7	2546.4 µg/L	2546.4 ppb	14:49:23
2	Sn 189.927†	1293.5	1314.7	512.31 µg/L	512.31 ppb	14:49:43
2	Ti 334.940†	211443.1	214260.5	500.71 µg/L	500.71 ppb	14:49:17
2	Tl 190.801†	482.8	522.0	514.64 µg/L	514.64 ppb	14:49:43
2	U 409.014†	5557.8	5622.5	509.53 µg/L	509.53 ppb	14:49:23
2	V 292.402†	42859.4	43201.1	515.02 µg/L	515.02 ppb	14:49:23
2	Zn 213.857†	23126.3	22362.5	511.28 µg/L	511.28 ppb	14:49:23
3	Sc RADIAL	99184.3	99184.3	102 %		14:48:12
3	Al 396.153Radial†	10349.2	10218.5	4869.3 µg/L	4869.3 ppb	14:48:12
3	Ca 317.933Radial†	14209.2	13480.7	4905.9 µg/L	4905.9 ppb	14:48:12
3	Fe 238.204 Radial†	440.6	418.0	4953.1 µg/L	4953.1 ppb	14:48:32
3	K 766.490 Radial†	11166.9	10411.8	4859.0 µg/L	4859.0 ppb	14:48:12
3	Mg 279.077 IEC†	390.8	373.4	4924.6 µg/L	4924.6 ppb	14:48:32
3	Na 589.592 Radial†	20383.4	19710.4	9837.5 µg/L	9837.5 ppb	14:48:12
3	Sr 421.552†	84696.1	82510.7	490.52 µg/L	490.52 ppb	14:48:12
3	Sc 361.383	2085274.6	2085274.6	99.626 %		14:49:50
3	Y 371.029	1422624.2	1422624.2	99.285 %		14:49:50
3	Ag 328.068†	56927.7	57601.8	465.85 µg/L	465.85 ppb	14:49:56
3	As 188.979†	286.7	291.0	428.11 µg/L	428.11 ppb	14:50:16
3	B 249.677†	10409.3	10149.1	458.70 µg/L	458.70 ppb	14:49:56
3	Ba 233.527†	20676.0	20762.1	454.87 µg/L	454.87 ppb	14:49:56
3	Be 313.107†	785177.0	789285.5	463.57 µg/L	463.57 ppb	14:49:50
3	Cd 226.502†	18801.8	19043.0	452.55 µg/L	452.55 ppb	14:49:56
3	Co 228.616†	10512.7	10504.1	450.70 µg/L	450.70 ppb	14:49:56
3	Cr 267.716†	20227.8	20223.6	440.13 µg/L	440.13 ppb	14:49:56
3	Cu 324.752†	73452.9	69352.1	453.91 µg/L	453.91 ppb	14:49:56
3	Mn 257.610†	156317.2	157591.4	473.60 µg/L	473.60 ppb	14:49:50
3	Mo 202.031†	4267.5	4278.4	423.54 µg/L	423.54 ppb	14:50:16
3	Ni 231.604†	8361.0	8015.5	449.09 µg/L	449.09 ppb	14:49:56
3	P 214.914†	1551.1	1284.5	2088.5 µg/L	2088.5 ppb	14:50:16
3	Pb 220.353†	1682.8	1658.9	435.40 µg/L	435.40 ppb	14:50:16
3	S 181.975 Axial†	290.8	269.4	857.37 µg/L	857.37 ppb	14:50:16
3	Sb 206.836†	500.3	479.5	429.59 µg/L	429.59 ppb	14:50:16
3	Se 196.026†	490.7	465.3	448.89 µg/L	448.89 ppb	14:50:16
3	SiO2†	29961.9	27294.8	4927.7 µg/L	4927.7 ppb	14:49:56
3	Si 251.611†	34218.1	33922.6	2306.2 µg/L	2306.2 ppb	14:49:56
3	Sn 189.927†	1056.3	1067.7	416.19 µg/L	416.19 ppb	14:50:16
3	Ti 334.940†	195556.5	196868.4	460.04 µg/L	460.04 ppb	14:49:50
3	Tl 190.801†	430.9	466.6	460.20 µg/L	460.20 ppb	14:50:16
3	U 409.014†	4887.2	4911.4	444.96 µg/L	444.96 ppb	14:49:56
3	V 292.402†	37901.0	37931.1	451.86 µg/L	451.86 ppb	14:49:56
3	Zn 213.857†	20722.2	19791.2	452.44 µg/L	452.44 ppb	14:49:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2074360.2	99.104 %	0.4643			0.47%
Sc RADIAL	99717.5	103 %	0.5			0.46%
Y 371.029	1416058.5	98.827 %	0.3974			0.40%
Ag 328.068†	60852.4	492.22 µg/L	22.876	492.22 ppb	22.876	4.65%
QC value within limits for Ag 328.068 Recovery = 98.44%						
Al 396.153Radial†	10134.7	4828.0 µg/L	38.01	4828.0 ppb	38.01	0.79%
QC value within limits for Al 396.153Radial Recovery = 96.56%						
As 188.979†	333.1	490.22 µg/L	53.930	490.22 ppb	53.930	11.00%
QC value within limits for As 188.979 Recovery = 98.04%						
B 249.677†	10782.6	487.54 µg/L	24.986	487.54 ppb	24.986	5.12%
QC value within limits for B 249.677 Recovery = 97.51%						
Ba 233.527†	22439.8	491.64 µg/L	31.846	491.64 ppb	31.846	6.48%
QC value within limits for Ba 233.527 Recovery = 98.33%						
Be 313.107†	832605.9	489.02 µg/L	22.042	489.02 ppb	22.042	4.51%
QC value within limits for Be 313.107 Recovery = 97.80%						
Ca 317.933Radial†	13360.9	4862.3 µg/L	37.84	4862.3 ppb	37.84	0.78%
QC value within limits for Ca 317.933Radial Recovery = 97.25%						
Cd 226.502†	20641.1	490.58 µg/L	32.941	490.58 ppb	32.941	6.71%
QC value within limits for Cd 226.502 Recovery = 98.12%						
Co 228.616†	11420.9	490.09 µg/L	34.117	490.09 ppb	34.117	6.96%

QC value within limits for Co 228.616 Recovery = 98.02%							
Cr 267.716†	22530.3	490.32 µg/L	43.500	490.32 ppb	43.500	8.87%	
QC value within limits for Cr 267.716 Recovery = 98.06%							
Cu 324.752†	75287.7	492.67 µg/L	33.603	492.67 ppb	33.603	6.82%	
QC value within limits for Cu 324.752 Recovery = 98.53%							
Fe 238.204 Radial†	416.4	4935.6 µg/L	16.29	4935.6 ppb	16.29	0.33%	
QC value within limits for Fe 238.204 Radial Recovery = 98.71%							
K 766.490 Radial†	10349.0	4829.7 µg/L	25.64	4829.7 ppb	25.64	0.53%	
QC value within limits for K 766.490 Radial Recovery = 96.59%							
Mg 279.077 IEC†	371.4	4899.7 µg/L	22.15	4899.7 ppb	22.15	0.45%	
QC value within limits for Mg 279.077 IEC Recovery = 97.99%							
Mn 257.610†	165752.2	498.12 µg/L	21.243	498.12 ppb	21.243	4.26%	
QC value within limits for Mn 257.610 Recovery = 99.62%							
Mo 202.031†	4936.7	488.68 µg/L	56.724	488.68 ppb	56.724	11.61%	
QC value within limits for Mo 202.031 Recovery = 97.74%							
Na 589.592 Radial†	19514.7	9739.9 µg/L	84.83	9739.9 ppb	84.83	0.87%	
QC value within limits for Na 589.592 Radial Recovery = 97.40%							
Ni 231.604†	8760.2	490.82 µg/L	36.136	490.82 ppb	36.136	7.36%	
QC value within limits for Ni 231.604 Recovery = 98.16%							
P 214.914†	1470.6	2394.4 µg/L	265.52	2394.4 ppb	265.52	11.09%	
QC value within limits for P 214.914 Recovery = 95.77%							
Pb 220.353†	1864.1	489.26 µg/L	46.652	489.26 ppb	46.652	9.54%	
QC value within limits for Pb 220.353 Recovery = 97.85%							
S 181.975 Axial†	302.9	964.03 µg/L	92.529	964.03 ppb	92.529	9.60%	
QC value within limits for S 181.975 Axial Recovery = 96.40%							
Sb 206.836†	539.7	483.78 µg/L	47.023	483.78 ppb	47.023	9.72%	
QC value within limits for Sb 206.836 Recovery = 96.76%							
Se 196.026†	517.6	498.05 µg/L	42.745	498.05 ppb	42.745	8.58%	
QC value within limits for Se 196.026 Recovery = 99.61%							
SiO2†	29237.1	5278.3 µg/L	303.76	5278.3 ppb	303.76	5.75%	
QC value within limits for SiO2 Recovery = 98.71%							
Si 251.611†	36308.8	2468.4 µg/L	140.53	2468.4 ppb	140.53	5.69%	
QC value within limits for Si 251.611 Recovery = 98.74%							
Sn 189.927†	1243.3	484.55 µg/L	59.551	484.55 ppb	59.551	12.29%	
QC value within limits for Sn 189.927 Recovery = 96.91%							
Sr 421.552†	81744.1	485.96 µg/L	3.952	485.96 ppb	3.952	0.81%	
QC value within limits for Sr 421.552 Recovery = 97.19%							
Ti 334.940†	208457.3	487.14 µg/L	23.470	487.14 ppb	23.470	4.82%	
QC value within limits for Ti 334.940 Recovery = 97.43%							
Tl 190.801†	505.6	498.50 µg/L	33.301	498.50 ppb	33.301	6.68%	
QC value within limits for Tl 190.801 Recovery = 99.70%							
U 409.014†	5421.8	491.31 µg/L	40.441	491.31 ppb	40.441	8.23%	
QC value within limits for U 409.014 Recovery = 98.26%							
V 292.402†	41453.8	494.11 µg/L	36.590	494.11 ppb	36.590	7.41%	
QC value within limits for V 292.402 Recovery = 98.82%							
Zn 213.857†	21542.4	492.51 µg/L	34.729	492.51 ppb	34.729	7.05%	
QC value within limits for Zn 213.857 Recovery = 98.50%							

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 14:50:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97547.7	97547.7	101 %		14:50:56
1	Al 396.153Radial†	-149.7	-29.2	-13.973 µg/L	-13.973 ppb	14:50:56
1	Ca 317.933Radial†	369.7	-18.5	-6.7321 µg/L	-6.7321 ppb	14:51:16
1	Fe 238.204 Radial†	13.5	1.4	16.924 µg/L	16.924 ppb	14:51:16
1	K 766.490 Radial†	498.1	8.9	4.1566 µg/L	4.1566 ppb	14:50:56
1	Mg 279.077 IEC†	11.8	3.8	49.563 µg/L	49.563 ppb	14:51:16
1	Na 589.592 Radial†	188.5	6.5	3.2264 µg/L	3.2264 ppb	14:50:56
1	Sr 421.552†	104.6	-35.7	-0.2120 µg/L	-0.2120 ppb	14:50:56
1	Sc 361.383	2086857.2	2086857.2	99.701 %		14:52:18
1	Y 371.029	1429226.5	1429226.5	99.746 %		14:52:18
1	Ag 328.068†	-536.8	-78.2	-0.6312 µg/L	-0.6312 ppb	14:52:24
1	As 188.979†	-1.4	1.9	2.7720 µg/L	2.7720 ppb	14:52:44
1	B 249.677†	300.3	1.8	0.0731 µg/L	0.0731 ppb	14:52:24
1	Ba 233.527†	1.3	9.8	0.2124 µg/L	0.2124 ppb	14:52:44
1	Be 313.107†	-1115.7	39.8	0.0233 µg/L	0.0233 ppb	14:52:24
1	Cd 226.502†	-174.2	-4.1	-0.1005 µg/L	-0.1005 ppb	14:52:44
1	Co 228.616†	51.4	3.5	0.1514 µg/L	0.1514 ppb	14:52:44
1	Cr 267.716†	70.7	-9.3	-0.2028 µg/L	-0.2028 ppb	14:52:24
1	Cu 324.752†	4402.6	39.1	0.2586 µg/L	0.2586 ppb	14:52:24
1	Mn 257.610†	-624.9	60.2	0.1786 µg/L	0.1786 ppb	14:52:44
1	Mo 202.031†	16.2	11.1	1.1017 µg/L	1.1017 ppb	14:52:44
1	Ni 231.604†	366.1	-9.7	-0.5435 µg/L	-0.5435 ppb	14:52:44
1	P 214.914†	267.2	-4.4	-7.3949 µg/L	-7.3949 ppb	14:52:44
1	Pb 220.353†	36.5	6.4	1.6946 µg/L	1.6946 ppb	14:52:44
1	S 181.975 Axial†	19.7	-2.8	-8.8508 µg/L	-8.8508 ppb	14:52:44
1	Sb 206.836†	27.9	5.2	4.6824 µg/L	4.6824 ppb	14:52:44
1	Se 196.026†	15.0	-12.3	-11.517 µg/L	-11.517 ppb	14:52:44
1	SiO2†	2691.1	-80.6	-14.546 µg/L	-14.546 ppb	14:52:24
1	Si 251.611†	417.6	-5.2	-0.3539 µg/L	-0.3539 ppb	14:52:44
1	Sn 189.927†	-2.8	4.6	1.8062 µg/L	1.8062 ppb	14:52:44
1	Ti 334.940†	-499.9	75.8	0.1733 µg/L	0.1733 ppb	14:52:24
1	Tl 190.801†	-29.6	4.4	4.2914 µg/L	4.2914 ppb	14:52:44
1	U 409.014†	-56.5	-50.9	-4.6213 µg/L	-4.6213 ppb	14:52:24
1	V 292.402†	51.2	-60.9	-0.7183 µg/L	-0.7183 ppb	14:52:24
1	Zn 213.857†	667.6	-339.3	-7.8125 µg/L	-7.8125 ppb	14:52:44
2	Sc RADIAL	97055.0	97055.0	100 %		14:51:22
2	Al 396.153Radial†	-121.6	-1.9	-0.9577 µg/L	-0.9577 ppb	14:51:22
2	Ca 317.933Radial†	380.0	-6.3	-2.2941 µg/L	-2.2941 ppb	14:51:42
2	Fe 238.204 Radial†	12.2	0.2	2.8206 µg/L	2.8206 ppb	14:51:42
2	K 766.490 Radial†	479.4	-7.3	-3.3854 µg/L	-3.3854 ppb	14:51:22
2	Mg 279.077 IEC†	4.7	-3.3	-43.939 µg/L	-43.939 ppb	14:51:42
2	Na 589.592 Radial†	181.4	0.3	0.1724 µg/L	0.1724 ppb	14:51:22
2	Sr 421.552†	140.8	1.0	0.0062 µg/L	0.0062 ppb	14:51:22
2	Sc 361.383	2077661.3	2077661.3	99.262 %		14:52:50
2	Y 371.029	1420720.2	1420720.2	99.152 %		14:52:50
2	Ag 328.068†	-539.7	-83.5	-0.6702 µg/L	-0.6702 ppb	14:52:56
2	As 188.979†	-4.4	-1.1	-1.6927 µg/L	-1.6927 ppb	14:53:16
2	B 249.677†	318.7	21.8	0.9863 µg/L	0.9863 ppb	14:52:56
2	Ba 233.527†	-0.8	7.6	0.1664 µg/L	0.1664 ppb	14:53:16
2	Be 313.107†	-1103.5	47.1	0.0276 µg/L	0.0276 ppb	14:52:56
2	Cd 226.502†	-174.3	-5.0	-0.1205 µg/L	-0.1205 ppb	14:53:16
2	Co 228.616†	39.5	-8.3	-0.3556 µg/L	-0.3556 ppb	14:53:16
2	Cr 267.716†	99.2	19.7	0.4278 µg/L	0.4278 ppb	14:52:56
2	Cu 324.752†	4429.3	85.6	0.5595 µg/L	0.5595 ppb	14:52:56
2	Mn 257.610†	-618.9	63.5	0.1939 µg/L	0.1939 ppb	14:53:16
2	Mo 202.031†	18.9	13.9	1.3776 µg/L	1.3776 ppb	14:53:16
2	Ni 231.604†	360.3	-14.0	-0.7820 µg/L	-0.7820 ppb	14:53:16
2	P 214.914†	269.9	-0.5	-0.8297 µg/L	-0.8297 ppb	14:53:16
2	Pb 220.353†	30.7	0.7	0.1922 µg/L	0.1922 ppb	14:53:16

2	S 181.975 Axial†	26.1	3.7	11.792 µg/L	11.792 ppb	14:53:16
2	Sb 206.836†	27.8	5.2	4.6869 µg/L	4.6869 ppb	14:53:16
2	Se 196.026†	19.4	-7.7	-7.2315 µg/L	-7.2315 ppb	14:53:16
2	SiO2†	2751.8	-7.5	-1.3548 µg/L	-1.3548 ppb	14:52:56
2	Si 251.611†	424.1	3.2	0.2163 µg/L	0.2163 ppb	14:53:16
2	Sn 189.927†	-8.0	-0.6	-0.2455 µg/L	-0.2455 ppb	14:53:16
2	Ti 334.940†	-505.5	68.0	0.1624 µg/L	0.1624 ppb	14:52:56
2	Tl 190.801†	-34.6	-0.7	-0.6733 µg/L	-0.6733 ppb	14:53:16
2	U 409.014†	49.2	55.3	5.0241 µg/L	5.0241 ppb	14:52:56
2	V 292.402†	116.8	5.3	0.0793 µg/L	0.0793 ppb	14:52:56
2	Zn 213.857†	675.8	-328.0	-7.5467 µg/L	-7.5467 ppb	14:53:16
3	Sc RADIAL	96786.0	96786.0	100.0 %		14:51:48
3	Al 396.153Radial†	-137.9	-18.6	-8.9198 µg/L	-8.9198 ppb	14:51:48
3	Ca 317.933Radial†	363.6	-21.7	-7.8937 µg/L	-7.8937 ppb	14:52:08
3	Fe 238.204 Radial†	12.5	0.5	6.4442 µg/L	6.4442 ppb	14:52:08
3	K 766.490 Radial†	483.8	-1.5	-0.7189 µg/L	-0.7189 ppb	14:51:48
3	Mg 279.077 IEC†	8.8	0.8	11.225 µg/L	11.225 ppb	14:52:08
3	Na 589.592 Radial†	196.1	15.5	7.7391 µg/L	7.7391 ppb	14:51:48
3	Sr 421.552†	118.2	-21.2	-0.1259 µg/L	-0.1259 ppb	14:51:48
3	Sc 361.383	2080927.0	2080927.0	99.418 %		14:53:22
3	Y 371.029	1422051.9	1422051.9	99.245 %		14:53:22
3	Ag 328.068†	-437.6	20.0	0.1568 µg/L	0.1568 ppb	14:53:28
3	As 188.979†	-1.2	2.1	3.0511 µg/L	3.0511 ppb	14:53:48
3	B 249.677†	334.6	37.2	1.6845 µg/L	1.6845 ppb	14:53:28
3	Ba 233.527†	-9.0	-0.6	-0.0141 µg/L	-0.0141 ppb	14:53:48
3	Be 313.107†	-996.4	156.6	0.0919 µg/L	0.0919 ppb	14:53:28
3	Cd 226.502†	-168.1	1.5	0.0357 µg/L	0.0357 ppb	14:53:48
3	Co 228.616†	44.1	-3.7	-0.1573 µg/L	-0.1573 ppb	14:53:48
3	Cr 267.716†	73.6	-6.2	-0.1347 µg/L	-0.1347 ppb	14:53:28
3	Cu 324.752†	4500.5	150.2	0.9823 µg/L	0.9823 ppb	14:53:28
3	Mn 257.610†	-632.9	50.3	0.1509 µg/L	0.1509 ppb	14:53:48
3	Mo 202.031†	21.3	16.3	1.6166 µg/L	1.6166 ppb	14:53:48
3	Ni 231.604†	368.0	-6.7	-0.3775 µg/L	-0.3775 ppb	14:53:48
3	P 214.914†	264.9	-5.9	-9.9023 µg/L	-9.9023 ppb	14:53:48
3	Pb 220.353†	40.1	10.2	2.6764 µg/L	2.6764 ppb	14:53:48
3	S 181.975 Axial†	23.2	0.8	2.5857 µg/L	2.5857 ppb	14:53:48
3	Sb 206.836†	27.2	4.6	4.1501 µg/L	4.1501 ppb	14:53:48
3	Se 196.026†	21.7	-5.5	-5.1181 µg/L	-5.1181 ppb	14:53:48
3	SiO2†	2703.6	-60.3	-10.883 µg/L	-10.883 ppb	14:53:28
3	Si 251.611†	427.3	5.7	0.3860 µg/L	0.3860 ppb	14:53:48
3	Sn 189.927†	-5.8	1.6	0.6373 µg/L	0.6373 ppb	14:53:48
3	Ti 334.940†	-460.4	114.2	0.2660 µg/L	0.2660 ppb	14:53:28
3	Tl 190.801†	-31.5	2.5	2.4208 µg/L	2.4208 ppb	14:53:48
3	U 409.014†	-18.3	-12.5	-1.1396 µg/L	-1.1396 ppb	14:53:28
3	V 292.402†	56.0	-56.0	-0.6512 µg/L	-0.6512 ppb	14:53:28
3	Zn 213.857†	676.9	-328.0	-7.5523 µg/L	-7.5523 ppb	14:53:48

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2081815.1	99.460 %	0.2227			0.22%
Sc RADIAL	97129.6	100 %	0.4			0.40%
Y 371.029	1423999.5	99.381 %	0.3193			0.32%
Ag 328.068†	-47.2	-0.3815 µg/L	0.46662	-0.3815 ppb	0.46662	122.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-16.6	-7.9500 µg/L	6.56148	-7.9500 ppb	6.56148	82.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.9	1.3768 µg/L	2.66191	1.3768 ppb	2.66191	193.35%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	20.3	0.9146 µg/L	0.80808	0.9146 ppb	0.80808	88.35%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.6	0.1216 µg/L	0.11974	0.1216 ppb	0.11974	98.48%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	81.2	0.0476 µg/L	0.03843	0.0476 ppb	0.03843	80.70%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-15.5	-5.6400 µg/L	2.95526	-5.6400 ppb	2.95526	52.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.5	-0.0618 µg/L	0.08498	-0.0618 ppb	0.08498	137.58%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.8	-0.1205 µg/L	0.25553	-0.1205 ppb	0.25553	212.04%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	1.4 0.0301 µg/L	0.34613 0.0301 ppb	0.34613 >999.9%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	91.6 0.6002 µg/L	0.36356 0.6002 ppb	0.36356 60.58%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.7 8.7296 µg/L	7.32427 8.7296 ppb	7.32427 83.90%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	0.0 0.0174 µg/L	3.82453 0.0174 ppb	3.82453 >999.9%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.4 5.6161 µg/L	47.00261 5.6161 ppb	47.00261 836.93%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	58.0 0.1745 µg/L	0.02178 0.1745 ppb	0.02178 12.48%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	13.8 1.3653 µg/L	0.25767 1.3653 ppb	0.25767 18.87%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	7.4 3.7126 µg/L	3.80675 3.7126 ppb	3.80675 102.53%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-10.1 -0.5677 µg/L	0.20335 -0.5677 ppb	0.20335 35.82%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-3.6 -6.0423 µg/L	4.68511 -6.0423 ppb	4.68511 77.54%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	5.8 1.5211 µg/L	1.25115 1.5211 ppb	1.25115 82.25%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	0.6 1.8421 µg/L	10.34123 1.8421 ppb	10.34123 561.37%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	5.0 4.5065 µg/L	0.30863 4.5065 ppb	0.30863 6.85%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-8.5 -7.9556 µg/L	3.26035 -7.9556 ppb	3.26035 40.98%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-49.5 -8.9278 µg/L	6.80936 -8.9278 ppb	6.80936 76.27%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	1.2 0.0828 µg/L	0.38757 0.0828 ppb	0.38757 468.24%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	1.9 0.7327 µg/L	1.02917 0.7327 ppb	1.02917 140.47%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-18.6 -0.1106 µg/L	0.10987 -0.1106 ppb	0.10987 99.38%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	86.0 0.2006 µg/L	0.05693 0.2006 ppb	0.05693 28.38%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.1 2.0129 µg/L	2.50739 2.0129 ppb	2.50739 124.56%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-2.7 -0.2456 µg/L	4.88446 -0.2456 ppb	4.88446 >999.9%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-37.2 -0.4301 µg/L	0.44240 -0.4301 ppb	0.44240 102.87%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-331.7 -7.6372 µg/L	0.15187 -7.6372 ppb	0.15187 1.99%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 15:15:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99922.9	99922.9	103 %		15:15:55
1	Al 396.153Radial†	10271.4	10068.4	4795.9 µg/L	4795.9 ppb	15:15:55
1	Ca 317.933Radial†	14072.7	13245.9	4820.5 µg/L	4820.5 ppb	15:15:55
1	Fe 238.204 Radial†	433.2	407.6	4831.8 µg/L	4831.8 ppb	15:16:16
1	K 766.490 Radial†	11078.1	10245.2	4781.3 µg/L	4781.3 ppb	15:15:55
1	Mg 279.077 IEC†	387.5	367.4	4846.7 µg/L	4846.7 ppb	15:16:16
1	Na 589.592 Radial†	20537.0	19712.2	9838.4 µg/L	9838.4 ppb	15:15:55
1	Sr 421.552†	84636.8	81842.3	486.54 µg/L	486.54 ppb	15:15:55
1	Sc 361.383	2120503.0	2120503.0	101.31 %		15:17:20
1	Y 371.029	1447741.8	1447741.8	101.04 %		15:17:20
1	Ag 328.068†	60931.6	60604.7	490.26 µg/L	490.26 ppb	15:17:25
1	As 188.979†	348.5	347.3	511.11 µg/L	511.11 ppb	15:17:46
1	B 249.677†	11168.5	10724.8	484.99 µg/L	484.99 ppb	15:17:25
1	Ba 233.527†	22741.8	22456.5	492.01 µg/L	492.01 ppb	15:17:25
1	Be 313.107†	845424.2	835661.0	490.81 µg/L	490.81 ppb	15:17:20
1	Cd 226.502†	20831.1	20732.6	492.77 µg/L	492.77 ppb	15:17:25
1	Co 228.616†	11718.9	11519.5	494.34 µg/L	494.34 ppb	15:17:25
1	Cr 267.716†	23264.3	22883.5	498.01 µg/L	498.01 ppb	15:17:25
1	Cu 324.752†	81115.9	75691.3	495.29 µg/L	495.29 ppb	15:17:25
1	Mn 257.610†	167386.2	165910.8	498.60 µg/L	498.60 ppb	15:17:20
1	Mo 202.031†	5221.9	5149.3	509.71 µg/L	509.71 ppb	15:17:46
1	Ni 231.604†	9272.9	8776.2	491.71 µg/L	491.71 ppb	15:17:25
1	P 214.914†	1818.2	1522.3	2480.3 µg/L	2480.3 ppb	15:17:46
1	Pb 220.353†	1967.3	1911.7	501.81 µg/L	501.81 ppb	15:17:46
1	S 181.975 Axial†	336.4	309.5	984.90 µg/L	984.90 ppb	15:17:46
1	Sb 206.836†	587.1	556.8	499.36 µg/L	499.36 ppb	15:17:46
1	Se 196.026†	563.2	528.6	508.06 µg/L	508.06 ppb	15:17:46
1	SiO2†	32357.2	29159.5	5264.3 µg/L	5264.3 ppb	15:17:25
1	Si 251.611†	37104.2	36200.8	2461.1 µg/L	2461.1 ppb	15:17:25
1	Sn 189.927†	1306.7	1297.3	505.54 µg/L	505.54 ppb	15:17:46
1	Ti 334.940†	211614.7	209458.2	489.49 µg/L	489.49 ppb	15:17:20
1	Tl 190.801†	486.2	514.0	506.73 µg/L	506.73 ppb	15:17:46
1	U 409.014†	5546.0	5480.2	496.63 µg/L	496.63 ppb	15:17:25
1	V 292.402†	42541.4	41879.5	499.33 µg/L	499.33 ppb	15:17:25
1	Zn 213.857†	22910.7	21605.9	493.98 µg/L	493.98 ppb	15:17:25
2	Sc RADIAL	100127.6	100127.6	103 %		15:16:21
2	Al 396.153Radial†	10275.5	10052.1	4788.2 µg/L	4788.2 ppb	15:16:21
2	Ca 317.933Radial†	14104.7	13249.0	4821.6 µg/L	4821.6 ppb	15:16:21
2	Fe 238.204 Radial†	438.1	411.5	4877.7 µg/L	4877.7 ppb	15:16:42
2	K 766.490 Radial†	11126.3	10269.9	4792.8 µg/L	4792.8 ppb	15:16:21
2	Mg 279.077 IEC†	394.9	373.8	4930.9 µg/L	4930.9 ppb	15:16:42
2	Na 589.592 Radial†	20578.8	19711.9	9838.3 µg/L	9838.3 ppb	15:16:21
2	Sr 421.552†	84624.1	81662.5	485.47 µg/L	485.47 ppb	15:16:21
2	Sc 361.383	2096292.7	2096292.7	100.15 %		15:17:53
2	Y 371.029	1430240.6	1430240.6	99.816 %		15:17:53
2	Ag 328.068†	61186.5	61553.8	497.93 µg/L	497.93 ppb	15:17:59
2	As 188.979†	339.7	342.4	503.96 µg/L	503.96 ppb	15:18:19
2	B 249.677†	11194.1	10877.7	491.92 µg/L	491.92 ppb	15:17:59
2	Ba 233.527†	22805.4	22779.2	499.09 µg/L	499.09 ppb	15:17:59
2	Be 313.107†	838460.9	838346.1	492.39 µg/L	492.39 ppb	15:17:53
2	Cd 226.502†	20927.3	21066.1	500.70 µg/L	500.70 ppb	15:17:59
2	Co 228.616†	11703.4	11637.5	499.40 µg/L	499.40 ppb	15:17:59
2	Cr 267.716†	23345.7	23230.0	505.55 µg/L	505.55 ppb	15:17:59
2	Cu 324.752†	81302.6	76802.4	502.56 µg/L	502.56 ppb	15:17:59
2	Mn 257.610†	166032.9	166467.7	500.27 µg/L	500.27 ppb	15:17:53
2	Mo 202.031†	5132.8	5119.9	506.81 µg/L	506.81 ppb	15:18:19
2	Ni 231.604†	9311.1	8920.1	499.77 µg/L	499.77 ppb	15:17:59
2	P 214.914†	1778.1	1503.0	2447.5 µg/L	2447.5 ppb	15:18:19
2	Pb 220.353†	1953.8	1920.7	504.13 µg/L	504.13 ppb	15:18:19

2	S 181.975 Axial†	334.2	311.1	990.09 µg/L	990.09 ppb	15:18:19
2	Sb 206.836†	578.6	555.0	497.54 µg/L	497.54 ppb	15:18:19
2	Se 196.026†	560.8	532.6	511.91 µg/L	511.91 ppb	15:18:19
2	SiO2†	32338.5	29509.6	5327.5 µg/L	5327.5 ppb	15:17:59
2	Si 251.611†	37284.9	36804.2	2502.1 µg/L	2502.1 ppb	15:17:59
2	Sn 189.927†	1294.0	1299.4	506.38 µg/L	506.38 ppb	15:18:19
2	Ti 334.940†	210114.0	210372.0	491.62 µg/L	491.62 ppb	15:17:53
2	Tl 190.801†	476.2	509.6	502.42 µg/L	502.42 ppb	15:18:19
2	U 409.014†	5554.5	5551.9	503.13 µg/L	503.13 ppb	15:17:59
2	V 292.402†	42704.3	42527.1	506.97 µg/L	506.97 ppb	15:17:59
2	Zn 213.857†	23020.3	21976.5	502.46 µg/L	502.46 ppb	15:17:59
3	Sc RADIAL	100973.8	100973.8	104 %		15:16:47
3	Al 396.153Radial†	10356.6	10046.6	4787.3 µg/L	4787.3 ppb	15:16:47
3	Ca 317.933Radial†	14208.5	13234.3	4816.2 µg/L	4816.2 ppb	15:16:47
3	Fe 238.204 Radial†	438.6	408.5	4840.9 µg/L	4840.9 ppb	15:17:08
3	K 766.490 Radial†	11175.0	10226.4	4772.5 µg/L	4772.5 ppb	15:16:47
3	Mg 279.077 IEC†	389.2	365.1	4815.1 µg/L	4815.1 ppb	15:17:08
3	Na 589.592 Radial†	20628.4	19592.7	9778.8 µg/L	9778.8 ppb	15:16:47
3	Sr 421.552†	85323.4	81647.2	485.38 µg/L	485.38 ppb	15:16:47
3	Sc 361.383	2099637.5	2099637.5	100.31 %		15:18:26
3	Y 371.029	1433165.2	1433165.2	100.02 %		15:18:26
3	Ag 328.068†	57070.6	57353.3	463.83 µg/L	463.83 ppb	15:18:32
3	As 188.979†	288.6	291.0	428.09 µg/L	428.09 ppb	15:18:52
3	B 249.677†	10398.9	10067.2	455.04 µg/L	455.04 ppb	15:18:32
3	Ba 233.527†	20731.1	20675.1	452.97 µg/L	452.97 ppb	15:18:32
3	Be 313.107†	776465.5	775209.8	455.31 µg/L	455.31 ppb	15:18:26
3	Cd 226.502†	18808.1	18920.2	449.64 µg/L	449.64 ppb	15:18:32
3	Co 228.616†	10500.5	10419.8	447.09 µg/L	447.09 ppb	15:18:32
3	Cr 267.716†	20224.9	20081.7	437.04 µg/L	437.04 ppb	15:18:32
3	Cu 324.752†	73337.0	68732.2	449.84 µg/L	449.84 ppb	15:18:32
3	Mn 257.610†	154562.0	154768.3	465.11 µg/L	465.11 ppb	15:18:26
3	Mo 202.031†	4257.3	4238.9	419.63 µg/L	419.63 ppb	15:18:52
3	Ni 231.604†	8367.4	7964.5	446.24 µg/L	446.24 ppb	15:18:32
3	P 214.914†	1549.8	1272.6	2069.1 µg/L	2069.1 ppb	15:18:52
3	Pb 220.353†	1683.8	1648.4	432.63 µg/L	432.63 ppb	15:18:52
3	S 181.975 Axial†	292.8	269.4	857.23 µg/L	857.23 ppb	15:18:52
3	Sb 206.836†	506.9	482.6	432.38 µg/L	432.38 ppb	15:18:52
3	Se 196.026†	491.5	462.6	446.15 µg/L	446.15 ppb	15:18:52
3	SiO2†	29973.8	27100.9	4892.7 µg/L	4892.7 ppb	15:18:32
3	Si 251.611†	34271.6	33741.0	2293.8 µg/L	2293.8 ppb	15:18:32
3	Sn 189.927†	1060.9	1065.0	415.11 µg/L	415.11 ppb	15:18:52
3	Ti 334.940†	193256.2	193232.5	451.55 µg/L	451.55 ppb	15:18:26
3	Tl 190.801†	431.7	464.5	457.99 µg/L	457.99 ppb	15:18:52
3	U 409.014†	4922.7	4913.2	445.14 µg/L	445.14 ppb	15:18:32
3	V 292.402†	37916.3	37686.1	448.95 µg/L	448.95 ppb	15:18:32
3	Zn 213.857†	20707.4	19634.2	448.86 µg/L	448.86 ppb	15:18:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2105477.7	100.59 %	0.627			0.62%
Sc RADIAL	100341.4	104 %	0.6			0.56%
Y 371.029	1437049.2	100.29 %	0.654			0.65%
Ag 328.068†	59837.3	484.01 µg/L	17.893	484.01 ppb	17.893	3.70%
QC value within limits for Ag 328.068 Recovery = 96.80%						
Al 396.153Radial†	10055.7	4790.5 µg/L	4.72	4790.5 ppb	4.72	0.10%
QC value within limits for Al 396.153Radial Recovery = 95.81%						
As 188.979†	326.9	481.06 µg/L	46.007	481.06 ppb	46.007	9.56%
QC value within limits for As 188.979 Recovery = 96.21%						
B 249.677†	10556.6	477.32 µg/L	19.597	477.32 ppb	19.597	4.11%
QC value within limits for B 249.677 Recovery = 95.46%						
Ba 233.527†	21970.3	481.36 µg/L	24.839	481.36 ppb	24.839	5.16%
QC value within limits for Ba 233.527 Recovery = 96.27%						
Be 313.107†	816405.7	479.50 µg/L	20.968	479.50 ppb	20.968	4.37%
QC value within limits for Be 313.107 Recovery = 95.90%						
Ca 317.933Radial†	13243.1	4819.4 µg/L	2.83	4819.4 ppb	2.83	0.06%
QC value within limits for Ca 317.933Radial Recovery = 96.39%						
Cd 226.502†	20239.6	481.04 µg/L	27.477	481.04 ppb	27.477	5.71%
QC value within limits for Cd 226.502 Recovery = 96.21%						
Co 228.616†	11192.3	480.28 µg/L	28.851	480.28 ppb	28.851	6.01%

Cr	267.716†	22065.1	480.20 µg/L	37.566	480.20 ppb	37.566	7.82%
QC value within limits for Cr 267.716 Recovery = 96.04%							
Cu	324.752†	73742.0	482.56 µg/L	28.571	482.56 ppb	28.571	5.92%
QC value within limits for Cu 324.752 Recovery = 96.51%							
Fe	238.204 Radial†	409.2	4850.1 µg/L	24.30	4850.1 ppb	24.30	0.50%
QC value within limits for Fe 238.204 Radial Recovery = 97.00%							
K	766.490 Radial†	10247.2	4782.2 µg/L	10.17	4782.2 ppb	10.17	0.21%
QC value within limits for K 766.490 Radial Recovery = 95.64%							
Mg	279.077 IEC†	368.8	4864.2 µg/L	59.81	4864.2 ppb	59.81	1.23%
QC value within limits for Mg 279.077 IEC Recovery = 97.28%							
Mn	257.610†	162382.3	487.99 µg/L	19.833	487.99 ppb	19.833	4.06%
QC value within limits for Mn 257.610 Recovery = 97.60%							
Mo	202.031†	4836.0	478.72 µg/L	51.190	478.72 ppb	51.190	10.69%
QC value within limits for Mo 202.031 Recovery = 95.74%							
Na	589.592 Radial†	19672.3	9818.5 µg/L	34.38	9818.5 ppb	34.38	0.35%
QC value within limits for Na 589.592 Radial Recovery = 98.19%							
Ni	231.604†	8553.6	479.24 µg/L	28.864	479.24 ppb	28.864	6.02%
QC value within limits for Ni 231.604 Recovery = 95.85%							
P	214.914†	1432.6	2332.3 µg/L	228.52	2332.3 ppb	228.52	9.80%
QC value within limits for P 214.914 Recovery = 93.29%							
Pb	220.353†	1826.9	479.52 µg/L	40.628	479.52 ppb	40.628	8.47%
QC value within limits for Pb 220.353 Recovery = 95.90%							
S	181.975 Axial†	296.6	944.08 µg/L	75.252	944.08 ppb	75.252	7.97%
QC value within limits for S 181.975 Axial Recovery = 94.41%							
Sb	206.836†	531.5	476.43 µg/L	38.155	476.43 ppb	38.155	8.01%
QC value within limits for Sb 206.836 Recovery = 95.29%							
Se	196.026†	507.9	488.71 µg/L	36.909	488.71 ppb	36.909	7.55%
QC value within limits for Se 196.026 Recovery = 97.74%							
SiO2†		28590.0	5161.5 µg/L	234.95	5161.5 ppb	234.95	4.55%
QC value within limits for SiO2 Recovery = 96.52%							
Si	251.611†	35582.0	2419.0 µg/L	110.31	2419.0 ppb	110.31	4.56%
QC value within limits for Si 251.611 Recovery = 96.76%							
Sn	189.927†	1220.6	475.68 µg/L	52.454	475.68 ppb	52.454	11.03%
QC value within limits for Sn 189.927 Recovery = 95.14%							
Sr	421.552†	81717.3	485.80 µg/L	0.645	485.80 ppb	0.645	0.13%
QC value within limits for Sr 421.552 Recovery = 97.16%							
Ti	334.940†	204354.2	477.55 µg/L	22.545	477.55 ppb	22.545	4.72%
QC value within limits for Ti 334.940 Recovery = 95.51%							
Tl	190.801†	496.0	489.05 µg/L	26.983	489.05 ppb	26.983	5.52%
QC value within limits for Tl 190.801 Recovery = 97.81%							
U	409.014†	5315.1	481.63 µg/L	31.768	481.63 ppb	31.768	6.60%
QC value within limits for U 409.014 Recovery = 96.33%							
V	292.402†	40697.6	485.08 µg/L	31.529	485.08 ppb	31.529	6.50%
QC value within limits for V 292.402 Recovery = 97.02%							
Zn	213.857†	21072.2	481.76 µg/L	28.812	481.76 ppb	28.812	5.98%
QC value within limits for Zn 213.857 Recovery = 96.35%							

All analyte(s) passed QC.

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

Autosampler Location: 8
 Date Collected: 3/16/2010 15:19:02
 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	101273.1	101273.1	105 %		15:19:32
1	Al 396.153Radial†	-125.9	-1.0	-0.5166 µg/L	-0.5166 ppb	15:19:32
1	Ca 317.933Radial†	379.9	-22.2	-8.0940 µg/L	-8.0940 ppb	15:19:52
1	Fe 238.204 Radial†	14.2	1.6	19.469 µg/L	19.469 ppb	15:19:52
1	K 766.490 Radial†	435.5	-69.2	-32.277 µg/L	-32.277 ppb	15:19:32
1	Mg 279.077 IEC†	6.0	-2.2	-29.120 µg/L	-29.120 ppb	15:19:52
1	Na 589.592 Radial†	241.5	50.2	25.063 µg/L	25.063 ppb	15:19:32
1	Sr 421.552†	102.6	-41.3	-0.2457 µg/L	-0.2457 ppb	15:19:32
1	Sc 361.383	2096378.6	2096378.6	100.16 %		15:20:54
1	Y 371.029	1434737.4	1434737.4	100.13 %		15:20:54
1	Ag 328.068†	-497.8	-36.8	-0.2981 µg/L	-0.2981 ppb	15:21:00
1	As 188.979†	1.7	4.9	7.2616 µg/L	7.2616 ppb	15:21:20
1	B 249.677†	328.7	28.8	1.2969 µg/L	1.2969 ppb	15:21:00
1	Ba 233.527†	-3.8	4.6	0.0990 µg/L	0.0990 ppb	15:21:20
1	Be 313.107†	-1021.6	138.8	0.0815 µg/L	0.0815 ppb	15:21:00
1	Cd 226.502†	-154.7	16.1	0.3799 µg/L	0.3799 ppb	15:21:20
1	Co 228.616†	40.4	-7.7	-0.3309 µg/L	-0.3309 ppb	15:21:20
1	Cr 267.716†	47.8	-32.5	-0.7074 µg/L	-0.7074 ppb	15:21:00
1	Cu 324.752†	4345.1	-38.3	-0.2466 µg/L	-0.2466 ppb	15:21:00
1	Mn 257.610†	-618.7	69.2	0.2112 µg/L	0.2112 ppb	15:21:20
1	Mo 202.031†	23.5	18.4	1.8197 µg/L	1.8197 ppb	15:21:20
1	Ni 231.604†	365.5	-11.9	-0.6687 µg/L	-0.6687 ppb	15:21:20
1	P 214.914†	264.3	-8.5	-14.144 µg/L	-14.144 ppb	15:21:20
1	Pb 220.353†	21.5	-8.7	-2.2740 µg/L	-2.2740 ppb	15:21:20
1	S 181.975 Axial†	22.8	0.2	0.6761 µg/L	0.6761 ppb	15:21:20
1	Sb 206.836†	30.6	7.9	7.0486 µg/L	7.0486 ppb	15:21:20
1	Se 196.026†	19.1	-8.3	-7.6821 µg/L	-7.6821 ppb	15:21:20
1	SiO2†	2666.6	-117.3	-21.170 µg/L	-21.170 ppb	15:21:00
1	Si 251.611†	415.9	-8.9	-0.6040 µg/L	-0.6040 ppb	15:21:20
1	Sn 189.927†	-7.6	-0.1	-0.0414 µg/L	-0.0414 ppb	15:21:20
1	Ti 334.940†	-440.8	137.1	0.3229 µg/L	0.3229 ppb	15:21:00
1	Tl 190.801†	-28.8	5.4	5.2646 µg/L	5.2646 ppb	15:21:20
1	U 409.014†	4.8	10.6	0.9567 µg/L	0.9567 ppb	15:21:00
1	V 292.402†	56.0	-56.4	-0.6551 µg/L	-0.6551 ppb	15:21:00
1	Zn 213.857†	672.9	-337.0	-7.7546 µg/L	-7.7546 ppb	15:21:20
2	Sc RADIAL	101341.2	101341.2	105 %		15:19:58
2	Al 396.153Radial†	-134.2	-8.9	-4.2893 µg/L	-4.2893 ppb	15:19:58
2	Ca 317.933Radial†	384.4	-18.1	-6.5959 µg/L	-6.5959 ppb	15:20:18
2	Fe 238.204 Radial†	13.9	1.3	15.131 µg/L	15.131 ppb	15:20:18
2	K 766.490 Radial†	481.8	-25.2	-11.744 µg/L	-11.744 ppb	15:19:58
2	Mg 279.077 IEC†	7.4	-1.0	-12.637 µg/L	-12.637 ppb	15:20:18
2	Na 589.592 Radial†	221.7	31.2	15.568 µg/L	15.568 ppb	15:19:58
2	Sr 421.552†	147.5	1.4	0.0085 µg/L	0.0085 ppb	15:19:58
2	Sc 361.383	2085947.6	2085947.6	99.658 %		15:21:26
2	Y 371.029	1427335.5	1427335.5	99.614 %		15:21:26
2	Ag 328.068†	-489.2	-30.7	-0.2478 µg/L	-0.2478 ppb	15:21:32
2	As 188.979†	-4.9	-1.7	-2.4564 µg/L	-2.4564 ppb	15:21:52
2	B 249.677†	288.7	-9.7	-0.4478 µg/L	-0.4478 ppb	15:21:32
2	Ba 233.527†	-5.8	2.6	0.0562 µg/L	0.0562 ppb	15:21:52
2	Be 313.107†	-1022.7	132.7	0.0778 µg/L	0.0778 ppb	15:21:32
2	Cd 226.502†	-172.3	-2.3	-0.0572 µg/L	-0.0572 ppb	15:21:52
2	Co 228.616†	37.6	-10.3	-0.4409 µg/L	-0.4409 ppb	15:21:52
2	Cr 267.716†	69.3	-10.7	-0.2328 µg/L	-0.2328 ppb	15:21:32
2	Cu 324.752†	4425.1	63.6	0.4185 µg/L	0.4185 ppb	15:21:32
2	Mn 257.610†	-630.2	54.6	0.1658 µg/L	0.1658 ppb	15:21:52
2	Mo 202.031†	24.7	19.7	1.9466 µg/L	1.9466 ppb	15:21:52
2	Ni 231.604†	356.3	-19.4	-1.0864 µg/L	-1.0864 ppb	15:21:52
2	P 214.914†	269.3	-2.2	-3.5731 µg/L	-3.5731 ppb	15:21:52
2	Pb 220.353†	38.4	8.4	2.1901 µg/L	2.1901 ppb	15:21:52

2	S 181.975 Axial†	22.4	-0.0	-0.0824 µg/L	-0.0824 ppb	15:21:52
2	Sb 206.836†	30.5	7.8	7.0283 µg/L	7.0283 ppb	15:21:52
2	Se 196.026†	19.8	-7.5	-6.9805 µg/L	-6.9805 ppb	15:21:52
2	SiO2†	2718.0	-52.4	-9.4558 µg/L	-9.4558 ppb	15:21:32
2	Si 251.611†	411.4	-11.3	-0.7694 µg/L	-0.7694 ppb	15:21:52
2	Sn 189.927†	2.3	9.7	3.7860 µg/L	3.7860 ppb	15:21:52
2	Ti 334.940†	-454.3	121.4	0.2847 µg/L	0.2847 ppb	15:21:32
2	Tl 190.801†	-23.9	10.1	9.8677 µg/L	9.8677 ppb	15:21:52
2	U 409.014†	59.2	65.2	5.9166 µg/L	5.9166 ppb	15:21:32
2	V 292.402†	81.9	-30.1	-0.3365 µg/L	-0.3365 ppb	15:21:32
2	Zn 213.857†	665.2	-341.4	-7.8561 µg/L	-7.8561 ppb	15:21:52
3	Sc RADIAL	101508.0	101508.0	105 %		15:20:24
3	Al 396.153Radial†	-131.2	-5.8	-2.8214 µg/L	-2.8214 ppb	15:20:24
3	Ca 317.933Radial†	393.8	-9.8	-3.5524 µg/L	-3.5524 ppb	15:20:44
3	Fe 238.204 Radial†	12.7	0.1	1.4170 µg/L	1.4170 ppb	15:20:44
3	K 766.490 Radial†	458.1	-48.5	-22.647 µg/L	-22.647 ppb	15:20:24
3	Mg 279.077 IEC†	4.2	-4.0	-52.777 µg/L	-52.777 ppb	15:20:44
3	Na 589.592 Radial†	218.2	27.5	13.707 µg/L	13.707 ppb	15:20:24
3	Sr 421.552†	139.5	-6.4	-0.0380 µg/L	-0.0380 ppb	15:20:24
3	Sc 361.383	2118833.1	2118833.1	101.23 %		15:21:58
3	Y 371.029	1449748.8	1449748.8	101.18 %		15:21:58
3	Ag 328.068†	-508.4	-42.0	-0.3404 µg/L	-0.3404 ppb	15:22:04
3	As 188.979†	-0.9	2.3	3.4165 µg/L	3.4165 ppb	15:22:25
3	B 249.677†	297.9	-5.1	-0.2316 µg/L	-0.2316 ppb	15:22:04
3	Ba 233.527†	-8.0	0.5	0.0094 µg/L	0.0094 ppb	15:22:25
3	Be 313.107†	-1075.9	96.0	0.0563 µg/L	0.0563 ppb	15:22:04
3	Cd 226.502†	-165.6	7.0	0.1662 µg/L	0.1662 ppb	15:22:25
3	Co 228.616†	42.1	-6.5	-0.2757 µg/L	-0.2757 ppb	15:22:25
3	Cr 267.716†	67.6	-13.5	-0.2930 µg/L	-0.2930 ppb	15:22:04
3	Cu 324.752†	4436.8	6.3	0.0412 µg/L	0.0412 ppb	15:22:04
3	Mn 257.610†	-622.1	72.4	0.2213 µg/L	0.2213 ppb	15:22:25
3	Mo 202.031†	30.3	24.8	2.4526 µg/L	2.4526 ppb	15:22:25
3	Ni 231.604†	373.3	-8.1	-0.4541 µg/L	-0.4541 ppb	15:22:25
3	P 214.914†	266.3	-9.3	-15.478 µg/L	-15.478 ppb	15:22:25
3	Pb 220.353†	25.2	-5.3	-1.3747 µg/L	-1.3747 ppb	15:22:25
3	S 181.975 Axial†	21.8	-1.0	-3.1695 µg/L	-3.1695 ppb	15:22:25
3	Sb 206.836†	27.9	4.8	4.3400 µg/L	4.3400 ppb	15:22:25
3	Se 196.026†	20.6	-7.0	-6.5418 µg/L	-6.5418 ppb	15:22:25
3	SiO2†	2720.2	-92.6	-16.710 µg/L	-16.710 ppb	15:22:04
3	Si 251.611†	417.1	-12.0	-0.8170 µg/L	-0.8170 ppb	15:22:25
3	Sn 189.927†	1.4	8.8	3.4358 µg/L	3.4358 ppb	15:22:25
3	Ti 334.940†	-427.2	155.2	0.3670 µg/L	0.3670 ppb	15:22:04
3	Tl 190.801†	-33.0	1.6	1.5267 µg/L	1.5267 ppb	15:22:25
3	U 409.014†	-5.9	-0.0	-0.0033 µg/L	-0.0033 ppb	15:22:04
3	V 292.402†	72.8	-40.4	-0.4587 µg/L	-0.4587 ppb	15:22:04
3	Zn 213.857†	670.0	-347.0	-7.9848 µg/L	-7.9848 ppb	15:22:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2100386.5	100.35 %		0.803			0.80%
Sc RADIAL	101374.1	105 %		0.1			0.12%
Y 371.029	1437273.9	100.31 %		0.797			0.79%
Ag 328.068†	-36.5	-0.2954 µg/L		0.04633	-0.2954 ppb	0.04633	15.68%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.2	-2.5424 µg/L		1.90175	-2.5424 ppb	1.90175	74.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.9	2.7406 µg/L		4.89412	2.7406 ppb	4.89412	178.58%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	4.7	0.2058 µg/L		0.95107	0.2058 ppb	0.95107	462.06%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	2.6	0.0549 µg/L		0.04482	0.0549 ppb	0.04482	81.65%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	122.5	0.0719 µg/L		0.01362	0.0719 ppb	0.01362	18.95%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-16.7	-6.0808 µg/L		2.31421	-6.0808 ppb	2.31421	38.06%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	6.9	0.1630 µg/L		0.21855	0.1630 ppb	0.21855	134.08%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-8.2	-0.3492 µg/L		0.08411	-0.3492 ppb	0.08411	24.09%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-18.9 -0.4111 µg/L	0.25842 -0.4111 ppb	0.25842 62.87%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	10.5 0.0710 µg/L	0.33355 0.0710 ppb	0.33355 469.64%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.0 12.006 µg/L	9.4229 12.006 ppb	9.4229 78.49%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-47.6 -22.223 µg/L	10.2730 -22.223 ppb	10.2730 46.23%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-2.4 -31.511 µg/L	20.1763 -31.511 ppb	20.1763 64.03%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	65.4 0.1994 µg/L	0.02954 0.1994 ppb	0.02954 14.81%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	20.9 2.0730 µg/L	0.33488 2.0730 ppb	0.33488 16.15%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	36.3 18.113 µg/L	6.0908 18.113 ppb	6.0908 33.63%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-13.1 -0.7364 µg/L	0.32155 -0.7364 ppb	0.32155 43.67%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-6.7 -11.065 µg/L	6.5221 -11.065 ppb	6.5221 58.95%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-1.9 -0.4862 µg/L	2.36099 -0.4862 ppb	2.36099 485.62%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-0.3 -0.8586 µg/L	2.03688 -0.8586 ppb	2.03688 237.23%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	6.8 6.1390 µg/L	1.55796 6.1390 ppb	1.55796 25.38%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-7.6 -7.0681 µg/L	0.57517 -7.0681 ppb	0.57517 8.14%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-87.4 -15.779 µg/L	5.9126 -15.779 ppb	5.9126 37.47%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-10.7 -0.7302 µg/L	0.11179 -0.7302 ppb	0.11179 15.31%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	6.1 2.3935 µg/L	2.11591 2.3935 ppb	2.11591 88.40%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-15.4 -0.0917 µg/L	0.13537 -0.0917 ppb	0.13537 147.58%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	137.9 0.3249 µg/L	0.04121 0.3249 ppb	0.04121 12.68%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	5.7 5.5530 µg/L	4.17795 5.5530 ppb	4.17795 75.24%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	25.2 2.2900 µg/L	3.17718 2.2900 ppb	3.17718 138.74%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-42.3 -0.4834 µg/L	0.16071 -0.4834 ppb	0.16071 33.24%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-341.8 -7.8652 µg/L	0.11537 -7.8652 ppb	0.11537 1.47%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 15:54:30

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	97233.7	97233.7	100 %		15:55:03
1	Al 396.153Radial†	10457.9	10529.3	5015.3 µg/L	5015.3 ppb	15:55:03
1	Ca 317.933Radial†	14215.3	13764.9	5009.3 µg/L	5009.3 ppb	15:55:03
1	Fe 238.204 Radial†	439.0	425.0	5038.1 µg/L	5038.1 ppb	15:55:24
1	K 766.490 Radial†	11244.9	10708.0	4997.2 µg/L	4997.2 ppb	15:55:03
1	Mg 279.077 IEC†	394.5	384.7	5075.6 µg/L	5075.6 ppb	15:55:24
1	Na 589.592 Radial†	20511.4	20236.9	10100 µg/L	10100 ppb	15:55:03
1	Sr 421.552†	85322.8	84792.6	504.08 µg/L	504.08 ppb	15:55:03
1	Sc 361.383	2055099.7	2055099.7	98.184 %		15:56:27
1	Y 371.029	1401561.2	1401561.2	97.815 %		15:56:27
1	Ag 328.068†	62103.0	63711.8	515.39 µg/L	515.39 ppb	15:56:33
1	As 188.979†	353.6	363.4	534.92 µg/L	534.92 ppb	15:56:53
1	B 249.677†	11382.2	11293.3	510.72 µg/L	510.72 ppb	15:56:33
1	Ba 233.527†	23239.1	23677.3	518.76 µg/L	518.76 ppb	15:56:33
1	Be 313.107†	856861.3	873867.6	513.25 µg/L	513.25 ppb	15:56:27
1	Cd 226.502†	21188.5	21750.9	516.98 µg/L	516.98 ppb	15:56:33
1	Co 228.616†	11950.9	12123.8	520.27 µg/L	520.27 ppb	15:56:33
1	Cr 267.716†	23739.8	24098.6	524.45 µg/L	524.45 ppb	15:56:33
1	Cu 324.752†	82644.9	79796.7	522.14 µg/L	522.14 ppb	15:56:33
1	Mn 257.610†	169604.6	173428.4	521.19 µg/L	521.19 ppb	15:56:27
1	Mo 202.031†	5324.4	5417.7	536.28 µg/L	536.28 ppb	15:56:53
1	Ni 231.604†	9497.3	9296.0	520.83 µg/L	520.83 ppb	15:56:33
1	P 214.914†	1840.9	1602.5	2611.1 µg/L	2611.1 ppb	15:56:53
1	Pb 220.353†	2016.8	2024.0	531.25 µg/L	531.25 ppb	15:56:53
1	S 181.975 Axial†	346.5	330.4	1051.5 µg/L	1051.5 ppb	15:56:53
1	Sb 206.836†	603.7	592.1	530.98 µg/L	530.98 ppb	15:56:53
1	Se 196.026†	582.4	565.8	543.53 µg/L	543.53 ppb	15:56:53
1	SiO2†	32900.3	30729.0	5547.7 µg/L	5547.7 ppb	15:56:33
1	Si 251.611†	37899.4	38176.2	2595.4 µg/L	2595.4 ppb	15:56:33
1	Sn 189.927†	1346.2	1378.5	537.18 µg/L	537.18 ppb	15:56:53
1	Ti 334.940†	214841.1	219391.8	512.70 µg/L	512.70 ppb	15:56:27
1	Tl 190.801†	491.8	535.0	527.40 µg/L	527.40 ppb	15:56:53
1	U 409.014†	5685.9	5796.8	525.34 µg/L	525.34 ppb	15:56:33
1	V 292.402†	43268.9	43956.9	524.12 µg/L	524.12 ppb	15:56:33
1	Zn 213.857†	23380.3	22803.9	521.36 µg/L	521.36 ppb	15:56:33
2	Sc RADIAL	97535.2	97535.2	101 %		15:55:29
2	Al 396.153Radial†	10452.8	10492.0	4997.7 µg/L	4997.7 ppb	15:55:29
2	Ca 317.933Radial†	14265.7	13771.2	5011.6 µg/L	5011.6 ppb	15:55:29
2	Fe 238.204 Radial†	437.9	422.6	5009.5 µg/L	5009.5 ppb	15:55:50
2	K 766.490 Radial†	11246.9	10675.4	4982.0 µg/L	4982.0 ppb	15:55:29
2	Mg 279.077 IEC†	397.2	386.2	5095.0 µg/L	5095.0 ppb	15:55:50
2	Na 589.592 Radial†	20557.7	20219.7	10092 µg/L	10092 ppb	15:55:29
2	Sr 421.552†	85474.7	84680.8	503.42 µg/L	503.42 ppb	15:55:29
2	Sc 361.383	2062290.9	2062290.9	98.528 %		15:57:00
2	Y 371.029	1405199.3	1405199.3	98.069 %		15:57:00
2	Ag 328.068†	62454.5	63848.0	516.48 µg/L	516.48 ppb	15:57:06
2	As 188.979†	349.5	358.0	526.92 µg/L	526.92 ppb	15:57:26
2	B 249.677†	11457.7	11329.5	512.38 µg/L	512.38 ppb	15:57:06
2	Ba 233.527†	23369.2	23726.8	519.84 µg/L	519.84 ppb	15:57:06
2	Be 313.107†	859786.7	873793.6	513.21 µg/L	513.21 ppb	15:57:00
2	Cd 226.502†	21394.2	21884.5	520.16 µg/L	520.16 ppb	15:57:06
2	Co 228.616†	12018.7	12150.2	521.40 µg/L	521.40 ppb	15:57:06
2	Cr 267.716†	23889.7	24166.4	525.93 µg/L	525.93 ppb	15:57:06
2	Cu 324.752†	83171.0	80037.1	523.71 µg/L	523.71 ppb	15:57:06
2	Mn 257.610†	170523.3	173758.5	522.18 µg/L	522.18 ppb	15:57:00
2	Mo 202.031†	5253.3	5326.7	527.27 µg/L	527.27 ppb	15:57:26
2	Ni 231.604†	9598.2	9364.8	524.69 µg/L	524.69 ppb	15:57:06
2	P 214.914†	1823.4	1578.3	2570.5 µg/L	2570.5 ppb	15:57:26
2	Pb 220.353†	1995.9	1995.5	523.78 µg/L	523.78 ppb	15:57:26

2	S 181.975 Axial†	339.8	322.3	1025.8 µg/L	1025.8 ppb	15:57:26
2	Sb 206.836†	595.8	581.9	521.72 µg/L	521.72 ppb	15:57:26
2	Se 196.026†	572.0	553.2	531.60 µg/L	531.60 ppb	15:57:26
2	SiO2†	33130.5	30845.8	5568.8 µg/L	5568.8 ppb	15:57:06
2	Si 251.611†	38151.0	38297.0	2603.6 µg/L	2603.6 ppb	15:57:06
2	Sn 189.927†	1320.9	1348.1	525.33 µg/L	525.33 ppb	15:57:26
2	Ti 334.940†	215471.4	219268.5	512.41 µg/L	512.41 ppb	15:57:00
2	Tl 190.801†	488.8	530.2	522.76 µg/L	522.76 ppb	15:57:26
2	U 409.014†	5630.4	5720.4	518.40 µg/L	518.40 ppb	15:57:06
2	V 292.402†	43490.2	44027.8	524.89 µg/L	524.89 ppb	15:57:06
2	Zn 213.857†	23579.7	22923.2	524.09 µg/L	524.09 ppb	15:57:06
3	Sc RADIAL	97298.9	97298.9	101 %		15:55:55
3	Al 396.153Radial†	10465.2	10529.6	5017.6 µg/L	5017.6 ppb	15:55:55
3	Ca 317.933Radial†	14270.5	13810.4	5025.9 µg/L	5025.9 ppb	15:55:55
3	Fe 238.204 Radial†	442.3	428.0	5071.9 µg/L	5071.9 ppb	15:56:16
3	K 766.490 Radial†	11242.5	10698.2	4992.6 µg/L	4992.6 ppb	15:55:55
3	Mg 279.077 IEC†	398.7	388.6	5125.2 µg/L	5125.2 ppb	15:56:16
3	Na 589.592 Radial†	20533.7	20245.4	10105 µg/L	10105 ppb	15:55:55
3	Sr 421.552†	85316.6	84729.4	503.71 µg/L	503.71 ppb	15:55:55
3	Sc 361.383	2061146.1	2061146.1	98.473 %		15:57:34
3	Y 371.029	1407044.7	1407044.7	98.198 %		15:57:34
3	Ag 328.068†	57832.1	59189.1	478.68 µg/L	478.68 ppb	15:57:39
3	As 188.979†	294.5	302.3	444.72 µg/L	444.72 ppb	15:58:00
3	B 249.677†	10574.9	10439.5	471.84 µg/L	471.84 ppb	15:57:39
3	Ba 233.527†	21133.5	21469.6	470.37 µg/L	470.37 ppb	15:57:39
3	Be 313.107†	799146.3	812697.5	477.33 µg/L	477.33 ppb	15:57:34
3	Cd 226.502†	19167.6	19635.4	466.63 µg/L	466.63 ppb	15:57:39
3	Co 228.616†	10669.2	10786.6	462.82 µg/L	462.82 ppb	15:57:39
3	Cr 267.716†	20573.1	20811.9	452.93 µg/L	452.93 ppb	15:57:39
3	Cu 324.752†	74555.8	71335.3	466.88 µg/L	466.88 ppb	15:57:39
3	Mn 257.610†	158734.8	161883.3	486.49 µg/L	486.49 ppb	15:57:34
3	Mo 202.031†	4347.8	4410.1	436.58 µg/L	436.58 ppb	15:58:00
3	Ni 231.604†	8515.2	8270.3	463.37 µg/L	463.37 ppb	15:57:39
3	P 214.914†	1582.1	1334.3	2169.9 µg/L	2169.9 ppb	15:58:00
3	Pb 220.353†	1698.9	1695.0	444.89 µg/L	444.89 ppb	15:58:00
3	S 181.975 Axial†	295.3	277.4	882.66 µg/L	882.66 ppb	15:58:00
3	Sb 206.836†	513.4	498.6	446.76 µg/L	446.76 ppb	15:58:00
3	Se 196.026†	504.7	485.3	467.89 µg/L	467.89 ppb	15:58:00
3	SiO2†	30494.3	28187.4	5088.8 µg/L	5088.8 ppb	15:57:39
3	Si 251.611†	34842.2	34958.4	2376.6 µg/L	2376.6 ppb	15:57:39
3	Sn 189.927†	1074.5	1098.6	428.22 µg/L	428.22 ppb	15:58:00
3	Ti 334.940†	198697.1	202355.5	472.86 µg/L	472.86 ppb	15:57:34
3	Tl 190.801†	438.0	478.9	472.31 µg/L	472.31 ppb	15:58:00
3	U 409.014†	4922.9	5005.1	453.44 µg/L	453.44 ppb	15:57:39
3	V 292.402†	38466.3	38950.5	464.02 µg/L	464.02 ppb	15:57:39
3	Zn 213.857†	21054.9	20372.5	465.72 µg/L	465.72 ppb	15:57:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2059512.2	98.395 %	0.1846			0.19%
Sc RADIAL	97355.9	101 %	0.2			0.16%
Y 371.029	1404601.7	98.027 %	0.1947			0.20%
Ag 328.068†	62249.6	503.52 µg/L	21.514	503.52 ppb	21.514	4.27%
QC value within limits for Ag 328.068 Recovery = 100.70%						
Al 396.153Radial†	10517.0	5010.2 µg/L	10.85	5010.2 ppb	10.85	0.22%
QC value within limits for Al 396.153Radial Recovery = 100.20%						
As 188.979†	341.2	502.19 µg/L	49.925	502.19 ppb	49.925	9.94%
QC value within limits for As 188.979 Recovery = 100.44%						
B 249.677†	11020.8	498.32 µg/L	22.941	498.32 ppb	22.941	4.60%
QC value within limits for B 249.677 Recovery = 99.66%						
Ba 233.527†	22957.9	502.99 µg/L	28.255	502.99 ppb	28.255	5.62%
QC value within limits for Ba 233.527 Recovery = 100.60%						
Be 313.107†	853452.9	501.26 µg/L	20.729	501.26 ppb	20.729	4.14%
QC value within limits for Be 313.107 Recovery = 100.25%						
Ca 317.933Radial†	13782.1	5015.6 µg/L	8.97	5015.6 ppb	8.97	0.18%
QC value within limits for Ca 317.933Radial Recovery = 100.31%						
Cd 226.502†	21090.3	501.26 µg/L	30.030	501.26 ppb	30.030	5.99%
QC value within limits for Cd 226.502 Recovery = 100.25%						
Co 228.616†	11686.9	501.50 µg/L	33.503	501.50 ppb	33.503	6.68%

QC value within limits for Co 228.616 Recovery = 100.30%						
Cr 267.716†	23025.7	501.11 µg/L	41.725	501.11 ppb	41.725	8.33%
QC value within limits for Cr 267.716 Recovery = 100.22%						
Cu 324.752†	77056.4	504.25 µg/L	32.366	504.25 ppb	32.366	6.42%
QC value within limits for Cu 324.752 Recovery = 100.85%						
Fe 238.204 Radial†	425.2	5039.8 µg/L	31.24	5039.8 ppb	31.24	0.62%
QC value within limits for Fe 238.204 Radial Recovery = 100.80%						
K 766.490 Radial†	10693.9	4990.6 µg/L	7.81	4990.6 ppb	7.81	0.16%
QC value within limits for K 766.490 Radial Recovery = 99.81%						
Mg 279.077 IEC†	386.5	5098.6 µg/L	25.00	5098.6 ppb	25.00	0.49%
QC value within limits for Mg 279.077 IEC Recovery = 101.97%						
Mn 257.610†	169690.0	509.95 µg/L	20.325	509.95 ppb	20.325	3.99%
QC value within limits for Mn 257.610 Recovery = 101.99%						
Mo 202.031†	5051.5	500.05 µg/L	55.145	500.05 ppb	55.145	11.03%
QC value within limits for Mo 202.031 Recovery = 100.01%						
Na 589.592 Radial†	20234.0	10099 µg/L	6.5	10099 ppb	6.5	0.06%
QC value within limits for Na 589.592 Radial Recovery = 100.99%						
Ni 231.604†	8977.0	502.97 µg/L	34.341	502.97 ppb	34.341	6.83%
QC value within limits for Ni 231.604 Recovery = 100.59%						
P 214.914†	1505.0	2450.5 µg/L	243.85	2450.5 ppb	243.85	9.95%
QC value within limits for P 214.914 Recovery = 98.02%						
Pb 220.353†	1904.8	499.97 µg/L	47.850	499.97 ppb	47.850	9.57%
QC value within limits for Pb 220.353 Recovery = 99.99%						
S 181.975 Axial†	310.0	986.65 µg/L	90.964	986.65 ppb	90.964	9.22%
QC value within limits for S 181.975 Axial Recovery = 98.67%						
Sb 206.836†	557.6	499.82 µg/L	46.182	499.82 ppb	46.182	9.24%
QC value within limits for Sb 206.836 Recovery = 99.96%						
Se 196.026†	534.8	514.34 µg/L	40.667	514.34 ppb	40.667	7.91%
QC value within limits for Se 196.026 Recovery = 102.87%						
SiO2†	29920.8	5401.8 µg/L	271.21	5401.8 ppb	271.21	5.02%
QC value within limits for SiO2 Recovery = 101.01%						
Si 251.611†	37143.9	2525.2 µg/L	128.74	2525.2 ppb	128.74	5.10%
QC value within limits for Si 251.611 Recovery = 101.01%						
Sn 189.927†	1275.0	496.91 µg/L	59.785	496.91 ppb	59.785	12.03%
QC value within limits for Sn 189.927 Recovery = 99.38%						
Sr 421.552†	84734.2	503.73 µg/L	0.333	503.73 ppb	0.333	0.07%
QC value within limits for Sr 421.552 Recovery = 100.75%						
Ti 334.940†	213671.9	499.32 µg/L	22.919	499.32 ppb	22.919	4.59%
QC value within limits for Ti 334.940 Recovery = 99.86%						
Tl 190.801†	514.7	507.49 µg/L	30.557	507.49 ppb	30.557	6.02%
QC value within limits for Tl 190.801 Recovery = 101.50%						
U 409.014†	5507.4	499.06 µg/L	39.658	499.06 ppb	39.658	7.95%
QC value within limits for U 409.014 Recovery = 99.81%						
V 292.402†	42311.7	504.34 µg/L	34.926	504.34 ppb	34.926	6.93%
QC value within limits for V 292.402 Recovery = 100.87%						
Zn 213.857†	22033.2	503.73 µg/L	32.940	503.73 ppb	32.940	6.54%
QC value within limits for Zn 213.857 Recovery = 100.75%						

All analyte(s) passed QC.

Sequence No.: 24

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 15:58:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98998.7	98998.7	102 %		15:58:40
1	Al 396.153Radial†	-144.1	-21.6	-10.340 µg/L	-10.340 ppb	15:58:40
1	Ca 317.933Radial†	372.0	-21.6	-7.8617 µg/L	-7.8617 ppb	15:59:00
1	Fe 238.204 Radial†	13.5	1.2	14.689 µg/L	14.689 ppb	15:59:00
1	K 766.490 Radial†	357.6	-135.7	-63.342 µg/L	-63.342 ppb	15:58:40
1	Mg 279.077 IEC†	8.6	0.4	5.1501 µg/L	5.1501 ppb	15:59:00
1	Na 589.592 Radial†	210.2	24.9	12.437 µg/L	12.437 ppb	15:58:40
1	Sr 421.552†	130.4	-11.9	-0.0710 µg/L	-0.0710 ppb	15:58:40
1	Sc 361.383	2084090.4	2084090.4	99.569 %		16:00:02
1	Y 371.029	1427133.0	1427133.0	99.600 %		16:00:02
1	Ag 328.068†	-567.0	-109.3	-0.8805 µg/L	-0.8805 ppb	16:00:08
1	As 188.979†	-0.6	2.6	3.8737 µg/L	3.8737 ppb	16:00:28
1	B 249.677†	298.1	0.0	-0.0072 µg/L	-0.0072 ppb	16:00:08
1	Ba 233.527†	-9.7	-1.3	-0.0292 µg/L	-0.0292 ppb	16:00:28
1	Be 313.107†	-1099.9	54.1	0.0317 µg/L	0.0317 ppb	16:00:08
1	Cd 226.502†	-167.7	2.1	0.0492 µg/L	0.0492 ppb	16:00:28
1	Co 228.616†	45.5	-2.4	-0.1018 µg/L	-0.1018 ppb	16:00:28
1	Cr 267.716†	49.5	-30.5	-0.6642 µg/L	-0.6642 ppb	16:00:08
1	Cu 324.752†	4460.4	103.0	0.6756 µg/L	0.6756 ppb	16:00:08
1	Mn 257.610†	-640.6	43.6	0.1317 µg/L	0.1317 ppb	16:00:28
1	Mo 202.031†	25.6	20.6	2.0397 µg/L	2.0397 ppb	16:00:28
1	Ni 231.604†	370.7	-4.6	-0.2555 µg/L	-0.2555 ppb	16:00:28
1	P 214.914†	271.7	0.5	0.7804 µg/L	0.7804 ppb	16:00:28
1	Pb 220.353†	37.8	7.8	2.0551 µg/L	2.0551 ppb	16:00:28
1	S 181.975 Axial†	27.3	4.9	15.660 µg/L	15.660 ppb	16:00:28
1	Sb 206.836†	27.1	4.5	4.0557 µg/L	4.0557 ppb	16:00:28
1	Se 196.026†	20.2	-7.0	-6.5765 µg/L	-6.5765 ppb	16:00:28
1	SiO2†	2752.8	-15.1	-2.7188 µg/L	-2.7188 ppb	16:00:08
1	Si 251.611†	407.7	-14.6	-0.9945 µg/L	-0.9945 ppb	16:00:28
1	Sn 189.927†	1.2	8.6	3.3584 µg/L	3.3584 ppb	16:00:28
1	Ti 334.940†	-426.6	148.8	0.3474 µg/L	0.3474 ppb	16:00:08
1	Tl 190.801†	-39.4	-5.5	-5.3488 µg/L	-5.3488 ppb	16:00:28
1	U 409.014†	-65.2	-59.7	-5.4240 µg/L	-5.4240 ppb	16:00:08
1	V 292.402†	56.3	-55.8	-0.6514 µg/L	-0.6514 ppb	16:00:08
1	Zn 213.857†	663.7	-342.2	-7.8807 µg/L	-7.8807 ppb	16:00:28
2	Sc RADIAL	98732.8	98732.8	102 %		15:59:06
2	Al 396.153Radial†	-122.3	-0.6	-0.3409 µg/L	-0.3409 ppb	15:59:06
2	Ca 317.933Radial†	381.9	-10.9	-3.9829 µg/L	-3.9829 ppb	15:59:26
2	Fe 238.204 Radial†	12.5	0.3	3.8232 µg/L	3.8232 ppb	15:59:26
2	K 766.490 Radial†	355.5	-136.8	-63.843 µg/L	-63.843 ppb	15:59:06
2	Mg 279.077 IEC†	9.9	1.7	22.168 µg/L	22.168 ppb	15:59:26
2	Na 589.592 Radial†	188.7	4.4	2.1910 µg/L	2.1910 ppb	15:59:06
2	Sr 421.552†	118.7	-23.1	-0.1374 µg/L	-0.1374 ppb	15:59:06
2	Sc 361.383	2080595.7	2080595.7	99.402 %		16:00:34
2	Y 371.029	1425280.7	1425280.7	99.470 %		16:00:34
2	Ag 328.068†	-503.6	-46.4	-0.3761 µg/L	-0.3761 ppb	16:00:40
2	As 188.979†	-0.4	2.8	4.1966 µg/L	4.1966 ppb	16:01:00
2	B 249.677†	319.3	21.9	0.9922 µg/L	0.9922 ppb	16:00:40
2	Ba 233.527†	-8.5	-0.1	-0.0042 µg/L	-0.0042 ppb	16:01:00
2	Be 313.107†	-1105.1	47.1	0.0276 µg/L	0.0276 ppb	16:00:40
2	Cd 226.502†	-177.0	-7.5	-0.1788 µg/L	-0.1788 ppb	16:01:00
2	Co 228.616†	51.2	3.4	0.1474 µg/L	0.1474 ppb	16:01:00
2	Cr 267.716†	92.5	12.8	0.2779 µg/L	0.2779 ppb	16:00:40
2	Cu 324.752†	4414.9	64.8	0.4240 µg/L	0.4240 ppb	16:00:40
2	Mn 257.610†	-633.7	49.5	0.1474 µg/L	0.1474 ppb	16:01:00
2	Mo 202.031†	23.6	18.6	1.8392 µg/L	1.8392 ppb	16:01:00
2	Ni 231.604†	363.7	-11.1	-0.6205 µg/L	-0.6205 ppb	16:01:00
2	P 214.914†	266.2	-4.6	-7.6776 µg/L	-7.6776 ppb	16:01:00
2	Pb 220.353†	32.2	2.2	0.5786 µg/L	0.5786 ppb	16:01:00

2	S 181.975 Axial†	22.0	-0.5	-1.4458 µg/L	-1.4458 ppb	16:01:00
2	Sb 206.836†	25.6	3.0	2.7103 µg/L	2.7103 ppb	16:01:00
2	Se 196.026†	28.2	1.0	0.9682 µg/L	0.9682 ppb	16:01:00
2	SiO2†	2771.3	8.2	1.4780 µg/L	1.4780 ppb	16:00:40
2	Si 251.611†	424.5	2.9	0.2005 µg/L	0.2005 ppb	16:01:00
2	Sn 189.927†	1.3	8.8	3.4074 µg/L	3.4074 ppb	16:01:00
2	Ti 334.940†	-497.2	77.1	0.1785 µg/L	0.1785 ppb	16:00:40
2	Tl 190.801†	-32.9	1.0	1.0276 µg/L	1.0276 ppb	16:01:00
2	U 409.014†	50.0	56.1	5.0918 µg/L	5.0918 ppb	16:00:40
2	V 292.402†	62.9	-49.0	-0.5595 µg/L	-0.5595 ppb	16:00:40
2	Zn 213.857†	650.1	-354.8	-8.1684 µg/L	-8.1684 ppb	16:01:00
3	Sc RADIAL	99400.2	99400.2	103 %		15:59:32
3	Al 396.153Radial†	-154.7	-31.3	-14.980 µg/L	-14.980 ppb	15:59:32
3	Ca 317.933Radial†	375.9	-19.3	-7.0192 µg/L	-7.0192 ppb	15:59:52
3	Fe 238.204 Radial†	14.7	2.3	27.612 µg/L	27.612 ppb	15:59:52
3	K 766.490 Radial†	441.9	-55.0	-25.691 µg/L	-25.691 ppb	15:59:32
3	Mg 279.077 IEC†	8.5	0.3	4.2157 µg/L	4.2157 ppb	15:59:52
3	Na 589.592 Radial†	213.0	26.8	13.364 µg/L	13.364 ppb	15:59:32
3	Sr 421.552†	137.9	-5.1	-0.0305 µg/L	-0.0305 ppb	15:59:32
3	Sc 361.383	2079208.6	2079208.6	99.336 %		16:01:06
3	Y 371.029	1423599.6	1423599.6	99.353 %		16:01:06
3	Ag 328.068†	-486.2	-29.3	-0.2325 µg/L	-0.2325 ppb	16:01:12
3	As 188.979†	-4.8	-1.6	-2.3249 µg/L	-2.3249 ppb	16:01:33
3	B 249.677†	302.5	5.2	0.2204 µg/L	0.2204 ppb	16:01:12
3	Ba 233.527†	-13.5	-5.2	-0.1138 µg/L	-0.1138 ppb	16:01:33
3	Be 313.107†	-1003.6	148.5	0.0872 µg/L	0.0872 ppb	16:01:12
3	Cd 226.502†	-161.6	7.9	0.1825 µg/L	0.1825 ppb	16:01:33
3	Co 228.616†	33.2	-14.7	-0.6304 µg/L	-0.6304 ppb	16:01:33
3	Cr 267.716†	81.1	1.4	0.0310 µg/L	0.0310 ppb	16:01:12
3	Cu 324.752†	4374.2	26.8	0.1801 µg/L	0.1801 ppb	16:01:12
3	Mn 257.610†	-643.0	39.6	0.1205 µg/L	0.1205 ppb	16:01:33
3	Mo 202.031†	16.5	11.4	1.1335 µg/L	1.1335 ppb	16:01:33
3	Ni 231.604†	351.0	-23.5	-1.3176 µg/L	-1.3176 ppb	16:01:33
3	P 214.914†	264.8	-5.8	-9.6970 µg/L	-9.6970 ppb	16:01:33
3	Pb 220.353†	27.1	-2.9	-0.7598 µg/L	-0.7598 ppb	16:01:33
3	S 181.975 Axial†	25.2	2.8	9.0515 µg/L	9.0515 ppb	16:01:33
3	Sb 206.836†	28.5	6.0	5.3697 µg/L	5.3697 ppb	16:01:33
3	Se 196.026†	21.4	-5.8	-5.3362 µg/L	-5.3362 ppb	16:01:33
3	SiO2†	2740.2	-21.2	-3.8277 µg/L	-3.8277 ppb	16:01:12
3	Si 251.611†	431.4	10.2	0.6932 µg/L	0.6932 ppb	16:01:33
3	Sn 189.927†	1.3	8.7	3.3979 µg/L	3.3979 ppb	16:01:33
3	Ti 334.940†	-488.7	85.3	0.1990 µg/L	0.1990 ppb	16:01:12
3	Tl 190.801†	-34.7	-0.9	-0.8375 µg/L	-0.8375 ppb	16:01:33
3	U 409.014†	-78.4	-73.1	-6.6428 µg/L	-6.6428 ppb	16:01:12
3	V 292.402†	117.5	6.0	0.0688 µg/L	0.0688 ppb	16:01:12
3	Zn 213.857†	679.9	-324.5	-7.4662 µg/L	-7.4662 ppb	16:01:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2081298.2	99.436 %	0.1202			0.12%
Sc RADIAL	99043.9	102 %	0.3			0.34%
Y 371.029	1425337.8	99.474 %	0.1233			0.12%
Ag 328.068†	-61.6	-0.4964 µg/L	0.34034	-0.4964 ppb	0.34034	68.57%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-17.8	-8.5536 µg/L	7.48128	-8.5536 ppb	7.48128	87.46%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.3	1.9151 µg/L	3.67554	1.9151 ppb	3.67554	191.92%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	9.0	0.4018 µg/L	0.52379	0.4018 ppb	0.52379	130.36%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.2	-0.0491 µg/L	0.05742	-0.0491 ppb	0.05742	116.99%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	83.3	0.0488 µg/L	0.03329	0.0488 ppb	0.03329	68.17%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.3	-6.2880 µg/L	2.04017	-6.2880 ppb	2.04017	32.45%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	0.8	0.0176 µg/L	0.18274	0.0176 ppb	0.18274	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.6	-0.1949 µg/L	0.39722	-0.1949 ppb	0.39722	203.77%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		-5.4	-0.1184 µg/L	0.48849	-0.1184 ppb	0.48849 412.58%
Cu	324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
		64.9	0.4266 µg/L	0.24775	0.4266 ppb	0.24775 58.08%
Fe	238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
		1.3	15.374 µg/L	11.9090	15.374 ppb	11.9090 77.46%
K	766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
		-109.2	-50.959 µg/L	21.8842	-50.959 ppb	21.8842 42.95%
Mg	279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
		0.8	10.511 µg/L	10.1056	10.511 ppb	10.1056 96.14%
Mn	257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
		44.3	0.1332 µg/L	0.01355	0.1332 ppb	0.01355 10.17%
Mo	202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
		16.9	1.6708 µg/L	0.47599	1.6708 ppb	0.47599 28.49%
Na	589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
		18.7	9.3308 µg/L	6.20056	9.3308 ppb	6.20056 66.45%
Ni	231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
		-13.0	-0.7312 µg/L	0.53962	-0.7312 ppb	0.53962 73.80%
P	214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
		-3.3	-5.5314 µg/L	5.55868	-5.5314 ppb	5.55868 100.49%
Pb	220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
		2.4	0.6246 µg/L	1.40804	0.6246 ppb	1.40804 225.42%
S	181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
		2.4	7.7553 µg/L	8.62636	7.7553 ppb	8.62636 111.23%
Sb	206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
		4.5	4.0452 µg/L	1.32969	4.0452 ppb	1.32969 32.87%
Se	196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
		-3.9	-3.6482 µg/L	4.04566	-3.6482 ppb	4.04566 110.90%
SiO2†		QC value within limits for Se 196.026	Recovery = Not calculated			
		-9.4	-1.6895 µg/L	2.79862	-1.6895 ppb	2.79862 165.65%
Si	251.611†	QC value within limits for SiO2	Recovery = Not calculated			
		-0.5	-0.0336 µg/L	0.86789	-0.0336 ppb	0.86789 >999.9%
Sn	189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
		8.7	3.3879 µg/L	0.02602	3.3879 ppb	0.02602 0.77%
Sr	421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
		-13.4	-0.0796 µg/L	0.05397	-0.0796 ppb	0.05397 67.80%
Ti	334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
		103.7	0.2416 µg/L	0.09219	0.2416 ppb	0.09219 38.16%
Tl	190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
		-1.8	-1.7196 µg/L	3.27847	-1.7196 ppb	3.27847 190.66%
U	409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
		-25.6	-2.3250 µg/L	6.45195	-2.3250 ppb	6.45195 277.51%
V	292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
		-32.9	-0.3807 µg/L	0.39202	-0.3807 ppb	0.39202 102.97%
Zn	213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
		-340.5	-7.8384 µg/L	0.35304	-7.8384 ppb	0.35304 4.50%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 34

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 16:34:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99660.6	99660.6	103 %		16:34:52
1	Al 396.153Radial†	10461.6	10279.4	4896.3 µg/L	4896.3 ppb	16:34:52
1	Ca 317.933Radial†	14240.4	13444.7	4892.8 µg/L	4892.8 ppb	16:34:52
1	Fe 238.204 Radial†	444.1	419.3	4970.6 µg/L	4970.6 ppb	16:35:12
1	K 766.490 Radial†	11162.8	10355.8	4832.8 µg/L	4832.8 ppb	16:34:52
1	Mg 279.077 IEC†	390.9	371.7	4903.2 µg/L	4903.2 ppb	16:35:12
1	Na 589.592 Radial†	20820.6	20039.9	10002 µg/L	10002 ppb	16:34:52
1	Sr 421.552†	85992.2	83374.4	495.65 µg/L	495.65 ppb	16:34:52
1	Sc 361.383	2099020.8	2099020.8	100.28 %		16:36:16
1	Y 371.029	1433236.4	1433236.4	100.03 %		16:36:16
1	Ag 328.068†	61653.1	61939.7	501.06 µg/L	501.06 ppb	16:36:21
1	As 188.979†	346.8	349.1	513.79 µg/L	513.79 ppb	16:36:42
1	B 249.677†	11291.5	10960.3	495.62 µg/L	495.62 ppb	16:36:21
1	Ba 233.527†	22929.8	22873.7	501.16 µg/L	501.16 ppb	16:36:21
1	Be 313.107†	852361.9	851119.9	499.89 µg/L	499.89 ppb	16:36:16
1	Cd 226.502†	21018.9	21130.3	502.22 µg/L	502.22 ppb	16:36:21
1	Co 228.616†	11809.3	11728.0	503.28 µg/L	503.28 ppb	16:36:21
1	Cr 267.716†	23554.6	23408.0	509.42 µg/L	509.42 ppb	16:36:21
1	Cu 324.752†	82180.1	77571.9	507.60 µg/L	507.60 ppb	16:36:21
1	Mn 257.610†	168944.6	169155.7	508.35 µg/L	508.35 ppb	16:36:16
1	Mo 202.031†	5299.1	5279.1	522.56 µg/L	522.56 ppb	16:36:42
1	Ni 231.604†	9372.3	8969.0	502.51 µg/L	502.51 ppb	16:36:21
1	P 214.914†	1830.8	1553.2	2530.5 µg/L	2530.5 ppb	16:36:42
1	Pb 220.353†	2004.9	1969.1	516.87 µg/L	516.87 ppb	16:36:42
1	S 181.975 Axial†	345.5	322.0	1024.7 µg/L	1024.7 ppb	16:36:42
1	Sb 206.836†	605.2	580.8	520.78 µg/L	520.78 ppb	16:36:42
1	Se 196.026†	585.7	556.8	534.94 µg/L	534.94 ppb	16:36:42
1	SiO2†	33025.3	30152.5	5443.6 µg/L	5443.6 ppb	16:36:21
1	Si 251.611†	37949.1	37418.1	2543.8 µg/L	2543.8 ppb	16:36:21
1	Sn 189.927†	1333.4	1337.1	521.05 µg/L	521.05 ppb	16:36:42
1	Ti 334.940†	214373.2	214346.6	500.91 µg/L	500.91 ppb	16:36:16
1	Tl 190.801†	487.5	520.2	512.89 µg/L	512.89 ppb	16:36:42
1	U 409.014†	5642.5	5632.4	510.43 µg/L	510.43 ppb	16:36:21
1	V 292.402†	42955.2	42721.9	509.40 µg/L	509.40 ppb	16:36:21
1	Zn 213.857†	23164.3	22090.2	505.05 µg/L	505.05 ppb	16:36:21
2	Sc RADIAL	99554.0	99554.0	103 %		16:35:18
2	Al 396.153Radial†	10430.9	10260.4	4887.4 µg/L	4887.4 ppb	16:35:18
2	Ca 317.933Radial†	14198.0	13418.3	4883.2 µg/L	4883.2 ppb	16:35:18
2	Fe 238.204 Radial†	446.6	422.2	5004.8 µg/L	5004.8 ppb	16:35:38
2	K 766.490 Radial†	11246.7	10448.9	4876.3 µg/L	4876.3 ppb	16:35:18
2	Mg 279.077 IEC†	393.6	374.7	4942.9 µg/L	4942.9 ppb	16:35:38
2	Na 589.592 Radial†	20817.2	20058.2	10011 µg/L	10011 ppb	16:35:18
2	Sr 421.552†	85780.1	83257.7	494.96 µg/L	494.96 ppb	16:35:18
2	Sc 361.383	2090568.1	2090568.1	99.879 %		16:36:49
2	Y 371.029	1428136.0	1428136.0	99.670 %		16:36:49
2	Ag 328.068†	61761.0	62296.3	503.93 µg/L	503.93 ppb	16:36:55
2	As 188.979†	338.1	341.8	503.03 µg/L	503.03 ppb	16:37:15
2	B 249.677†	11290.4	11004.8	497.62 µg/L	497.62 ppb	16:36:55
2	Ba 233.527†	23038.5	23074.9	505.56 µg/L	505.56 ppb	16:36:55
2	Be 313.107†	849211.0	851401.7	500.06 µg/L	500.06 ppb	16:36:49
2	Cd 226.502†	21029.2	21225.3	504.48 µg/L	504.48 ppb	16:36:55
2	Co 228.616†	11845.7	11812.1	506.89 µg/L	506.89 ppb	16:36:55
2	Cr 267.716†	23563.5	23511.9	511.68 µg/L	511.68 ppb	16:36:55
2	Cu 324.752†	82398.1	78121.5	511.20 µg/L	511.20 ppb	16:36:55
2	Mn 257.610†	168501.6	169393.4	509.07 µg/L	509.07 ppb	16:36:49
2	Mo 202.031†	5200.0	5201.2	514.86 µg/L	514.86 ppb	16:37:15
2	Ni 231.604†	9465.4	9100.0	509.86 µg/L	509.86 ppb	16:36:55
2	P 214.914†	1803.2	1532.9	2496.3 µg/L	2496.3 ppb	16:37:15
2	Pb 220.353†	1968.9	1941.2	509.51 µg/L	509.51 ppb	16:37:15

2	S 181.975 Axial†	339.1	317.0	1008.8 µg/L	1008.8 ppb	16:37:15
2	Sb 206.836†	593.6	571.6	512.44 µg/L	512.44 ppb	16:37:15
2	Se 196.026†	551.1	524.4	504.63 µg/L	504.63 ppb	16:37:15
2	SiO2†	33212.2	30472.8	5501.4 µg/L	5501.4 ppb	16:36:55
2	Si 251.611†	38173.5	37795.8	2569.5 µg/L	2569.5 ppb	16:36:55
2	Sn 189.927†	1300.9	1310.0	510.49 µg/L	510.49 ppb	16:37:15
2	Ti 334.940†	213632.3	214469.1	501.20 µg/L	501.20 ppb	16:36:49
2	Tl 190.801†	478.5	513.1	506.00 µg/L	506.00 ppb	16:37:15
2	U 409.014†	5634.9	5647.6	511.80 µg/L	511.80 ppb	16:36:55
2	V 292.402†	42928.8	42868.7	511.07 µg/L	511.07 ppb	16:36:55
2	Zn 213.857†	23276.3	22295.7	509.74 µg/L	509.74 ppb	16:36:55
3	Sc RADIAL	99732.5	99732.5	103 %		16:35:44
3	Al 396.153Radial†	10453.2	10264.0	4891.0 µg/L	4891.0 ppb	16:35:44
3	Ca 317.933Radial†	14218.7	13413.6	4881.5 µg/L	4881.5 ppb	16:35:44
3	Fe 238.204 Radial†	442.8	417.7	4950.6 µg/L	4950.6 ppb	16:36:04
3	K 766.490 Radial†	11162.5	10347.6	4829.0 µg/L	4829.0 ppb	16:35:44
3	Mg 279.077 IEC†	393.1	373.5	4926.5 µg/L	4926.5 ppb	16:36:04
3	Na 589.592 Radial†	20859.9	20063.5	10014 µg/L	10014 ppb	16:35:44
3	Sr 421.552†	85956.2	83279.3	495.09 µg/L	495.09 ppb	16:35:44
3	Sc 361.383	2099490.1	2099490.1	100.30 %		16:37:22
3	Y 371.029	1434677.3	1434677.3	100.13 %		16:37:22
3	Ag 328.068†	58080.3	58363.9	472.01 µg/L	472.01 ppb	16:37:28
3	As 188.979†	294.3	296.7	436.49 µg/L	436.49 ppb	16:37:49
3	B 249.677†	10598.9	10267.3	464.08 µg/L	464.08 ppb	16:37:28
3	Ba 233.527†	20999.6	20944.2	458.87 µg/L	458.87 ppb	16:37:28
3	Be 313.107†	790967.7	789722.3	463.83 µg/L	463.83 ppb	16:37:22
3	Cd 226.502†	19155.5	19267.9	457.90 µg/L	457.90 ppb	16:37:28
3	Co 228.616†	10649.4	10568.9	453.48 µg/L	453.48 ppb	16:37:28
3	Cr 267.716†	20624.0	20481.1	445.73 µg/L	445.73 ppb	16:37:28
3	Cu 324.752†	74692.2	70088.5	458.72 µg/L	458.72 ppb	16:37:28
3	Mn 257.610†	157122.5	157331.9	472.82 µg/L	472.82 ppb	16:37:22
3	Mo 202.031†	4320.0	4301.7	425.85 µg/L	425.85 ppb	16:37:49
3	Ni 231.604†	8484.9	8082.2	452.83 µg/L	452.83 ppb	16:37:28
3	P 214.914†	1583.0	1305.8	2123.3 µg/L	2123.3 ppb	16:37:49
3	Pb 220.353†	1711.3	1675.9	439.85 µg/L	439.85 ppb	16:37:49
3	S 181.975 Axial†	296.6	273.1	869.18 µg/L	869.18 ppb	16:37:49
3	Sb 206.836†	509.5	485.3	434.72 µg/L	434.72 ppb	16:37:49
3	Se 196.026†	507.9	479.0	461.78 µg/L	461.78 ppb	16:37:49
3	SiO2†	30880.0	28006.4	5056.2 µg/L	5056.2 ppb	16:37:28
3	Si 251.611†	35312.7	34781.3	2364.6 µg/L	2364.6 ppb	16:37:28
3	Sn 189.927†	1070.3	1074.5	418.81 µg/L	418.81 ppb	16:37:49
3	Ti 334.940†	197220.6	197198.3	460.81 µg/L	460.81 ppb	16:37:22
3	Tl 190.801†	436.6	469.4	462.85 µg/L	462.85 ppb	16:37:49
3	U 409.014†	4962.5	4953.3	448.76 µg/L	448.76 ppb	16:37:28
3	V 292.402†	38667.9	38438.0	457.88 µg/L	457.88 ppb	16:37:28
3	Zn 213.857†	20969.9	19897.3	454.86 µg/L	454.86 ppb	16:37:28

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2096359.7	100.16 %	0.240			0.24%
Sc RADIAL	99649.0	103 %	0.1			0.09%
Y 371.029	1432016.6	99.940 %	0.2399			0.24%
Ag 328.068†	60866.6	492.33 µg/L	17.659	492.33 ppb	17.659	3.59%
QC value within limits for Ag 328.068 Recovery = 98.47%						
Al 396.153Radial†	10267.9	4891.6 µg/L	4.48	4891.6 ppb	4.48	0.09%
QC value within limits for Al 396.153Radial Recovery = 97.83%						
As 188.979†	329.2	484.44 µg/L	41.874	484.44 ppb	41.874	8.64%
QC value within limits for As 188.979 Recovery = 96.89%						
B 249.677†	10744.2	485.78 µg/L	18.815	485.78 ppb	18.815	3.87%
QC value within limits for B 249.677 Recovery = 97.16%						
Ba 233.527†	22297.6	488.53 µg/L	25.781	488.53 ppb	25.781	5.28%
QC value within limits for Ba 233.527 Recovery = 97.71%						
Be 313.107†	830747.9	487.93 µg/L	20.867	487.93 ppb	20.867	4.28%
QC value within limits for Be 313.107 Recovery = 97.59%						
Ca 317.933Radial†	13425.5	4885.8 µg/L	6.09	4885.8 ppb	6.09	0.12%
QC value within limits for Ca 317.933Radial Recovery = 97.72%						
Cd 226.502†	20541.2	488.20 µg/L	26.265	488.20 ppb	26.265	5.38%
QC value within limits for Cd 226.502 Recovery = 97.64%						
Co 228.616†	11369.7	487.88 µg/L	29.847	487.88 ppb	29.847	6.12%

QC value within limits for Co 228.616 Recovery = 97.58%						
Cr 267.716†	22467.0	488.95 µg/L	37.441	488.95 ppb	37.441	7.66%
QC value within limits for Cr 267.716 Recovery = 97.79%						
Cu 324.752†	75260.7	492.51 µg/L	29.316	492.51 ppb	29.316	5.95%
QC value within limits for Cu 324.752 Recovery = 98.50%						
Fe 238.204 Radial†	419.8	4975.3 µg/L	27.43	4975.3 ppb	27.43	0.55%
QC value within limits for Fe 238.204 Radial Recovery = 99.51%						
K 766.490 Radial†	10384.1	4846.1 µg/L	26.25	4846.1 ppb	26.25	0.54%
QC value within limits for K 766.490 Radial Recovery = 96.92%						
Mg 279.077 IEC†	373.3	4924.2 µg/L	19.94	4924.2 ppb	19.94	0.40%
QC value within limits for Mg 279.077 IEC Recovery = 98.48%						
Mn 257.610†	165293.7	496.75 µg/L	20.727	496.75 ppb	20.727	4.17%
QC value within limits for Mn 257.610 Recovery = 99.35%						
Mo 202.031†	4927.3	487.76 µg/L	53.749	487.76 ppb	53.749	11.02%
QC value within limits for Mo 202.031 Recovery = 97.55%						
Na 589.592 Radial†	20053.9	10009 µg/L	6.2	10009 ppb	6.2	0.06%
QC value within limits for Na 589.592 Radial Recovery = 100.09%						
Ni 231.604†	8717.1	488.40 µg/L	31.020	488.40 ppb	31.020	6.35%
QC value within limits for Ni 231.604 Recovery = 97.68%						
P 214.914†	1464.0	2383.4 µg/L	225.87	2383.4 ppb	225.87	9.48%
QC value within limits for P 214.914 Recovery = 95.33%						
Pb 220.353†	1862.1	488.74 µg/L	42.501	488.74 ppb	42.501	8.70%
QC value within limits for Pb 220.353 Recovery = 97.75%						
S 181.975 Axial†	304.0	967.55 µg/L	85.564	967.55 ppb	85.564	8.84%
QC value within limits for S 181.975 Axial Recovery = 96.76%						
Sb 206.836†	545.9	489.31 µg/L	47.462	489.31 ppb	47.462	9.70%
QC value within limits for Sb 206.836 Recovery = 97.86%						
Se 196.026†	520.1	500.45 µg/L	36.757	500.45 ppb	36.757	7.34%
QC value within limits for Se 196.026 Recovery = 100.09%						
SiO2†	29543.9	5333.7 µg/L	242.12	5333.7 ppb	242.12	4.54%
QC value within limits for SiO2 Recovery = 99.74%						
Si 251.611†	36665.1	2492.6 µg/L	111.65	2492.6 ppb	111.65	4.48%
QC value within limits for Si 251.611 Recovery = 99.71%						
Sn 189.927†	1240.5	483.45 µg/L	56.230	483.45 ppb	56.230	11.63%
QC value within limits for Sn 189.927 Recovery = 96.69%						
Sr 421.552†	83303.8	495.23 µg/L	0.369	495.23 ppb	0.369	0.07%
QC value within limits for Sr 421.552 Recovery = 99.05%						
Ti 334.940†	208671.4	487.64 µg/L	23.235	487.64 ppb	23.235	4.76%
QC value within limits for Ti 334.940 Recovery = 97.53%						
Tl 190.801†	500.9	493.91 µg/L	27.121	493.91 ppb	27.121	5.49%
QC value within limits for Tl 190.801 Recovery = 98.78%						
U 409.014†	5411.1	490.33 µg/L	36.004	490.33 ppb	36.004	7.34%
QC value within limits for U 409.014 Recovery = 98.07%						
V 292.402†	41342.9	492.78 µg/L	30.240	492.78 ppb	30.240	6.14%
QC value within limits for V 292.402 Recovery = 98.56%						
Zn 213.857†	21427.7	489.88 µg/L	30.422	489.88 ppb	30.422	6.21%
QC value within limits for Zn 213.857 Recovery = 97.98%						
All analyte(s) passed QC.						

Sequence No.: 35
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/16/2010 16:37:59
 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	98363.6	98363.6	102 %		16:38:29
1	Al 396.153Radial†	-105.7	15.2	7.2381 µg/L	7.2381 ppb	16:38:29
1	Ca 317.933Radial†	374.8	-16.5	-6.0091 µg/L	-6.0091 ppb	16:38:50
1	Fe 238.204 Radial†	14.0	1.8	21.832 µg/L	21.832 ppb	16:38:50
1	K 766.490 Radial†	484.0	-9.1	-4.2312 µg/L	-4.2312 ppb	16:38:29
1	Mg 279.077 IEC†	9.0	0.9	11.273 µg/L	11.273 ppb	16:38:50
1	Na 589.592 Radial†	197.0	13.3	6.6198 µg/L	6.6198 ppb	16:38:29
1	Sr 421.552†	120.0	-21.4	-0.1271 µg/L	-0.1271 ppb	16:38:29
1	Sc 361.383	2092382.4	2092382.4	99.965 %		16:39:52
1	Y 371.029	1433417.4	1433417.4	100.04 %		16:39:52
1	Ag 328.068†	-480.8	-20.8	-0.1662 µg/L	-0.1662 ppb	16:39:57
1	As 188.979†	-3.2	0.0	0.0655 µg/L	0.0655 ppb	16:40:18
1	B 249.677†	288.1	-11.2	-0.5192 µg/L	-0.5192 ppb	16:39:57
1	Ba 233.527†	-3.4	5.1	0.1102 µg/L	0.1102 ppb	16:40:18
1	Be 313.107†	-1061.5	96.9	0.0568 µg/L	0.0568 ppb	16:39:57
1	Cd 226.502†	-165.6	4.9	0.1126 µg/L	0.1126 ppb	16:40:18
1	Co 228.616†	43.1	-5.0	-0.2117 µg/L	-0.2117 ppb	16:40:18
1	Cr 267.716†	86.5	6.3	0.1371 µg/L	0.1371 ppb	16:39:57
1	Cu 324.752†	4355.4	-19.8	-0.1249 µg/L	-0.1249 ppb	16:39:57
1	Mn 257.610†	-624.7	62.1	0.1870 µg/L	0.1870 ppb	16:40:18
1	Mo 202.031†	24.2	19.1	1.8925 µg/L	1.8925 ppb	16:40:18
1	Ni 231.604†	357.9	-18.8	-1.0559 µg/L	-1.0559 ppb	16:40:18
1	P 214.914†	261.6	-10.7	-17.702 µg/L	-17.702 ppb	16:40:18
1	Pb 220.353†	40.8	10.6	2.8001 µg/L	2.8001 ppb	16:40:18
1	S 181.975 Axial†	20.4	-2.1	-6.6487 µg/L	-6.6487 ppb	16:40:18
1	Sb 206.836†	24.5	1.8	1.6023 µg/L	1.6023 ppb	16:40:18
1	Se 196.026†	22.6	-4.7	-4.3480 µg/L	-4.3480 ppb	16:40:18
1	SiO2†	2774.2	-4.6	-0.8290 µg/L	-0.8290 ppb	16:39:57
1	Si 251.611†	461.6	37.7	2.5604 µg/L	2.5604 ppb	16:40:18
1	Sn 189.927†	-3.0	4.5	1.7371 µg/L	1.7371 ppb	16:40:18
1	Ti 334.940†	-459.7	117.4	0.2735 µg/L	0.2735 ppb	16:39:57
1	Tl 190.801†	-35.2	-1.1	-1.0652 µg/L	-1.0652 ppb	16:40:18
1	U 409.014†	-76.5	-70.7	-6.4262 µg/L	-6.4262 ppb	16:39:57
1	V 292.402†	96.1	-16.1	-0.1851 µg/L	-0.1851 ppb	16:39:57
1	Zn 213.857†	813.8	-194.8	-4.4824 µg/L	-4.4824 ppb	16:40:18
2	Sc RADIAL	97612.6	97612.6	101 %		16:38:55
2	Al 396.153Radial†	-126.0	-5.6	-2.7157 µg/L	-2.7157 ppb	16:38:55
2	Ca 317.933Radial†	379.8	-8.7	-3.1749 µg/L	-3.1749 ppb	16:39:16
2	Fe 238.204 Radial†	15.2	3.1	36.274 µg/L	36.274 ppb	16:39:16
2	K 766.490 Radial†	515.9	26.2	12.207 µg/L	12.207 ppb	16:38:55
2	Mg 279.077 IEC†	10.0	1.9	25.334 µg/L	25.334 ppb	16:39:16
2	Na 589.592 Radial†	212.6	30.2	15.070 µg/L	15.070 ppb	16:38:55
2	Sr 421.552†	123.5	-17.0	-0.1010 µg/L	-0.1010 ppb	16:38:55
2	Sc 361.383	2083907.7	2083907.7	99.560 %		16:40:24
2	Y 371.029	1424831.2	1424831.2	99.439 %		16:40:24
2	Ag 328.068†	-502.3	-44.3	-0.3566 µg/L	-0.3566 ppb	16:40:29
2	As 188.979†	-1.3	2.0	2.8773 µg/L	2.8773 ppb	16:40:50
2	B 249.677†	274.7	-23.4	-1.0819 µg/L	-1.0819 ppb	16:40:29
2	Ba 233.527†	-7.0	1.4	0.0305 µg/L	0.0305 ppb	16:40:50
2	Be 313.107†	-1000.4	154.0	0.0904 µg/L	0.0904 ppb	16:40:29
2	Cd 226.502†	-181.7	-11.9	-0.2882 µg/L	-0.2882 ppb	16:40:50
2	Co 228.616†	41.9	-6.0	-0.2553 µg/L	-0.2553 ppb	16:40:50
2	Cr 267.716†	49.3	-30.7	-0.6688 µg/L	-0.6688 ppb	16:40:29
2	Cu 324.752†	4410.5	53.3	0.3549 µg/L	0.3549 ppb	16:40:29
2	Mn 257.610†	-624.6	59.6	0.1797 µg/L	0.1797 ppb	16:40:50
2	Mo 202.031†	17.3	12.2	1.2095 µg/L	1.2095 ppb	16:40:50
2	Ni 231.604†	372.2	-3.1	-0.1712 µg/L	-0.1712 ppb	16:40:50
2	P 214.914†	268.0	-3.2	-5.3953 µg/L	-5.3953 ppb	16:40:50
2	Pb 220.353†	42.8	12.9	3.3683 µg/L	3.3683 ppb	16:40:50

2	S 181.975 Axial†	24.7	2.3	7.2053 µg/L	7.2053 ppb	16:40:50
2	Sb 206.836†	28.2	5.6	5.0149 µg/L	5.0149 ppb	16:40:50
2	Se 196.026†	22.4	-4.9	-4.4759 µg/L	-4.4759 ppb	16:40:50
2	SiO2†	2791.9	24.4	4.4127 µg/L	4.4127 ppb	16:40:29
2	Si 251.611†	453.2	31.1	2.1172 µg/L	2.1172 ppb	16:40:50
2	Sn 189.927†	-2.9	4.5	1.7593 µg/L	1.7593 ppb	16:40:50
2	Ti 334.940†	-476.6	98.5	0.2283 µg/L	0.2283 ppb	16:40:29
2	Tl 190.801†	-27.4	6.6	6.4769 µg/L	6.4769 ppb	16:40:50
2	U 409.014†	50.4	56.5	5.1239 µg/L	5.1239 ppb	16:40:29
2	V 292.402†	68.0	-44.0	-0.5112 µg/L	-0.5112 ppb	16:40:29
2	Zn 213.857†	819.3	-185.9	-4.2838 µg/L	-4.2838 ppb	16:40:50
3	Sc RADIAL	97907.1	97907.1	101 %		16:39:21
3	Al 396.153Radial†	-123.5	-2.8	-1.3736 µg/L	-1.3736 ppb	16:39:21
3	Ca 317.933Radial†	381.9	-7.7	-2.8109 µg/L	-2.8109 ppb	16:39:41
3	Fe 238.204 Radial†	13.1	1.0	11.809 µg/L	11.809 ppb	16:39:41
3	K 766.490 Radial†	380.4	-109.2	-50.984 µg/L	-50.984 ppb	16:39:21
3	Mg 279.077 IEC†	9.7	1.6	21.439 µg/L	21.439 ppb	16:39:41
3	Na 589.592 Radial†	207.8	24.9	12.413 µg/L	12.413 ppb	16:39:21
3	Sr 421.552†	115.6	-25.1	-0.1494 µg/L	-0.1494 ppb	16:39:21
3	Sc 361.383	2080516.0	2080516.0	99.398 %		16:40:56
3	Y 371.029	1423803.6	1423803.6	99.367 %		16:40:56
3	Ag 328.068†	-422.1	35.6	0.2830 µg/L	0.2830 ppb	16:41:01
3	As 188.979†	3.7	7.0	10.367 µg/L	10.367 ppb	16:41:22
3	B 249.677†	285.2	-12.4	-0.5701 µg/L	-0.5701 ppb	16:41:01
3	Ba 233.527†	-11.9	-3.5	-0.0781 µg/L	-0.0781 ppb	16:41:22
3	Be 313.107†	-1005.9	146.9	0.0861 µg/L	0.0861 ppb	16:41:01
3	Cd 226.502†	-167.9	1.7	0.0380 µg/L	0.0380 ppb	16:41:22
3	Co 228.616†	45.9	-1.8	-0.0788 µg/L	-0.0788 ppb	16:41:22
3	Cr 267.716†	53.2	-26.7	-0.5810 µg/L	-0.5810 ppb	16:41:01
3	Cu 324.752†	4402.8	52.7	0.3466 µg/L	0.3466 ppb	16:41:01
3	Mn 257.610†	-636.5	46.6	0.1393 µg/L	0.1393 ppb	16:41:22
3	Mo 202.031†	20.8	15.8	1.5638 µg/L	1.5638 ppb	16:41:22
3	Ni 231.604†	369.1	-5.6	-0.3129 µg/L	-0.3129 ppb	16:41:22
3	P 214.914†	270.3	-0.5	-0.8733 µg/L	-0.8733 ppb	16:41:22
3	Pb 220.353†	35.7	5.7	1.5107 µg/L	1.5107 ppb	16:41:22
3	S 181.975 Axial†	18.3	-4.1	-12.987 µg/L	-12.987 ppb	16:41:22
3	Sb 206.836†	29.7	7.2	6.4578 µg/L	6.4578 ppb	16:41:22
3	Se 196.026†	21.5	-5.7	-5.2981 µg/L	-5.2981 ppb	16:41:22
3	SiO2†	2767.6	4.6	0.8269 µg/L	0.8269 ppb	16:41:01
3	Si 251.611†	455.1	33.8	2.2978 µg/L	2.2978 ppb	16:41:22
3	Sn 189.927†	-8.5	-1.1	-0.4470 µg/L	-0.4470 ppb	16:41:22
3	Ti 334.940†	-388.1	186.8	0.4350 µg/L	0.4350 ppb	16:41:01
3	Tl 190.801†	-31.8	2.1	2.0668 µg/L	2.0668 ppb	16:41:22
3	U 409.014†	-10.1	-4.3	-0.3946 µg/L	-0.3946 ppb	16:41:01
3	V 292.402†	64.4	-47.5	-0.5524 µg/L	-0.5524 ppb	16:41:01
3	Zn 213.857†	804.8	-199.2	-4.5871 µg/L	-4.5871 ppb	16:41:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2085602.1	99.641 %	0.2920			0.29%
Sc RADIAL	97961.1	101 %	0.4			0.39%
Y 371.029	1427350.7	99.615 %	0.3684			0.37%
Ag 328.068†	-9.8	-0.0799 µg/L	0.32841	-0.0799 ppb	0.32841	410.82%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.3	1.0496 µg/L	5.40124	1.0496 ppb	5.40124	514.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.0	4.4365 µg/L	5.32477	4.4365 ppb	5.32477	120.02%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-15.7	-0.7237 µg/L	0.31123	-0.7237 ppb	0.31123	43.00%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.0	0.0209 µg/L	0.09455	0.0209 ppb	0.09455	453.46%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	132.6	0.0778 µg/L	0.01826	0.0778 ppb	0.01826	23.47%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-11.0	-3.9983 µg/L	1.75090	-3.9983 ppb	1.75090	43.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-1.8	-0.0459 µg/L	0.21320	-0.0459 ppb	0.21320	464.89%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.3	-0.1819 µg/L	0.09193	-0.1819 ppb	0.09193	50.54%

Cr	267.716†	-17.0	-0.3709 µg/L	0.44213	-0.3709 ppb	0.44213	119.20%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cu	324.752†	28.8	0.1922 µg/L	0.27464	0.1922 ppb	0.27464	142.90%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	2.0	23.305 µg/L	12.2989	23.305 ppb	12.2989	52.77%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-30.7	-14.336 µg/L	32.7849	-14.336 ppb	32.7849	228.69%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.5	19.349 µg/L	7.2600	19.349 ppb	7.2600	37.52%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	56.1	0.1687 µg/L	0.02570	0.1687 ppb	0.02570	15.23%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	15.7	1.5553 µg/L	0.34158	1.5553 ppb	0.34158	21.96%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	22.8	11.368 µg/L	4.3212	11.368 ppb	4.3212	38.01%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-9.2	-0.5133 µg/L	0.47518	-0.5133 ppb	0.47518	92.56%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-4.8	-7.9902 µg/L	8.70931	-7.9902 ppb	8.70931	109.00%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	9.7	2.5597 µg/L	0.95189	2.5597 ppb	0.95189	37.19%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.3	-4.1435 µg/L	10.32666	-4.1435 ppb	10.32666	249.23%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	4.9	4.3583 µg/L	2.49343	4.3583 ppb	2.49343	57.21%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-5.1	-4.7073 µg/L	0.51562	-4.7073 ppb	0.51562	10.95%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		8.1	1.4702 µg/L	2.67944	1.4702 ppb	2.67944	182.25%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	34.2	2.3251 µg/L	0.22289	2.3251 ppb	0.22289	9.59%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.6	1.0164 µg/L	1.26744	1.0164 ppb	1.26744	124.69%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-21.2	-0.1258 µg/L	0.02420	-0.1258 ppb	0.02420	19.24%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	134.2	0.3123 µg/L	0.10866	0.3123 ppb	0.10866	34.79%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	2.5	2.4928 µg/L	3.78908	2.4928 ppb	3.78908	152.00%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-6.2	-0.5656 µg/L	5.77693	-0.5656 ppb	5.77693	>999.9%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-35.9	-0.4162 µg/L	0.20120	-0.4162 ppb	0.20120	48.34%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-193.3	-4.4511 µg/L	0.15404	-4.4511 ppb	0.15404	3.46%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 45

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 17:14:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99699.6	99699.6	103 %		17:14:42
1	Al 396.153Radial†	10646.7	10455.1	4980.3 µg/L	4980.3 ppb	17:14:42
1	Ca 317.933Radial†	14570.5	13759.8	5007.5 µg/L	5007.5 ppb	17:14:42
1	Fe 238.204 Radial†	455.2	430.0	5096.3 µg/L	5096.3 ppb	17:15:02
1	K 766.490 Radial†	11422.9	10604.1	4948.7 µg/L	4948.7 ppb	17:14:42
1	Mg 279.077 IEC†	393.8	374.3	4937.8 µg/L	4937.8 ppb	17:15:02
1	Na 589.592 Radial†	21228.3	20427.8	10196 µg/L	10196 ppb	17:14:42
1	Sr 421.552†	87559.1	84863.0	504.50 µg/L	504.50 ppb	17:14:42
1	Sc 361.383	2103243.2	2103243.2	100.48 %		17:16:06
1	Y 371.029	1434697.9	1434697.9	100.13 %		17:16:06
1	Ag 328.068†	61396.5	61560.9	498.01 µg/L	498.01 ppb	17:16:12
1	As 188.979†	344.3	345.9	509.05 µg/L	509.05 ppb	17:16:32
1	B 249.677†	11255.9	10902.3	492.92 µg/L	492.92 ppb	17:16:12
1	Ba 233.527†	22931.0	22828.9	500.17 µg/L	500.17 ppb	17:16:12
1	Be 313.107†	850963.7	848022.0	498.07 µg/L	498.07 ppb	17:16:06
1	Cd 226.502†	20962.6	21032.2	499.87 µg/L	499.87 ppb	17:16:12
1	Co 228.616†	11754.1	11649.4	499.91 µg/L	499.91 ppb	17:16:12
1	Cr 267.716†	23550.8	23357.0	508.31 µg/L	508.31 ppb	17:16:12
1	Cu 324.752†	81642.6	76872.5	503.06 µg/L	503.06 ppb	17:16:12
1	Mn 257.610†	168838.0	168711.4	507.02 µg/L	507.02 ppb	17:16:06
1	Mo 202.031†	5278.6	5248.1	519.50 µg/L	519.50 ppb	17:16:32
1	Ni 231.604†	9380.9	8958.8	501.94 µg/L	501.94 ppb	17:16:12
1	P 214.914†	1812.0	1530.9	2493.8 µg/L	2493.8 ppb	17:16:32
1	Pb 220.353†	1996.7	1956.9	513.69 µg/L	513.69 ppb	17:16:32
1	S 181.975 Axial†	343.1	318.9	1014.9 µg/L	1014.9 ppb	17:16:32
1	Sb 206.836†	597.3	571.7	512.68 µg/L	512.68 ppb	17:16:32
1	Se 196.026†	572.3	542.2	521.65 µg/L	521.65 ppb	17:16:32
1	SiO2†	32875.0	29936.8	5404.7 µg/L	5404.7 ppb	17:16:12
1	Si 251.611†	37835.1	37228.7	2530.9 µg/L	2530.9 ppb	17:16:12
1	Sn 189.927†	1328.2	1329.3	518.02 µg/L	518.02 ppb	17:16:32
1	Ti 334.940†	213929.0	213475.4	498.88 µg/L	498.88 ppb	17:16:06
1	Tl 190.801†	488.5	520.2	512.87 µg/L	512.87 ppb	17:16:32
1	U 409.014†	5530.6	5509.7	499.26 µg/L	499.26 ppb	17:16:12
1	V 292.402†	42820.7	42502.0	506.75 µg/L	506.75 ppb	17:16:12
1	Zn 213.857†	23177.0	22056.5	504.28 µg/L	504.28 ppb	17:16:12
2	Sc RADIAL	98794.8	98794.8	102 %		17:15:08
2	Al 396.153Radial†	10585.9	10490.2	4997.2 µg/L	4997.2 ppb	17:15:08
2	Ca 317.933Radial†	14448.8	13770.0	5011.2 µg/L	5011.2 ppb	17:15:08
2	Fe 238.204 Radial†	456.3	435.0	5156.1 µg/L	5156.1 ppb	17:15:28
2	K 766.490 Radial†	11419.5	10702.3	4994.6 µg/L	4994.6 ppb	17:15:08
2	Mg 279.077 IEC†	395.1	379.1	5001.3 µg/L	5001.3 ppb	17:15:28
2	Na 589.592 Radial†	21023.5	20415.9	10190 µg/L	10190 ppb	17:15:08
2	Sr 421.552†	86928.9	85023.9	505.46 µg/L	505.46 ppb	17:15:08
2	Sc 361.383	2102403.6	2102403.6	100.44 %		17:16:39
2	Y 371.029	1436022.9	1436022.9	100.22 %		17:16:39
2	Ag 328.068†	61886.1	62072.7	502.15 µg/L	502.15 ppb	17:16:45
2	As 188.979†	347.3	349.0	513.70 µg/L	513.70 ppb	17:17:05
2	B 249.677†	11311.7	10962.3	495.62 µg/L	495.62 ppb	17:16:45
2	Ba 233.527†	23137.9	23044.0	504.89 µg/L	504.89 ppb	17:16:45
2	Be 313.107†	851813.7	849206.5	498.77 µg/L	498.77 ppb	17:16:39
2	Cd 226.502†	21112.4	21189.7	503.61 µg/L	503.61 ppb	17:16:45
2	Co 228.616†	11865.1	11764.6	504.85 µg/L	504.85 ppb	17:16:45
2	Cr 267.716†	23710.9	23525.9	511.99 µg/L	511.99 ppb	17:16:45
2	Cu 324.752†	82316.3	77575.7	507.66 µg/L	507.66 ppb	17:16:45
2	Mn 257.610†	168870.3	168810.6	507.32 µg/L	507.32 ppb	17:16:39
2	Mo 202.031†	5182.9	5154.9	510.28 µg/L	510.28 ppb	17:17:05
2	Ni 231.604†	9430.8	9012.2	504.93 µg/L	504.93 ppb	17:16:45
2	P 214.914†	1810.3	1529.9	2491.5 µg/L	2491.5 ppb	17:17:05
2	Pb 220.353†	1978.9	1940.0	509.21 µg/L	509.21 ppb	17:17:05

2	S 181.975 Axial†	338.9	314.9	1002.1 µg/L	1002.1 ppb	17:17:05
2	Sb 206.836†	590.1	564.8	506.28 µg/L	506.28 ppb	17:17:05
2	Se 196.026†	556.4	526.7	507.17 µg/L	507.17 ppb	17:17:05
2	SiO2†	33245.9	30319.1	5473.7 µg/L	5473.7 ppb	17:16:45
2	Si 251.611†	38258.8	37665.6	2560.7 µg/L	2560.7 ppb	17:16:45
2	Sn 189.927†	1305.1	1306.8	509.26 µg/L	509.26 ppb	17:17:05
2	Ti 334.940†	213802.3	213434.2	498.78 µg/L	498.78 ppb	17:16:39
2	Tl 190.801†	484.9	516.8	509.56 µg/L	509.56 ppb	17:17:05
2	U 409.014†	5668.0	5648.7	511.87 µg/L	511.87 ppb	17:16:45
2	V 292.402†	43197.9	42894.6	511.33 µg/L	511.33 ppb	17:16:45
2	Zn 213.857†	23334.4	22222.4	508.07 µg/L	508.07 ppb	17:16:45
3	Sc RADIAL	99477.8	99477.8	103 %		17:15:34
3	Al 396.153Radial†	10697.2	10527.2	5016.6 µg/L	5016.6 ppb	17:15:34
3	Ca 317.933Radial†	14564.6	13785.5	5016.9 µg/L	5016.9 ppb	17:15:34
3	Fe 238.204 Radial†	451.4	427.2	5062.3 µg/L	5062.3 ppb	17:15:54
3	K 766.490 Radial†	11502.0	10705.7	4996.1 µg/L	4996.1 ppb	17:15:34
3	Mg 279.077 IEC†	393.7	375.1	4946.8 µg/L	4946.8 ppb	17:15:54
3	Na 589.592 Radial†	21267.0	20511.4	10237 µg/L	10237 ppb	17:15:34
3	Sr 421.552†	87710.2	85199.4	506.50 µg/L	506.50 ppb	17:15:34
3	Sc 361.383	2096602.1	2096602.1	100.17 %		17:17:12
3	Y 371.029	1431243.1	1431243.1	99.886 %		17:17:12
3	Ag 328.068†	57697.4	58061.4	469.55 µg/L	469.55 ppb	17:17:18
3	As 188.979†	290.6	293.4	431.58 µg/L	431.58 ppb	17:17:39
3	B 249.677†	10449.2	10132.4	457.90 µg/L	457.90 ppb	17:17:18
3	Ba 233.527†	20904.9	20878.4	457.42 µg/L	457.42 ppb	17:17:18
3	Be 313.107†	783620.7	783473.8	460.16 µg/L	460.16 ppb	17:17:12
3	Cd 226.502†	18959.0	19098.0	453.85 µg/L	453.85 ppb	17:17:18
3	Co 228.616†	10570.8	10505.1	450.75 µg/L	450.75 ppb	17:17:18
3	Cr 267.716†	20422.4	20308.1	441.97 µg/L	441.97 ppb	17:17:18
3	Cu 324.752†	74087.6	69587.5	455.47 µg/L	455.47 ppb	17:17:18
3	Mn 257.610†	155808.4	156235.8	469.53 µg/L	469.53 ppb	17:17:12
3	Mo 202.031†	4333.1	4320.8	427.74 µg/L	427.74 ppb	17:17:39
3	Ni 231.604†	8469.4	8078.4	452.62 µg/L	452.62 ppb	17:17:18
3	P 214.914†	1579.7	1304.7	2121.8 µg/L	2121.8 ppb	17:17:39
3	Pb 220.353†	1705.5	1672.5	438.99 µg/L	438.99 ppb	17:17:39
3	S 181.975 Axial†	296.8	273.8	871.33 µg/L	871.33 ppb	17:17:39
3	Sb 206.836†	510.6	487.1	436.41 µg/L	436.41 ppb	17:17:39
3	Se 196.026†	506.3	478.1	461.30 µg/L	461.30 ppb	17:17:39
3	SiO2†	30762.2	27931.2	5042.6 µg/L	5042.6 ppb	17:17:18
3	Si 251.611†	35094.9	34612.3	2353.1 µg/L	2353.1 ppb	17:17:18
3	Sn 189.927†	1075.2	1080.8	421.30 µg/L	421.30 ppb	17:17:39
3	Ti 334.940†	195583.2	195834.5	457.62 µg/L	457.62 ppb	17:17:12
3	Tl 190.801†	422.2	455.6	449.41 µg/L	449.41 ppb	17:17:39
3	U 409.014†	4905.3	4903.0	444.17 µg/L	444.17 ppb	17:17:18
3	V 292.402†	38175.8	37999.8	452.69 µg/L	452.69 ppb	17:17:18
3	Zn 213.857†	20929.6	19885.9	454.60 µg/L	454.60 ppb	17:17:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2100749.6	100.37 %	0.173			0.17%
Sc RADIAL	99324.1	103 %	0.5			0.47%
Y 371.029	1433988.0	100.08 %	0.172			0.17%
Ag 328.068†	60565.0	489.90 µg/L	17.745	489.90 ppb	17.745	3.62%
QC value within limits for Ag 328.068 Recovery = 97.98%						
Al 396.153Radial†	10490.9	4998.0 µg/L	18.17	4998.0 ppb	18.17	0.36%
QC value within limits for Al 396.153Radial Recovery = 99.96%						
As 188.979†	329.4	484.78 µg/L	46.125	484.78 ppb	46.125	9.51%
QC value within limits for As 188.979 Recovery = 96.96%						
B 249.677†	10665.7	482.15 µg/L	21.045	482.15 ppb	21.045	4.36%
QC value within limits for B 249.677 Recovery = 96.43%						
Ba 233.527†	22250.5	487.49 µg/L	26.150	487.49 ppb	26.150	5.36%
QC value within limits for Ba 233.527 Recovery = 97.50%						
Be 313.107†	826900.8	485.67 µg/L	22.091	485.67 ppb	22.091	4.55%
QC value within limits for Be 313.107 Recovery = 97.13%						
Ca 317.933Radial†	13771.8	5011.8 µg/L	4.72	5011.8 ppb	4.72	0.09%
QC value within limits for Ca 317.933Radial Recovery = 100.24%						
Cd 226.502†	20440.0	485.78 µg/L	27.713	485.78 ppb	27.713	5.70%
QC value within limits for Cd 226.502 Recovery = 97.16%						
Co 228.616†	11306.4	485.17 µg/L	29.909	485.17 ppb	29.909	6.16%

QC value within limits for Co 228.616 Recovery = 97.03%							
Cr 267.716†	22397.0	487.42 µg/L	39.408	487.42 ppb	39.408	8.08%	
QC value within limits for Cr 267.716 Recovery = 97.48%							
Cu 324.752†	74678.6	488.73 µg/L	28.897	488.73 ppb	28.897	5.91%	
QC value within limits for Cu 324.752 Recovery = 97.75%							
Fe 238.204 Radial†	430.7	5104.9 µg/L	47.46	5104.9 ppb	47.46	0.93%	
QC value within limits for Fe 238.204 Radial Recovery = 102.10%							
K 766.490 Radial†	10670.7	4979.8 µg/L	26.93	4979.8 ppb	26.93	0.54%	
QC value within limits for K 766.490 Radial Recovery = 99.60%							
Mg 279.077 IEC†	376.2	4962.0 µg/L	34.33	4962.0 ppb	34.33	0.69%	
QC value within limits for Mg 279.077 IEC Recovery = 99.24%							
Mn 257.610†	164585.9	494.62 µg/L	21.736	494.62 ppb	21.736	4.39%	
QC value within limits for Mn 257.610 Recovery = 98.92%							
Mo 202.031†	4907.9	485.84 µg/L	50.525	485.84 ppb	50.525	10.40%	
QC value within limits for Mo 202.031 Recovery = 97.17%							
Na 589.592 Radial†	20451.7	10208 µg/L	26.0	10208 ppb	26.0	0.25%	
QC value within limits for Na 589.592 Radial Recovery = 102.08%							
Ni 231.604†	8683.1	486.50 µg/L	29.377	486.50 ppb	29.377	6.04%	
QC value within limits for Ni 231.604 Recovery = 97.30%							
P 214.914†	1455.2	2369.1 µg/L	214.12	2369.1 ppb	214.12	9.04%	
QC value within limits for P 214.914 Recovery = 94.76%							
Pb 220.353†	1856.5	487.29 µg/L	41.895	487.29 ppb	41.895	8.60%	
QC value within limits for Pb 220.353 Recovery = 97.46%							
S 181.975 Axial†	302.5	962.79 µg/L	79.461	962.79 ppb	79.461	8.25%	
QC value within limits for S 181.975 Axial Recovery = 96.28%							
Sb 206.836†	541.2	485.12 µg/L	42.307	485.12 ppb	42.307	8.72%	
QC value within limits for Sb 206.836 Recovery = 97.02%							
Se 196.026†	515.7	496.70 µg/L	31.507	496.70 ppb	31.507	6.34%	
QC value within limits for Se 196.026 Recovery = 99.34%							
SiO2†	29395.7	5307.0 µg/L	231.56	5307.0 ppb	231.56	4.36%	
QC value within limits for SiO2 Recovery = 99.24%							
Si 251.611†	36502.2	2481.6 µg/L	112.26	2481.6 ppb	112.26	4.52%	
QC value within limits for Si 251.611 Recovery = 99.26%							
Sn 189.927†	1239.0	482.86 µg/L	53.492	482.86 ppb	53.492	11.08%	
QC value within limits for Sn 189.927 Recovery = 96.57%							
Sr 421.552†	85028.8	505.49 µg/L	1.000	505.49 ppb	1.000	0.20%	
QC value within limits for Sr 421.552 Recovery = 101.10%							
Ti 334.940†	207581.4	485.09 µg/L	23.788	485.09 ppb	23.788	4.90%	
QC value within limits for Ti 334.940 Recovery = 97.02%							
Tl 190.801†	497.6	490.61 µg/L	35.722	490.61 ppb	35.722	7.28%	
QC value within limits for Tl 190.801 Recovery = 98.12%							
U 409.014†	5353.8	485.10 µg/L	36.002	485.10 ppb	36.002	7.42%	
QC value within limits for U 409.014 Recovery = 97.02%							
V 292.402†	41132.2	490.26 µg/L	32.611	490.26 ppb	32.611	6.65%	
QC value within limits for V 292.402 Recovery = 98.05%							
Zn 213.857†	21388.2	488.98 µg/L	29.837	488.98 ppb	29.837	6.10%	
QC value within limits for Zn 213.857 Recovery = 97.80%							

All analyte(s) passed QC.

Sequence No.: 46

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 17:17:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99131.9	99131.9	102 %		17:18:19
1	Al 396.153Radial†	-135.7	-13.2	-6.3547 µg/L	-6.3547 ppb	17:18:19
1	Ca 317.933Radial†	379.3	-15.0	-5.4550 µg/L	-5.4550 ppb	17:18:40
1	Fe 238.204 Radial†	14.4	2.1	25.334 µg/L	25.334 ppb	17:18:40
1	K 766.490 Radial†	519.2	21.6	10.080 µg/L	10.080 ppb	17:18:19
1	Mg 279.077 IEC†	6.9	-1.3	-16.855 µg/L	-16.855 ppb	17:18:40
1	Na 589.592 Radial†	173.8	-10.9	-5.4574 µg/L	-5.4574 ppb	17:18:19
1	Sr 421.552†	157.6	14.4	0.0857 µg/L	0.0857 ppb	17:18:19
1	Sc 361.383	2095501.3	2095501.3	100.11 %		17:19:41
1	Y 371.029	1434074.7	1434074.7	100.08 %		17:19:41
1	Ag 328.068†	-462.7	-2.0	-0.0133 µg/L	-0.0133 ppb	17:19:47
1	As 188.979†	-3.9	-0.7	-0.9721 µg/L	-0.9721 ppb	17:20:08
1	B 249.677†	290.5	-9.2	-0.4320 µg/L	-0.4320 ppb	17:20:08
1	Ba 233.527†	0.9	9.3	0.2035 µg/L	0.2035 ppb	17:20:08
1	Be 313.107†	-1001.6	158.4	0.0929 µg/L	0.0929 ppb	17:19:47
1	Cd 226.502†	-164.9	5.8	0.1360 µg/L	0.1360 ppb	17:20:08
1	Co 228.616†	41.4	-6.7	-0.2888 µg/L	-0.2888 ppb	17:20:08
1	Cr 267.716†	69.6	-10.7	-0.2334 µg/L	-0.2334 ppb	17:20:08
1	Cu 324.752†	4302.1	-79.5	-0.5147 µg/L	-0.5147 ppb	17:19:47
1	Mn 257.610†	-643.7	44.0	0.1349 µg/L	0.1349 ppb	17:20:08
1	Mo 202.031†	23.3	18.2	1.8011 µg/L	1.8011 ppb	17:20:08
1	Ni 231.604†	376.7	-0.6	-0.0341 µg/L	-0.0341 ppb	17:20:08
1	P 214.914†	274.1	1.4	2.3013 µg/L	2.3013 ppb	17:20:08
1	Pb 220.353†	29.9	-0.3	-0.0637 µg/L	-0.0637 ppb	17:20:08
1	S 181.975 Axial†	21.5	-1.1	-3.4098 µg/L	-3.4098 ppb	17:20:08
1	Sb 206.836†	29.9	7.1	6.4030 µg/L	6.4030 ppb	17:20:08
1	Se 196.026†	19.1	-8.3	-7.6904 µg/L	-7.6904 ppb	17:20:08
1	SiO2†	2725.6	-57.3	-10.339 µg/L	-10.339 ppb	17:20:08
1	Si 251.611†	503.9	79.3	5.3890 µg/L	5.3890 ppb	17:20:08
1	Sn 189.927†	-5.7	1.7	0.6724 µg/L	0.6724 ppb	17:20:08
1	Ti 334.940†	-395.9	181.8	0.4263 µg/L	0.4263 ppb	17:19:47
1	Tl 190.801†	-28.4	5.8	5.6547 µg/L	5.6547 ppb	17:20:08
1	U 409.014†	-30.4	-24.6	-2.2328 µg/L	-2.2328 ppb	17:19:47
1	V 292.402†	121.7	9.2	0.1167 µg/L	0.1167 ppb	17:19:47
1	Zn 213.857†	828.1	-181.7	-4.1818 µg/L	-4.1818 ppb	17:20:08
2	Sc RADIAL	98733.7	98733.7	102 %		17:18:45
2	Al 396.153Radial†	-119.2	2.4	1.1093 µg/L	1.1093 ppb	17:18:45
2	Ca 317.933Radial†	379.2	-13.6	-4.9427 µg/L	-4.9427 ppb	17:19:05
2	Fe 238.204 Radial†	14.6	2.3	27.631 µg/L	27.631 ppb	17:19:05
2	K 766.490 Radial†	433.8	-60.1	-28.058 µg/L	-28.058 ppb	17:18:45
2	Mg 279.077 IEC†	9.3	1.2	15.264 µg/L	15.264 ppb	17:19:05
2	Na 589.592 Radial†	188.0	3.7	1.8359 µg/L	1.8359 ppb	17:18:45
2	Sr 421.552†	123.5	-18.4	-0.1094 µg/L	-0.1094 ppb	17:18:45
2	Sc 361.383	2085772.6	2085772.6	99.650 %		17:20:14
2	Y 371.029	1427894.6	1427894.6	99.653 %		17:20:14
2	Ag 328.068†	-462.3	-3.7	-0.0273 µg/L	-0.0273 ppb	17:20:19
2	As 188.979†	-3.4	-0.1	-0.2087 µg/L	-0.2087 ppb	17:20:40
2	B 249.677†	285.5	-12.9	-0.5990 µg/L	-0.5990 ppb	17:20:40
2	Ba 233.527†	-5.0	3.4	0.0737 µg/L	0.0737 ppb	17:20:40
2	Be 313.107†	-994.6	160.8	0.0944 µg/L	0.0944 ppb	17:20:19
2	Cd 226.502†	-164.5	5.5	0.1274 µg/L	0.1274 ppb	17:20:40
2	Co 228.616†	42.6	-5.3	-0.2262 µg/L	-0.2262 ppb	17:20:40
2	Cr 267.716†	57.6	-22.4	-0.4881 µg/L	-0.4881 ppb	17:20:40
2	Cu 324.752†	4396.5	35.2	0.2354 µg/L	0.2354 ppb	17:20:19
2	Mn 257.610†	-649.5	35.2	0.1065 µg/L	0.1065 ppb	17:20:40
2	Mo 202.031†	25.9	20.9	2.0643 µg/L	2.0643 ppb	17:20:40
2	Ni 231.604†	354.3	-21.3	-1.1962 µg/L	-1.1962 ppb	17:20:40
2	P 214.914†	279.0	7.6	12.684 µg/L	12.684 ppb	17:20:40
2	Pb 220.353†	36.0	6.0	1.5744 µg/L	1.5744 ppb	17:20:40

2	S 181.975 Axial†	28.3	5.8	18.606 µg/L	18.606 ppb	17:20:40
2	Sb 206.836†	26.6	3.9	3.5463 µg/L	3.5463 ppb	17:20:40
2	Se 196.026†	18.0	-9.3	-8.6207 µg/L	-8.6207 ppb	17:20:40
2	SiO2†	2737.2	-33.0	-5.9504 µg/L	-5.9504 ppb	17:20:40
2	Si 251.611†	481.7	59.3	4.0341 µg/L	4.0341 ppb	17:20:40
2	Sn 189.927†	3.8	11.3	4.3962 µg/L	4.3962 ppb	17:20:40
2	Ti 334.940†	-535.6	39.8	0.0918 µg/L	0.0918 ppb	17:20:19
2	Tl 190.801†	-31.2	2.8	2.7031 µg/L	2.7031 ppb	17:20:40
2	U 409.014†	42.8	48.8	4.4274 µg/L	4.4274 ppb	17:20:19
2	V 292.402†	118.4	6.5	0.0924 µg/L	0.0924 ppb	17:20:19
2	Zn 213.857†	826.7	-179.3	-4.1250 µg/L	-4.1250 ppb	17:20:40
3	Sc RADIAL	97950.1	97950.1	101 %		17:19:11
3	Al 396.153Radial†	-72.4	47.8	22.775 µg/L	22.775 ppb	17:19:11
3	Ca 317.933Radial†	380.9	-8.9	-3.2373 µg/L	-3.2373 ppb	17:19:31
3	Fe 238.204 Radial†	14.5	2.3	27.707 µg/L	27.707 ppb	17:19:31
3	K 766.490 Radial†	398.9	-91.2	-42.557 µg/L	-42.557 ppb	17:19:11
3	Mg 279.077 IEC†	11.9	3.7	49.144 µg/L	49.144 ppb	17:19:31
3	Na 589.592 Radial†	160.7	-21.8	-10.877 µg/L	-10.877 ppb	17:19:11
3	Sr 421.552†	147.0	5.8	0.0345 µg/L	0.0345 ppb	17:19:11
3	Sc 361.383	2074480.3	2074480.3	99.110 %		17:20:46
3	Y 371.029	1418991.9	1418991.9	99.031 %		17:20:46
3	Ag 328.068†	-491.9	-36.1	-0.2879 µg/L	-0.2879 ppb	17:20:51
3	As 188.979†	-2.1	1.2	1.7165 µg/L	1.7165 ppb	17:21:12
3	B 249.677†	289.9	-6.8	-0.3245 µg/L	-0.3245 ppb	17:21:12
3	Ba 233.527†	-7.1	1.2	0.0270 µg/L	0.0270 ppb	17:21:12
3	Be 313.107†	-1070.0	79.2	0.0465 µg/L	0.0465 ppb	17:20:51
3	Cd 226.502†	-171.8	-2.7	-0.0681 µg/L	-0.0681 ppb	17:21:12
3	Co 228.616†	45.6	-2.0	-0.0848 µg/L	-0.0848 ppb	17:21:12
3	Cr 267.716†	77.2	-2.3	-0.0505 µg/L	-0.0505 ppb	17:21:12
3	Cu 324.752†	4405.4	68.3	0.4513 µg/L	0.4513 ppb	17:20:51
3	Mn 257.610†	-649.3	31.9	0.0941 µg/L	0.0941 ppb	17:21:12
3	Mo 202.031†	25.7	20.8	2.0571 µg/L	2.0571 ppb	17:21:12
3	Ni 231.604†	368.2	-5.4	-0.3000 µg/L	-0.3000 ppb	17:21:12
3	P 214.914†	274.3	4.4	7.2075 µg/L	7.2075 ppb	17:21:12
3	Pb 220.353†	34.9	5.1	1.3355 µg/L	1.3355 ppb	17:21:12
3	S 181.975 Axial†	20.1	-2.3	-7.2423 µg/L	-7.2423 ppb	17:21:12
3	Sb 206.836†	28.5	6.0	5.4056 µg/L	5.4056 ppb	17:21:12
3	Se 196.026†	15.6	-11.5	-10.788 µg/L	-10.788 ppb	17:21:12
3	SiO2†	2738.9	-16.2	-2.9319 µg/L	-2.9319 ppb	17:21:12
3	Si 251.611†	508.1	88.6	6.0220 µg/L	6.0220 ppb	17:21:12
3	Sn 189.927†	-1.0	6.4	2.4966 µg/L	2.4966 ppb	17:21:12
3	Ti 334.940†	-492.1	80.7	0.1848 µg/L	0.1848 ppb	17:20:51
3	Tl 190.801†	-30.9	3.0	2.9021 µg/L	2.9021 ppb	17:21:12
3	U 409.014†	-21.9	-16.3	-1.4795 µg/L	-1.4795 ppb	17:20:51
3	V 292.402†	109.3	-2.0	-0.0133 µg/L	-0.0133 ppb	17:20:51
3	Zn 213.857†	806.2	-195.4	-4.5034 µg/L	-4.5034 ppb	17:21:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2085251.4	99.625 %	0.5026			0.50%
Sc RADIAL	98605.2	102 %	0.6			0.61%
Y 371.029	1426987.1	99.589 %	0.5292			0.53%
Ag 328.068†	-13.9	-0.1095 µg/L	0.15468	-0.1095 ppb	0.15468	141.29%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.3	5.8433 µg/L	15.13111	5.8433 ppb	15.13111	258.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.1	0.1786 µg/L	1.38549	0.1786 ppb	1.38549	775.76%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-9.6	-0.4518 µg/L	0.13834	-0.4518 ppb	0.13834	30.62%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.6	0.1014 µg/L	0.09147	0.1014 ppb	0.09147	90.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	132.8	0.0779 µg/L	0.02725	0.0779 ppb	0.02725	34.96%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-12.5	-4.5450 µg/L	1.16112	-4.5450 ppb	1.16112	25.55%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	2.9	0.0651 µg/L	0.11547	0.0651 ppb	0.11547	177.36%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.7	-0.1999 µg/L	0.10449	-0.1999 ppb	0.10449	52.27%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-11.8	-0.2573 µg/L	0.21975	-0.2573 ppb	0.21975	85.40%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	8.0	0.0573 µg/L	0.50702	0.0573 ppb	0.50702	884.58%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.3	26.891 µg/L	1.3486	26.891 ppb	1.3486	5.02%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-43.2	-20.178 µg/L	27.1890	-20.178 ppb	27.1890	134.75%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.2	15.851 µg/L	33.0036	15.851 ppb	33.0036	208.21%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	37.0	0.1119 µg/L	0.02090	0.1119 ppb	0.02090	18.68%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	19.9	1.9742 µg/L	0.14994	1.9742 ppb	0.14994	7.59%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-9.7	-4.8329 µg/L	6.37947	-4.8329 ppb	6.37947	132.00%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-9.1	-0.5101 µg/L	0.60884	-0.5101 ppb	0.60884	119.35%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	4.4	7.3975 µg/L	5.19373	7.3975 ppb	5.19373	70.21%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	3.6	0.9488 µg/L	0.88489	0.9488 ppb	0.88489	93.27%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.8	2.6512 µg/L	13.94925	2.6512 ppb	13.94925	526.14%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.7	5.1183 µg/L	1.44981	5.1183 ppb	1.44981	28.33%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-9.7	-9.0329 µg/L	1.58930	-9.0329 ppb	1.58930	17.59%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-35.5	-6.4072 µg/L	3.72476	-6.4072 ppb	3.72476	58.13%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	75.7	5.1484 µg/L	1.01555	5.1484 ppb	1.01555	19.73%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	6.5	2.5217 µg/L	1.86204	2.5217 ppb	1.86204	73.84%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	0.6	0.0036 µg/L	0.10119	0.0036 ppb	0.10119	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	100.8	0.2343 µg/L	0.17265	0.2343 ppb	0.17265	73.69%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.8	3.7533 µg/L	1.64968	3.7533 ppb	1.64968	43.95%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	2.7	0.2384 µg/L	3.64731	0.2384 ppb	3.64731	>999.9%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	4.6	0.0653 µg/L	0.06911	0.0653 ppb	0.06911	105.85%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-185.5	-4.2701 µg/L	0.20406	-4.2701 ppb	0.20406	4.78%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 17:38:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98560.2	98560.2	102 %		17:38:54
1	Al 396.153Radial†	10323.6	10257.3	4885.8 µg/L	4885.8 ppb	17:38:54
1	Ca 317.933Radial†	14126.5	13487.2	4908.3 µg/L	4908.3 ppb	17:38:54
1	Fe 238.204 Radial†	438.9	419.1	4967.3 µg/L	4967.3 ppb	17:39:15
1	K 766.490 Radial†	11117.9	10432.7	4868.8 µg/L	4868.8 ppb	17:38:54
1	Mg 279.077 IEC†	390.9	375.9	4958.9 µg/L	4958.9 ppb	17:39:15
1	Na 589.592 Radial†	20516.6	19967.1	9965.7 µg/L	9965.7 ppb	17:38:54
1	Sr 421.552†	84560.8	82901.2	492.84 µg/L	492.84 ppb	17:38:54
1	Sc 361.383	2088467.0	2088467.0	99.778 %		17:40:18
1	Y 371.029	1427832.8	1427832.8	99.648 %		17:40:18
1	Ag 328.068†	60935.5	61531.2	497.76 µg/L	497.76 ppb	17:40:24
1	As 188.979†	344.1	348.1	512.39 µg/L	512.39 ppb	17:40:44
1	B 249.677†	11148.2	10873.6	491.68 µg/L	491.68 ppb	17:40:24
1	Ba 233.527†	22801.9	22861.0	500.88 µg/L	500.88 ppb	17:40:24
1	Be 313.107†	848615.5	851660.3	500.21 µg/L	500.21 ppb	17:40:18
1	Cd 226.502†	20732.3	20949.0	497.91 µg/L	497.91 ppb	17:40:24
1	Co 228.616†	11730.6	11708.6	502.45 µg/L	502.45 ppb	17:40:24
1	Cr 267.716†	23334.6	23306.2	507.21 µg/L	507.21 ppb	17:40:24
1	Cu 324.752†	81183.0	76986.7	503.78 µg/L	503.78 ppb	17:40:24
1	Mn 257.610†	168257.0	169317.9	508.84 µg/L	508.84 ppb	17:40:18
1	Mo 202.031†	5247.3	5253.9	520.07 µg/L	520.07 ppb	17:40:44
1	Ni 231.604†	9355.9	8999.8	504.24 µg/L	504.24 ppb	17:40:24
1	P 214.914†	1819.7	1551.3	2527.8 µg/L	2527.8 ppb	17:40:44
1	Pb 220.353†	1973.6	1947.8	511.28 µg/L	511.28 ppb	17:40:44
1	S 181.975 Axial†	341.8	320.1	1018.6 µg/L	1018.6 ppb	17:40:44
1	Sb 206.836†	590.8	569.4	510.59 µg/L	510.59 ppb	17:40:44
1	Se 196.026†	571.2	545.2	524.01 µg/L	524.01 ppb	17:40:44
1	SiO2†	32456.1	29748.5	5370.7 µg/L	5370.7 ppb	17:40:24
1	Si 251.611†	37307.6	36966.4	2513.1 µg/L	2513.1 ppb	17:40:24
1	Sn 189.927†	1329.8	1340.2	522.27 µg/L	522.27 ppb	17:40:44
1	Ti 334.940†	212810.7	213860.9	499.77 µg/L	499.77 ppb	17:40:18
1	Tl 190.801†	490.6	525.8	518.37 µg/L	518.37 ppb	17:40:44
1	U 409.014†	5565.1	5583.3	505.96 µg/L	505.96 ppb	17:40:24
1	V 292.402†	42558.8	42541.0	507.23 µg/L	507.23 ppb	17:40:24
1	Zn 213.857†	23004.5	22046.7	504.05 µg/L	504.05 ppb	17:40:24
2	Sc RADIAL	99785.3	99785.3	103 %		17:39:20
2	Al 396.153Radial†	10435.2	10241.1	4878.3 µg/L	4878.3 ppb	17:39:20
2	Ca 317.933Radial†	14262.7	13449.1	4894.4 µg/L	4894.4 ppb	17:39:20
2	Fe 238.204 Radial†	441.8	416.6	4938.0 µg/L	4938.0 ppb	17:39:40
2	K 766.490 Radial†	11201.3	10379.5	4843.9 µg/L	4843.9 ppb	17:39:20
2	Mg 279.077 IEC†	389.5	369.8	4878.5 µg/L	4878.5 ppb	17:39:40
2	Na 589.592 Radial†	20739.8	19936.3	9950.3 µg/L	9950.3 ppb	17:39:20
2	Sr 421.552†	85751.7	83036.8	493.64 µg/L	493.64 ppb	17:39:20
2	Sc 361.383	2085278.6	2085278.6	99.626 %		17:40:51
2	Y 371.029	1422666.4	1422666.4	99.288 %		17:40:51
2	Ag 328.068†	61052.3	61741.8	499.46 µg/L	499.46 ppb	17:40:57
2	As 188.979†	341.6	346.1	509.43 µg/L	509.43 ppb	17:41:17
2	B 249.677†	11132.2	10874.7	491.75 µg/L	491.75 ppb	17:40:57
2	Ba 233.527†	22759.4	22853.3	500.71 µg/L	500.71 ppb	17:40:57
2	Be 313.107†	846322.9	850659.5	499.62 µg/L	499.62 ppb	17:40:51
2	Cd 226.502†	20810.5	21059.2	500.53 µg/L	500.53 ppb	17:40:57
2	Co 228.616†	11695.1	11691.0	501.68 µg/L	501.68 ppb	17:40:57
2	Cr 267.716†	23307.5	23314.8	507.40 µg/L	507.40 ppb	17:40:57
2	Cu 324.752†	81061.6	76989.2	503.79 µg/L	503.79 ppb	17:40:57
2	Mn 257.610†	167744.9	169061.7	508.07 µg/L	508.07 ppb	17:40:51
2	Mo 202.031†	5147.6	5161.8	510.96 µg/L	510.96 ppb	17:41:17
2	Ni 231.604†	9243.6	8901.4	498.72 µg/L	498.72 ppb	17:40:57
2	P 214.914†	1795.9	1530.2	2492.5 µg/L	2492.5 ppb	17:41:17
2	Pb 220.353†	1952.7	1929.9	506.55 µg/L	506.55 ppb	17:41:17

2	S 181.975 Axial†	341.5	320.3	1019.2 µg/L	1019.2 ppb	17:41:17
2	Sb 206.836†	581.7	561.1	503.09 µg/L	503.09 ppb	17:41:17
2	Se 196.026†	570.8	545.6	524.39 µg/L	524.39 ppb	17:41:17
2	SiO2†	32575.1	29917.6	5401.2 µg/L	5401.2 ppb	17:40:57
2	Si 251.611†	37431.4	37147.9	2525.5 µg/L	2525.5 ppb	17:40:57
2	Sn 189.927†	1288.6	1300.9	506.97 µg/L	506.97 ppb	17:41:17
2	Ti 334.940†	212627.8	214003.4	500.11 µg/L	500.11 ppb	17:40:51
2	Tl 190.801†	484.7	520.6	513.25 µg/L	513.25 ppb	17:41:17
2	U 409.014†	5540.7	5567.3	504.52 µg/L	504.52 ppb	17:40:57
2	V 292.402†	42620.5	42668.2	508.67 µg/L	508.67 ppb	17:40:57
2	Zn 213.857†	22937.2	22014.5	503.33 µg/L	503.33 ppb	17:40:57
3	Sc RADIAL	99523.8	99523.8	103 %		17:39:46
3	Al 396.153Radial†	10443.6	10275.8	4896.6 µg/L	4896.6 ppb	17:39:46
3	Ca 317.933Radial†	14222.6	13446.4	4893.4 µg/L	4893.4 ppb	17:39:46
3	Fe 238.204 Radial†	439.1	415.1	4918.9 µg/L	4918.9 ppb	17:40:06
3	K 766.490 Radial†	11205.0	10411.7	4858.9 µg/L	4858.9 ppb	17:39:46
3	Mg 279.077 IEC†	394.6	375.7	4955.5 µg/L	4955.5 ppb	17:40:06
3	Na 589.592 Radial†	20694.8	19945.4	9954.8 µg/L	9954.8 ppb	17:39:46
3	Sr 421.552†	85364.7	82878.9	492.71 µg/L	492.71 ppb	17:39:46
3	Sc 361.383	2081579.5	2081579.5	99.449 %		17:41:25
3	Y 371.029	1419655.0	1419655.0	99.078 %		17:41:25
3	Ag 328.068†	57300.1	58077.7	469.68 µg/L	469.68 ppb	17:41:30
3	As 188.979†	291.9	296.8	436.70 µg/L	436.70 ppb	17:41:51
3	B 249.677†	10452.2	10210.8	461.53 µg/L	461.53 ppb	17:41:30
3	Ba 233.527†	20831.4	20955.2	459.10 µg/L	459.10 ppb	17:41:30
3	Be 313.107†	781755.1	787243.7	462.37 µg/L	462.37 ppb	17:41:25
3	Cd 226.502†	18909.2	19184.5	455.93 µg/L	455.93 ppb	17:41:30
3	Co 228.616†	10513.9	10524.1	451.56 µg/L	451.56 ppb	17:41:30
3	Cr 267.716†	20326.8	20359.1	443.08 µg/L	443.08 ppb	17:41:30
3	Cu 324.752†	73691.6	69723.0	456.33 µg/L	456.33 ppb	17:41:30
3	Mn 257.610†	155316.1	156863.3	471.40 µg/L	471.40 ppb	17:41:25
3	Mo 202.031†	4298.8	4317.4	427.41 µg/L	427.41 ppb	17:41:51
3	Ni 231.604†	8486.5	8156.6	457.01 µg/L	457.01 ppb	17:41:30
3	P 214.914†	1564.2	1300.5	2114.8 µg/L	2114.8 ppb	17:41:51
3	Pb 220.353†	1687.7	1666.9	437.49 µg/L	437.49 ppb	17:41:51
3	S 181.975 Axial†	300.5	279.6	889.76 µg/L	889.76 ppb	17:41:51
3	Sb 206.836†	507.4	487.5	436.78 µg/L	436.78 ppb	17:41:51
3	Se 196.026†	490.0	465.4	448.90 µg/L	448.90 ppb	17:41:51
3	SiO2†	30263.9	27651.8	4992.1 µg/L	4992.1 ppb	17:41:30
3	Si 251.611†	34571.3	34338.7	2334.5 µg/L	2334.5 ppb	17:41:30
3	Sn 189.927†	1047.0	1060.2	413.27 µg/L	413.27 ppb	17:41:51
3	Ti 334.940†	195236.6	196895.2	460.10 µg/L	460.10 ppb	17:41:25
3	Tl 190.801†	423.9	460.3	454.03 µg/L	454.03 ppb	17:41:51
3	U 409.014†	4937.4	4970.5	450.34 µg/L	450.34 ppb	17:41:30
3	V 292.402†	38033.6	38131.9	454.28 µg/L	454.28 ppb	17:41:30
3	Zn 213.857†	20833.2	19939.8	455.82 µg/L	455.82 ppb	17:41:30

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2085108.4	99.618 %	0.1647			0.17%
Sc RADIAL	99289.7	103 %	0.7			0.65%
Y 371.029	1423384.7	99.338 %	0.2886			0.29%
Ag 328.068†	60450.2	488.97 µg/L	16.722	488.97 ppb	16.722	3.42%
QC value within limits for Ag 328.068 Recovery = 97.79%						
Al 396.153Radial†	10258.1	4886.9 µg/L	9.20	4886.9 ppb	9.20	0.19%
QC value within limits for Al 396.153Radial Recovery = 97.74%						
As 188.979†	330.4	486.17 µg/L	42.869	486.17 ppb	42.869	8.82%
QC value within limits for As 188.979 Recovery = 97.23%						
B 249.677†	10653.0	481.65 µg/L	17.430	481.65 ppb	17.430	3.62%
QC value within limits for B 249.677 Recovery = 96.33%						
Ba 233.527†	22223.2	486.90 µg/L	24.071	486.90 ppb	24.071	4.94%
QC value within limits for Ba 233.527 Recovery = 97.38%						
Be 313.107†	829854.5	487.40 µg/L	21.675	487.40 ppb	21.675	4.45%
QC value within limits for Be 313.107 Recovery = 97.48%						
Ca 317.933Radial†	13460.9	4898.7 µg/L	8.32	4898.7 ppb	8.32	0.17%
QC value within limits for Ca 317.933Radial Recovery = 97.97%						
Cd 226.502†	20397.6	484.79 µg/L	25.029	484.79 ppb	25.029	5.16%
QC value within limits for Cd 226.502 Recovery = 96.96%						
Co 228.616†	11307.9	485.23 µg/L	29.162	485.23 ppb	29.162	6.01%

QC value within limits for Co 228.616 Recovery = 97.05%							
Cr 267.716†	22326.7	485.89 µg/L	37.079	485.89 ppb	37.079	7.63%	
QC value within limits for Cr 267.716 Recovery = 97.18%							
Cu 324.752†	74566.3	487.96 µg/L	27.400	487.96 ppb	27.400	5.62%	
QC value within limits for Cu 324.752 Recovery = 97.59%							
Fe 238.204 Radial†	416.9	4941.4 µg/L	24.34	4941.4 ppb	24.34	0.49%	
QC value within limits for Fe 238.204 Radial Recovery = 98.83%							
K 766.490 Radial†	10408.0	4857.2 µg/L	12.51	4857.2 ppb	12.51	0.26%	
QC value within limits for K 766.490 Radial Recovery = 97.14%							
Mg 279.077 IEC†	373.8	4931.0 µg/L	45.46	4931.0 ppb	45.46	0.92%	
QC value within limits for Mg 279.077 IEC Recovery = 98.62%							
Mn 257.610†	165081.0	496.10 µg/L	21.395	496.10 ppb	21.395	4.31%	
QC value within limits for Mn 257.610 Recovery = 99.22%							
Mo 202.031†	4911.0	486.14 µg/L	51.072	486.14 ppb	51.072	10.51%	
QC value within limits for Mo 202.031 Recovery = 97.23%							
Na 589.592 Radial†	19949.6	9956.9 µg/L	7.91	9956.9 ppb	7.91	0.08%	
QC value within limits for Na 589.592 Radial Recovery = 99.57%							
Ni 231.604†	8685.9	486.66 µg/L	25.823	486.66 ppb	25.823	5.31%	
QC value within limits for Ni 231.604 Recovery = 97.33%							
P 214.914†	1460.7	2378.4 µg/L	228.95	2378.4 ppb	228.95	9.63%	
QC value within limits for P 214.914 Recovery = 95.13%							
Pb 220.353†	1848.2	485.11 µg/L	41.307	485.11 ppb	41.307	8.52%	
QC value within limits for Pb 220.353 Recovery = 97.02%							
S 181.975 Axial†	306.6	975.86 µg/L	74.566	975.86 ppb	74.566	7.64%	
QC value within limits for S 181.975 Axial Recovery = 97.59%							
Sb 206.836†	539.3	483.49 µg/L	40.623	483.49 ppb	40.623	8.40%	
QC value within limits for Sb 206.836 Recovery = 96.70%							
Se 196.026†	518.7	499.10 µg/L	43.474	499.10 ppb	43.474	8.71%	
QC value within limits for Se 196.026 Recovery = 99.82%							
SiO2†	29106.0	5254.7 µg/L	227.87	5254.7 ppb	227.87	4.34%	
QC value within limits for SiO2 Recovery = 98.26%							
Si 251.611†	36151.0	2457.7 µg/L	106.88	2457.7 ppb	106.88	4.35%	
QC value within limits for Si 251.611 Recovery = 98.31%							
Sn 189.927†	1233.8	480.84 µg/L	59.015	480.84 ppb	59.015	12.27%	
QC value within limits for Sn 189.927 Recovery = 96.17%							
Sr 421.552†	82939.0	493.06 µg/L	0.508	493.06 ppb	0.508	0.10%	
QC value within limits for Sr 421.552 Recovery = 98.61%							
Ti 334.940†	208253.2	486.66 µg/L	23.003	486.66 ppb	23.003	4.73%	
QC value within limits for Ti 334.940 Recovery = 97.33%							
Tl 190.801†	502.3	495.22 µg/L	35.762	495.22 ppb	35.762	7.22%	
QC value within limits for Tl 190.801 Recovery = 99.04%							
U 409.014†	5373.7	486.94 µg/L	31.707	486.94 ppb	31.707	6.51%	
QC value within limits for U 409.014 Recovery = 97.39%							
V 292.402†	41113.7	490.06 µg/L	30.997	490.06 ppb	30.997	6.33%	
QC value within limits for V 292.402 Recovery = 98.01%							
Zn 213.857†	21333.7	487.73 µg/L	27.638	487.73 ppb	27.638	5.67%	
QC value within limits for Zn 213.857 Recovery = 97.55%							

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 17:42:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96746.5	96746.5	100.0	%		17:42:31
1	Al 396.153Radial†	-105.8	13.5	6.4160	µg/L	6.4160 ppb	17:42:31
1	Ca 317.933Radial†	365.9	-19.3	-7.0115	µg/L	-7.0115 ppb	17:42:51
1	Fe 238.204 Radial†	14.1	2.2	25.623	µg/L	25.623 ppb	17:42:51
1	K 766.490 Radial†	529.0	43.9	20.494	µg/L	20.494 ppb	17:42:31
1	Mg 279.077 IEC†	11.1	3.1	41.205	µg/L	41.205 ppb	17:42:51
1	Na 589.592 Radial†	173.3	-7.3	-3.6232	µg/L	-3.6232 ppb	17:42:31
1	Sr 421.552†	134.7	-4.7	-0.0278	µg/L	-0.0278 ppb	17:42:31
1	Sc 361.383	2070509.5	2070509.5	98.920	%		17:43:53
1	Y 371.029	1416252.3	1416252.3	98.840	%		17:43:53
1	Ag 328.068†	-523.2	-68.7	-0.5518	µg/L	-0.5518 ppb	17:43:59
1	As 188.979†	-1.8	1.5	2.1561	µg/L	2.1561 ppb	17:44:19
1	B 249.677†	295.7	-0.4	-0.0329	µg/L	-0.0329 ppb	17:43:59
1	Ba 233.527†	1.4	9.8	0.2134	µg/L	0.2134 ppb	17:44:19
1	Be 313.107†	-986.0	162.1	0.0952	µg/L	0.0952 ppb	17:43:59
1	Cd 226.502†	-166.5	2.3	0.0507	µg/L	0.0507 ppb	17:44:19
1	Co 228.616†	36.3	-11.4	-0.4877	µg/L	-0.4877 ppb	17:44:19
1	Cr 267.716†	62.5	-17.1	-0.3723	µg/L	-0.3723 ppb	17:43:59
1	Cu 324.752†	4338.7	9.4	0.0663	µg/L	0.0663 ppb	17:43:59
1	Mn 257.610†	-669.7	10.0	0.0286	µg/L	0.0286 ppb	17:44:19
1	Mo 202.031†	19.4	14.5	1.4330	µg/L	1.4330 ppb	17:44:19
1	Ni 231.604†	372.7	-0.1	-0.0067	µg/L	-0.0067 ppb	17:44:19
1	P 214.914†	270.1	0.7	1.0902	µg/L	1.0902 ppb	17:44:19
1	Pb 220.353†	38.8	9.1	2.3959	µg/L	2.3959 ppb	17:44:19
1	S 181.975 Axial†	19.5	-2.9	-9.1235	µg/L	-9.1235 ppb	17:44:19
1	Sb 206.836†	28.1	5.7	5.1171	µg/L	5.1171 ppb	17:44:19
1	Se 196.026†	24.7	-2.4	-2.1650	µg/L	-2.1650 ppb	17:44:19
1	SiO2†	2714.1	-36.0	-6.4944	µg/L	-6.4944 ppb	17:43:59
1	Si 251.611†	421.4	1.9	0.1284	µg/L	0.1284 ppb	17:44:19
1	Sn 189.927†	-4.4	3.0	1.1522	µg/L	1.1522 ppb	17:44:19
1	Ti 334.940†	-478.4	93.6	0.2156	µg/L	0.2156 ppb	17:43:59
1	Tl 190.801†	-35.6	-1.9	-1.8308	µg/L	-1.8308 ppb	17:44:19
1	U 409.014†	-54.6	-49.4	-4.4868	µg/L	-4.4868 ppb	17:43:59
1	V 292.402†	80.1	-31.3	-0.3675	µg/L	-0.3675 ppb	17:43:59
1	Zn 213.857†	847.5	-152.1	-3.5059	µg/L	-3.5059 ppb	17:44:19
2	Sc RADIAL	96174.0	96174.0	99.4	%		17:42:57
2	Al 396.153Radial†	-95.3	23.4	11.123	µg/L	11.123 ppb	17:42:57
2	Ca 317.933Radial†	366.9	-16.0	-5.8229	µg/L	-5.8229 ppb	17:43:17
2	Fe 238.204 Radial†	15.5	3.6	43.125	µg/L	43.125 ppb	17:43:17
2	K 766.490 Radial†	465.8	-16.6	-7.7282	µg/L	-7.7282 ppb	17:42:57
2	Mg 279.077 IEC†	9.5	1.5	20.056	µg/L	20.056 ppb	17:43:17
2	Na 589.592 Radial†	185.9	6.5	3.2471	µg/L	3.2471 ppb	17:42:57
2	Sr 421.552†	134.4	-4.1	-0.0246	µg/L	-0.0246 ppb	17:42:57
2	Sc 361.383	2067507.0	2067507.0	98.777	%		17:44:25
2	Y 371.029	1417548.2	1417548.2	98.931	%		17:44:25
2	Ag 328.068†	-506.0	-52.0	-0.4179	µg/L	-0.4179 ppb	17:44:31
2	As 188.979†	-0.3	2.9	4.2968	µg/L	4.2968 ppb	17:44:51
2	B 249.677†	292.5	-3.2	-0.1672	µg/L	-0.1672 ppb	17:44:31
2	Ba 233.527†	2.7	11.1	0.2425	µg/L	0.2425 ppb	17:44:51
2	Be 313.107†	-1119.4	25.6	0.0149	µg/L	0.0149 ppb	17:44:31
2	Cd 226.502†	-172.8	-4.4	-0.1079	µg/L	-0.1079 ppb	17:44:51
2	Co 228.616†	45.3	-2.2	-0.0952	µg/L	-0.0952 ppb	17:44:51
2	Cr 267.716†	91.3	12.2	0.2658	µg/L	0.2658 ppb	17:44:31
2	Cu 324.752†	4313.5	-9.8	-0.0557	µg/L	-0.0557 ppb	17:44:31
2	Mn 257.610†	-662.2	16.5	0.0509	µg/L	0.0509 ppb	17:44:51
2	Mo 202.031†	26.8	22.0	2.1788	µg/L	2.1788 ppb	17:44:51
2	Ni 231.604†	379.0	6.8	0.3815	µg/L	0.3815 ppb	17:44:51
2	P 214.914†	271.5	2.5	4.0512	µg/L	4.0512 ppb	17:44:51
2	Pb 220.353†	27.6	-2.2	-0.5695	µg/L	-0.5695 ppb	17:44:51

2	S 181.975 Axial†	16.7	-5.7	-17.998 µg/L	-17.998 ppb	17:44:51
2	Sb 206.836†	25.7	3.3	2.9519 µg/L	2.9519 ppb	17:44:51
2	Se 196.026†	23.8	-3.2	-2.8744 µg/L	-2.8744 ppb	17:44:51
2	SiO2†	2721.0	-25.0	-4.5155 µg/L	-4.5155 ppb	17:44:31
2	Si 251.611†	420.5	1.6	0.1066 µg/L	0.1066 ppb	17:44:51
2	Sn 189.927†	-8.1	-0.8	-0.3015 µg/L	-0.3015 ppb	17:44:51
2	Ti 334.940†	-458.2	113.3	0.2633 µg/L	0.2633 ppb	17:44:31
2	Tl 190.801†	-35.1	-1.5	-1.4171 µg/L	-1.4171 ppb	17:44:51
2	U 409.014†	-4.7	1.1	0.0931 µg/L	0.0931 ppb	17:44:31
2	V 292.402†	67.1	-44.4	-0.5121 µg/L	-0.5121 ppb	17:44:31
2	Zn 213.857†	838.0	-160.5	-3.6990 µg/L	-3.6990 ppb	17:44:51
3	Sc RADIAL	96145.3	96145.3	99.3 %		17:43:23
3	Al 396.153Radial†	-125.0	-6.5	-3.1388 µg/L	-3.1388 ppb	17:43:23
3	Ca 317.933Radial†	367.0	-15.8	-5.7540 µg/L	-5.7540 ppb	17:43:43
3	Fe 238.204 Radial†	15.1	3.3	38.869 µg/L	38.869 ppb	17:43:43
3	K 766.490 Radial†	475.7	-6.4	-3.0086 µg/L	-3.0086 ppb	17:43:23
3	Mg 279.077 IEC†	4.6	-3.4	-44.311 µg/L	-44.311 ppb	17:43:43
3	Na 589.592 Radial†	151.8	-27.8	-13.872 µg/L	-13.872 ppb	17:43:23
3	Sr 421.552†	133.0	-5.5	-0.0329 µg/L	-0.0329 ppb	17:43:23
3	Sc 361.383	2060340.5	2060340.5	98.434 %		17:44:57
3	Y 371.029	1410460.6	1410460.6	98.436 %		17:44:57
3	Ag 328.068†	-537.2	-85.5	-0.6875 µg/L	-0.6875 ppb	17:45:03
3	As 188.979†	-3.4	-0.2	-0.2609 µg/L	-0.2609 ppb	17:45:23
3	B 249.677†	296.7	2.1	0.0732 µg/L	0.0732 ppb	17:45:03
3	Ba 233.527†	-13.3	-5.1	-0.1119 µg/L	-0.1119 ppb	17:45:23
3	Be 313.107†	-1029.2	113.2	0.0665 µg/L	0.0665 ppb	17:45:03
3	Cd 226.502†	-162.1	5.9	0.1347 µg/L	0.1347 ppb	17:45:23
3	Co 228.616†	42.2	-5.2	-0.2220 µg/L	-0.2220 ppb	17:45:23
3	Cr 267.716†	68.1	-11.1	-0.2409 µg/L	-0.2409 ppb	17:45:03
3	Cu 324.752†	4311.8	3.7	0.0313 µg/L	0.0313 ppb	17:45:03
3	Mn 257.610†	-664.1	12.3	0.0422 µg/L	0.0422 ppb	17:45:23
3	Mo 202.031†	20.9	16.1	1.5913 µg/L	1.5913 ppb	17:45:23
3	Ni 231.604†	368.7	-2.3	-0.1278 µg/L	-0.1278 ppb	17:45:23
3	P 214.914†	274.7	6.7	11.113 µg/L	11.113 ppb	17:45:23
3	Pb 220.353†	41.8	12.3	3.2380 µg/L	3.2380 ppb	17:45:23
3	S 181.975 Axial†	20.2	-2.0	-6.3552 µg/L	-6.3552 ppb	17:45:23
3	Sb 206.836†	31.1	8.8	7.9080 µg/L	7.9080 ppb	17:45:23
3	Se 196.026†	21.6	-5.4	-4.9090 µg/L	-4.9090 ppb	17:45:23
3	SiO2†	2719.4	-17.1	-3.0912 µg/L	-3.0912 ppb	17:45:03
3	Si 251.611†	432.2	15.0	1.0175 µg/L	1.0175 ppb	17:45:23
3	Sn 189.927†	-0.4	7.1	2.7474 µg/L	2.7474 ppb	17:45:23
3	Ti 334.940†	-487.6	81.8	0.1948 µg/L	0.1948 ppb	17:45:03
3	Tl 190.801†	-33.3	0.3	0.2592 µg/L	0.2592 ppb	17:45:23
3	U 409.014†	26.8	33.0	2.9956 µg/L	2.9956 ppb	17:45:03
3	V 292.402†	61.3	-50.0	-0.5807 µg/L	-0.5807 ppb	17:45:03
3	Zn 213.857†	812.5	-183.5	-4.2232 µg/L	-4.2232 ppb	17:45:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2066119.0	98.711 %	0.2496			0.25%
Sc RADIAL	96355.3	99.6 %	0.35			0.35%
Y 371.029	1414753.7	98.736 %	0.2634			0.27%
Ag 328.068†	-68.7	-0.5524 µg/L	0.13482	-0.5524 ppb	0.13482	24.41%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	10.1	4.8000 µg/L	7.26694	4.8000 ppb	7.26694	151.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.4	2.0640 µg/L	2.28021	2.0640 ppb	2.28021	110.48%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-0.5	-0.0423 µg/L	0.12046	-0.0423 ppb	0.12046	284.72%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.3	0.1147 µg/L	0.19674	0.1147 ppb	0.19674	171.53%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	100.3	0.0588 µg/L	0.04066	0.0588 ppb	0.04066	69.10%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.0	-6.1961 µg/L	0.70698	-6.1961 ppb	0.70698	11.41%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.3	0.0259 µg/L	0.12323	0.0259 ppb	0.12323	476.70%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-6.3	-0.2683 µg/L	0.20033	-0.2683 ppb	0.20033	74.67%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-5.3 -0.1158 µg/L	0.33690 -0.1158 ppb	0.33690 290.96%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	1.1 0.0140 µg/L	0.06283 0.0140 ppb	0.06283 449.74%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	3.0 35.872 µg/L	9.1276 35.872 ppb	9.1276 25.44%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	7.0 3.2525 µg/L	15.11721 3.2525 ppb	15.11721 464.79%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.4 5.6501 µg/L	44.54113 5.6501 ppb	44.54113 788.32%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	12.9 0.0406 µg/L	0.01121 0.0406 ppb	0.01121 27.62%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	17.5 1.7344 µg/L	0.39295 1.7344 ppb	0.39295 22.66%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-9.5 -4.7495 µg/L	8.61511 -4.7495 ppb	8.61511 181.39%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	1.5 0.0823 µg/L	0.26603 0.0823 ppb	0.26603 323.13%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	3.3 5.4183 µg/L	5.14949 5.4183 ppb	5.14949 95.04%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	6.4 1.6881 µg/L	2.00001 1.6881 ppb	2.00001 118.47%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-3.5 -11.159 µg/L	6.0826 -11.159 ppb	6.0826 54.51%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	5.9 5.3257 µg/L	2.48459 5.3257 ppb	2.48459 46.65%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.6 -3.3161 µg/L	1.42432 -3.3161 ppb	1.42432 42.95%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-26.0 -4.7004 µg/L	1.70911 -4.7004 ppb	1.70911 36.36%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	6.1 0.4175 µg/L	0.51976 0.4175 ppb	0.51976 124.49%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	3.1 1.1994 µg/L	1.52496 1.1994 ppb	1.52496 127.15%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-4.8 -0.0284 µg/L	0.00417 -0.0284 ppb	0.00417 14.67%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	96.3 0.2246 µg/L	0.03514 0.2246 ppb	0.03514 15.65%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.0 -0.9962 µg/L	1.10674 -0.9962 ppb	1.10674 111.09%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-5.1 -0.4660 µg/L	3.77243 -0.4660 ppb	3.77243 809.49%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-41.9 -0.4868 µg/L	0.10884 -0.4868 ppb	0.10884 22.36%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-165.3 -3.8093 µg/L	0.37115 -3.8093 ppb	0.37115 9.74%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 18:24:37

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	95712.2	95712.2	98.9 %		18:25:11
1	Al 396.153Radial†	10687.2	10926.7	5204.8 µg/L	5204.8 ppb	18:25:11
1	Ca 317.933Radial†	14561.1	14339.6	5218.5 µg/L	5218.5 ppb	18:25:11
1	Fe 238.204 Radial†	458.7	451.9	5356.7 µg/L	5356.7 ppb	18:25:31
1	K 766.490 Radial†	11280.2	10921.7	5096.9 µg/L	5096.9 ppb	18:25:11
1	Mg 279.077 IEC†	405.0	401.5	5297.1 µg/L	5297.1 ppb	18:25:31
1	Na 589.592 Radial†	21474.5	21535.4	10748 µg/L	10748 ppb	18:25:11
1	Sr 421.552†	88185.3	89037.4	529.32 µg/L	529.32 ppb	18:25:11
1	Sc 361.383	2023235.3	2023235.3	96.662 %		18:26:35
1	Y 371.029	1383166.8	1383166.8	96.531 %		18:26:35
1	Ag 328.068†	62600.7	65222.8	527.63 µg/L	527.63 ppb	18:26:40
1	As 188.979†	357.3	372.9	548.84 µg/L	548.84 ppb	18:27:01
1	B 249.677†	11413.1	11507.9	520.31 µg/L	520.31 ppb	18:26:40
1	Ba 233.527†	23359.4	24174.5	529.66 µg/L	529.66 ppb	18:26:40
1	Be 313.107†	869551.5	900740.6	529.03 µg/L	529.03 ppb	18:26:35
1	Cd 226.502†	21304.1	22210.4	527.88 µg/L	527.88 ppb	18:26:40
1	Co 228.616†	11976.3	12341.8	529.62 µg/L	529.62 ppb	18:26:40
1	Cr 267.716†	23898.8	24643.9	536.32 µg/L	536.32 ppb	18:26:40
1	Cu 324.752†	83031.5	81522.4	533.48 µg/L	533.48 ppb	18:26:40
1	Mn 257.610†	172139.4	178771.3	537.25 µg/L	537.25 ppb	18:26:35
1	Mo 202.031†	5373.0	5553.5	549.73 µg/L	549.73 ppb	18:27:01
1	Ni 231.604†	9493.0	9443.9	529.12 µg/L	529.12 ppb	18:26:40
1	P 214.914†	1859.6	1651.4	2691.1 µg/L	2691.1 ppb	18:27:01
1	Pb 220.353†	2021.2	2060.8	540.95 µg/L	540.95 ppb	18:27:01
1	S 181.975 Axial†	348.1	337.6	1074.3 µg/L	1074.3 ppb	18:27:01
1	Sb 206.836†	611.4	609.8	546.82 µg/L	546.82 ppb	18:27:01
1	Se 196.026†	589.5	582.6	560.11 µg/L	560.11 ppb	18:27:01
1	SiO2†	33092.9	31456.0	5678.9 µg/L	5678.9 ppb	18:26:40
1	Si 251.611†	38191.1	39086.0	2657.2 µg/L	2657.2 ppb	18:26:40
1	Sn 189.927†	1363.0	1417.5	552.39 µg/L	552.39 ppb	18:27:01
1	Ti 334.940†	217926.7	226030.1	528.21 µg/L	528.21 ppb	18:26:35
1	Tl 190.801†	504.0	555.5	547.67 µg/L	547.67 ppb	18:27:01
1	U 409.014†	5741.3	5945.4	538.77 µg/L	538.77 ppb	18:26:40
1	V 292.402†	43623.2	45017.5	536.75 µg/L	536.75 ppb	18:26:40
1	Zn 213.857†	23532.1	23336.0	533.53 µg/L	533.53 ppb	18:26:40
2	Sc RADIAL	94733.3	94733.3	97.9 %		18:25:37
2	Al 396.153Radial†	10520.7	10868.2	5177.3 µg/L	5177.3 ppb	18:25:37
2	Ca 317.933Radial†	14457.4	14385.7	5235.3 µg/L	5235.3 ppb	18:25:37
2	Fe 238.204 Radial†	465.1	463.2	5489.5 µg/L	5489.5 ppb	18:25:57
2	K 766.490 Radial†	11237.2	10995.6	5131.4 µg/L	5131.4 ppb	18:25:37
2	Mg 279.077 IEC†	405.6	406.4	5360.8 µg/L	5360.8 ppb	18:25:57
2	Na 589.592 Radial†	21284.9	21566.0	10764 µg/L	10764 ppb	18:25:37
2	Sr 421.552†	87215.3	88967.8	528.90 µg/L	528.90 ppb	18:25:37
2	Sc 361.383	2043498.0	2043498.0	97.630 %		18:27:08
2	Y 371.029	1393824.3	1393824.3	97.275 %		18:27:08
2	Ag 328.068†	62535.4	64513.8	521.90 µg/L	521.90 ppb	18:27:14
2	As 188.979†	343.2	354.8	522.11 µg/L	522.11 ppb	18:27:34
2	B 249.677†	11414.5	11392.3	514.99 µg/L	514.99 ppb	18:27:14
2	Ba 233.527†	23313.2	23887.6	523.37 µg/L	523.37 ppb	18:27:14
2	Be 313.107†	865866.1	888045.8	521.58 µg/L	521.58 ppb	18:27:08
2	Cd 226.502†	21324.0	22012.3	523.15 µg/L	523.15 ppb	18:27:14
2	Co 228.616†	11979.1	12221.9	524.46 µg/L	524.46 ppb	18:27:14
2	Cr 267.716†	23925.3	24425.9	531.58 µg/L	531.58 ppb	18:27:14
2	Cu 324.752†	82868.2	80503.3	526.84 µg/L	526.84 ppb	18:27:14
2	Mn 257.610†	171830.8	176689.3	531.00 µg/L	531.00 ppb	18:27:08
2	Mo 202.031†	5240.3	5362.4	530.82 µg/L	530.82 ppb	18:27:34
2	Ni 231.604†	9553.2	9408.2	527.13 µg/L	527.13 ppb	18:27:14
2	P 214.914†	1824.5	1596.4	2599.9 µg/L	2599.9 ppb	18:27:34
2	Pb 220.353†	1989.8	2008.0	527.06 µg/L	527.06 ppb	18:27:34

2	S 181.975 Axial†	342.9	328.7	1045.9 µg/L	1045.9 ppb	18:27:34
2	Sb 206.836†	599.9	591.7	530.41 µg/L	530.41 ppb	18:27:34
2	Se 196.026†	570.3	556.8	536.26 µg/L	536.26 ppb	18:27:34
2	SiO2†	33178.8	31204.5	5633.5 µg/L	5633.5 ppb	18:27:14
2	Si 251.611†	38179.0	38681.8	2629.7 µg/L	2629.7 ppb	18:27:14
2	Sn 189.927†	1320.3	1359.8	529.94 µg/L	529.94 ppb	18:27:34
2	Ti 334.940†	217011.9	222857.5	520.79 µg/L	520.79 ppb	18:27:08
2	Tl 190.801†	491.3	537.3	529.80 µg/L	529.80 ppb	18:27:34
2	U 409.014†	5681.2	5824.9	527.81 µg/L	527.81 ppb	18:27:14
2	V 292.402†	43520.3	44464.6	530.04 µg/L	530.04 ppb	18:27:14
2	Zn 213.857†	23486.4	23047.7	526.91 µg/L	526.91 ppb	18:27:14
3	Sc RADIAL	95584.4	95584.4	98.8 %		18:26:03
3	Al 396.153Radial†	10638.2	10891.5	5190.2 µg/L	5190.2 ppb	18:26:03
3	Ca 317.933Radial†	14586.2	14384.7	5234.9 µg/L	5234.9 ppb	18:26:03
3	Fe 238.204 Radial†	457.4	451.2	5346.6 µg/L	5346.6 ppb	18:26:23
3	K 766.490 Radial†	11287.3	10944.1	5107.4 µg/L	5107.4 ppb	18:26:03
3	Mg 279.077 IEC†	404.7	401.8	5299.3 µg/L	5299.3 ppb	18:26:23
3	Na 589.592 Radial†	21495.7	21585.8	10774 µg/L	10774 ppb	18:26:03
3	Sr 421.552†	87925.7	88893.7	528.46 µg/L	528.46 ppb	18:26:03
3	Sc 361.383	2042382.0	2042382.0	97.577 %		18:27:41
3	Y 371.029	1396162.8	1396162.8	97.438 %		18:27:41
3	Ag 328.068†	58742.4	60661.5	490.59 µg/L	490.59 ppb	18:27:47
3	As 188.979†	295.0	305.6	449.51 µg/L	449.51 ppb	18:28:08
3	B 249.677†	10629.1	10593.7	478.71 µg/L	478.71 ppb	18:27:47
3	Ba 233.527†	21161.3	21695.3	475.32 µg/L	475.32 ppb	18:27:47
3	Be 313.107†	802269.1	823353.8	483.58 µg/L	483.58 ppb	18:27:41
3	Cd 226.502†	19285.5	19935.1	473.73 µg/L	473.73 ppb	18:27:47
3	Co 228.616†	10688.1	10905.5	467.92 µg/L	467.92 ppb	18:27:47
3	Cr 267.716†	20782.0	21217.9	461.77 µg/L	461.77 ppb	18:27:47
3	Cu 324.752†	75001.9	72488.0	474.47 µg/L	474.47 ppb	18:27:47
3	Mn 257.610†	159676.1	164328.9	493.84 µg/L	493.84 ppb	18:27:41
3	Mo 202.031†	4373.4	4476.9	443.20 µg/L	443.20 ppb	18:28:08
3	Ni 231.604†	8560.2	8395.9	470.42 µg/L	470.42 ppb	18:27:47
3	P 214.914†	1591.9	1359.0	2210.1 µg/L	2210.1 ppb	18:28:08
3	Pb 220.353†	1716.0	1728.5	453.67 µg/L	453.67 ppb	18:28:08
3	S 181.975 Axial†	296.6	281.4	895.61 µg/L	895.61 ppb	18:28:08
3	Sb 206.836†	516.2	506.3	453.59 µg/L	453.59 ppb	18:28:08
3	Se 196.026†	501.8	486.9	470.17 µg/L	470.17 ppb	18:28:08
3	SiO2†	30704.9	28687.7	5179.2 µg/L	5179.2 ppb	18:27:47
3	Si 251.611†	35115.1	35563.1	2417.7 µg/L	2417.7 ppb	18:27:47
3	Sn 189.927†	1075.8	1110.0	432.66 µg/L	432.66 ppb	18:28:08
3	Ti 334.940†	199638.1	205173.8	479.44 µg/L	479.44 ppb	18:27:41
3	Tl 190.801†	433.2	478.1	471.56 µg/L	471.56 ppb	18:28:08
3	U 409.014†	5042.6	5173.7	468.70 µg/L	468.70 ppb	18:27:47
3	V 292.402†	38945.3	39800.3	474.10 µg/L	474.10 ppb	18:27:47
3	Zn 213.857†	21165.1	20681.9	472.78 µg/L	472.78 ppb	18:27:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2036371.8	97.289 %	0.5442			0.56%
Sc RADIAL	95343.3	98.5 %	0.55			0.56%
Y 371.029	1391051.3	97.081 %	0.4835			0.50%
Ag 328.068†	63466.1	513.37 µg/L	19.934	513.37 ppb	19.934	3.88%
QC value within limits for Ag 328.068 Recovery = 102.67%						
Al 396.153Radial†	10895.5	5190.7 µg/L	13.77	5190.7 ppb	13.77	0.27%
QC value within limits for Al 396.153Radial Recovery = 103.81%						
As 188.979†	344.4	506.82 µg/L	51.401	506.82 ppb	51.401	10.14%
QC value within limits for As 188.979 Recovery = 101.36%						
B 249.677†	11164.6	504.67 µg/L	22.638	504.67 ppb	22.638	4.49%
QC value within limits for B 249.677 Recovery = 100.93%						
Ba 233.527†	23252.5	509.45 µg/L	29.720	509.45 ppb	29.720	5.83%
QC value within limits for Ba 233.527 Recovery = 101.89%						
Be 313.107†	870713.4	511.40 µg/L	24.375	511.40 ppb	24.375	4.77%
QC value within limits for Be 313.107 Recovery = 102.28%						
Ca 317.933Radial†	14370.0	5229.5 µg/L	9.59	5229.5 ppb	9.59	0.18%
QC value within limits for Ca 317.933Radial Recovery = 104.59%						
Cd 226.502†	21385.9	508.25 µg/L	29.989	508.25 ppb	29.989	5.90%
QC value within limits for Cd 226.502 Recovery = 101.65%						
Co 228.616†	11823.0	507.33 µg/L	34.233	507.33 ppb	34.233	6.75%

QC value within limits for Co 228.616	Recovery = 101.47%				
Cr 267.716†	23429.2	509.89 µg/L	41.740	509.89 ppb	41.740 8.19%
QC value within limits for Cr 267.716	Recovery = 101.98%				
Cu 324.752†	78171.2	511.60 µg/L	32.326	511.60 ppb	32.326 6.32%
QC value within limits for Cu 324.752	Recovery = 102.32%				
Fe 238.204 Radial†	455.4	5397.6 µg/L	79.72	5397.6 ppb	79.72 1.48%
QC value within limits for Fe 238.204 Radial	Recovery = 107.95%				
K 766.490 Radial†	10953.8	5111.9 µg/L	17.69	5111.9 ppb	17.69 0.35%
QC value within limits for K 766.490 Radial	Recovery = 102.24%				
Mg 279.077 IEC†	403.3	5319.1 µg/L	36.15	5319.1 ppb	36.15 0.68%
QC value within limits for Mg 279.077 IEC	Recovery = 106.38%				
Mn 257.610†	173263.2	520.70 µg/L	23.465	520.70 ppb	23.465 4.51%
QC value within limits for Mn 257.610	Recovery = 104.14%				
Mo 202.031†	5130.9	507.92 µg/L	56.841	507.92 ppb	56.841 11.19%
QC value within limits for Mo 202.031	Recovery = 101.58%				
Na 589.592 Radial†	21562.4	10762 µg/L	12.7	10762 ppb	12.7 0.12%
QC value within limits for Na 589.592 Radial	Recovery = 107.62%				
Ni 231.604†	9082.7	508.89 µg/L	33.334	508.89 ppb	33.334 6.55%
QC value within limits for Ni 231.604	Recovery = 101.78%				
P 214.914†	1535.6	2500.4 µg/L	255.48	2500.4 ppb	255.48 10.22%
QC value within limits for P 214.914	Recovery = 100.01%				
Pb 220.353†	1932.4	507.23 µg/L	46.896	507.23 ppb	46.896 9.25%
QC value within limits for Pb 220.353	Recovery = 101.45%				
S 181.975 Axial†	315.9	1005.3 µg/L	96.03	1005.3 ppb	96.03 9.55%
QC value within limits for S 181.975 Axial	Recovery = 100.53%				
Sb 206.836†	569.3	510.27 µg/L	49.770	510.27 ppb	49.770 9.75%
QC value within limits for Sb 206.836	Recovery = 102.05%				
Se 196.026†	542.1	522.18 µg/L	46.594	522.18 ppb	46.594 8.92%
QC value within limits for Se 196.026	Recovery = 104.44%				
SiO2†	30449.4	5497.2 µg/L	276.37	5497.2 ppb	276.37 5.03%
QC value within limits for SiO2	Recovery = 102.80%				
Si 251.611†	37777.0	2568.2 µg/L	131.06	2568.2 ppb	131.06 5.10%
QC value within limits for Si 251.611	Recovery = 102.73%				
Sn 189.927†	1295.8	505.00 µg/L	63.646	505.00 ppb	63.646 12.60%
QC value within limits for Sn 189.927	Recovery = 101.00%				
Sr 421.552†	88966.3	528.89 µg/L	0.427	528.89 ppb	0.427 0.08%
QC value within limits for Sr 421.552	Recovery = 105.78%				
Ti 334.940†	218020.5	509.48 µg/L	26.278	509.48 ppb	26.278 5.16%
QC value within limits for Ti 334.940	Recovery = 101.90%				
Tl 190.801†	523.6	516.35 µg/L	39.799	516.35 ppb	39.799 7.71%
QC value within limits for Tl 190.801	Recovery = 103.27%				
U 409.014†	5648.0	511.76 µg/L	37.693	511.76 ppb	37.693 7.37%
QC value within limits for U 409.014	Recovery = 102.35%				
V 292.402†	43094.1	513.63 µg/L	34.396	513.63 ppb	34.396 6.70%
QC value within limits for V 292.402	Recovery = 102.73%				
Zn 213.857†	22355.2	511.07 µg/L	33.327	511.07 ppb	33.327 6.52%
QC value within limits for Zn 213.857	Recovery = 102.21%				

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 18:28:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95962.4	95962.4	99.1 %		18:28:48
1	Al 396.153Radial†	-131.1	-12.9	-6.2181 µg/L	-6.2181 ppb	18:28:48
1	Ca 317.933Radial†	372.1	-10.0	-3.6372 µg/L	-3.6372 ppb	18:29:09
1	Fe 238.204 Radial†	14.8	3.0	35.562 µg/L	35.562 ppb	18:29:09
1	K 766.490 Radial†	356.8	-125.5	-58.574 µg/L	-58.574 ppb	18:28:48
1	Mg 279.077 IEC†	8.9	1.0	13.525 µg/L	13.525 ppb	18:29:09
1	Na 589.592 Radial†	232.2	53.6	26.758 µg/L	26.758 ppb	18:28:48
1	Sr 421.552†	160.6	22.6	0.1341 µg/L	0.1341 ppb	18:28:48
1	Sc 361.383	2018729.8	2018729.8	96.447 %		18:30:11
1	Y 371.029	1383991.6	1383991.6	96.589 %		18:30:11
1	Ag 328.068†	-470.7	-27.8	-0.2208 µg/L	-0.2208 ppb	18:30:16
1	As 188.979†	0.8	4.1	6.0208 µg/L	6.0208 ppb	18:30:37
1	B 249.677†	263.8	-25.8	-1.1911 µg/L	-1.1911 ppb	18:30:16
1	Ba 233.527†	-12.5	-4.5	-0.0987 µg/L	-0.0987 ppb	18:30:37
1	Be 313.107†	-1091.5	27.1	0.0159 µg/L	0.0159 ppb	18:30:16
1	Cd 226.502†	-167.0	-2.6	-0.0645 µg/L	-0.0645 ppb	18:30:37
1	Co 228.616†	33.5	-13.3	-0.5714 µg/L	-0.5714 ppb	18:30:37
1	Cr 267.716†	56.7	-21.4	-0.4662 µg/L	-0.4662 ppb	18:30:16
1	Cu 324.752†	4292.7	74.1	0.4910 µg/L	0.4910 ppb	18:30:16
1	Mn 257.610†	-678.3	-16.3	-0.0478 µg/L	-0.0478 ppb	18:30:16
1	Mo 202.031†	23.7	19.4	1.9252 µg/L	1.9252 ppb	18:30:37
1	Ni 231.604†	366.8	3.4	0.1920 µg/L	0.1920 ppb	18:30:37
1	P 214.914†	279.4	17.3	28.673 µg/L	28.673 ppb	18:30:37
1	Pb 220.353†	30.7	1.7	0.4371 µg/L	0.4371 ppb	18:30:37
1	S 181.975 Axial†	21.1	-0.7	-2.1808 µg/L	-2.1808 ppb	18:30:37
1	Sb 206.836†	29.7	8.1	7.2695 µg/L	7.2695 ppb	18:30:37
1	Se 196.026†	25.9	-0.4	-0.2961 µg/L	-0.2961 ppb	18:30:37
1	SiO2†	2738.9	60.1	10.842 µg/L	10.842 ppb	18:30:16
1	Si 251.611†	417.4	8.7	0.5924 µg/L	0.5924 ppb	18:30:37
1	Sn 189.927†	-2.0	5.4	2.1022 µg/L	2.1022 ppb	18:30:37
1	Ti 334.940†	-474.3	85.5	0.1987 µg/L	0.1987 ppb	18:30:16
1	Tl 190.801†	-31.5	1.4	1.3886 µg/L	1.3886 ppb	18:30:37
1	U 409.014†	2.6	8.5	0.7683 µg/L	0.7683 ppb	18:30:16
1	V 292.402†	104.1	-4.3	-0.0411 µg/L	-0.0411 ppb	18:30:16
1	Zn 213.857†	859.5	-117.7	-2.7130 µg/L	-2.7130 ppb	18:30:37
2	Sc RADIAL	96122.7	96122.7	99.3 %		18:29:14
2	Al 396.153Radial†	-131.1	-12.7	-6.0884 µg/L	-6.0884 ppb	18:29:14
2	Ca 317.933Radial†	374.6	-8.1	-2.9537 µg/L	-2.9537 ppb	18:29:34
2	Fe 238.204 Radial†	13.6	1.8	20.694 µg/L	20.694 ppb	18:29:34
2	K 766.490 Radial†	467.3	-14.8	-6.9240 µg/L	-6.9240 ppb	18:29:14
2	Mg 279.077 IEC†	7.7	-0.3	-3.5924 µg/L	-3.5924 ppb	18:29:34
2	Na 589.592 Radial†	195.9	16.7	8.3400 µg/L	8.3400 ppb	18:29:14
2	Sr 421.552†	94.9	-43.9	-0.2608 µg/L	-0.2608 ppb	18:29:14
2	Sc 361.383	2030816.2	2030816.2	97.024 %		18:30:43
2	Y 371.029	1390630.3	1390630.3	97.052 %		18:30:43
2	Ag 328.068†	-523.7	-79.5	-0.6410 µg/L	-0.6410 ppb	18:30:48
2	As 188.979†	-0.2	3.0	4.4938 µg/L	4.4938 ppb	18:31:09
2	B 249.677†	280.4	-10.3	-0.4800 µg/L	-0.4800 ppb	18:30:48
2	Ba 233.527†	-3.6	4.7	0.1008 µg/L	0.1008 ppb	18:31:09
2	Be 313.107†	-1037.5	89.5	0.0525 µg/L	0.0525 ppb	18:30:48
2	Cd 226.502†	-172.4	-7.1	-0.1705 µg/L	-0.1705 ppb	18:31:09
2	Co 228.616†	35.5	-11.5	-0.4922 µg/L	-0.4922 ppb	18:31:09
2	Cr 267.716†	84.8	7.1	0.1551 µg/L	0.1551 ppb	18:30:48
2	Cu 324.752†	4283.7	38.4	0.2546 µg/L	0.2546 ppb	18:30:48
2	Mn 257.610†	-677.0	-10.8	-0.0310 µg/L	-0.0310 ppb	18:30:48
2	Mo 202.031†	25.0	20.6	2.0438 µg/L	2.0438 ppb	18:31:09
2	Ni 231.604†	368.3	2.7	0.1542 µg/L	0.1542 ppb	18:31:09
2	P 214.914†	277.2	13.3	22.018 µg/L	22.018 ppb	18:31:09
2	Pb 220.353†	26.0	-3.4	-0.8811 µg/L	-0.8811 ppb	18:31:09

2	S 181.975 Axial†	22.3	0.5	1.4530 µg/L	1.4530 ppb	18:31:09
2	Sb 206.836†	31.3	9.5	8.5137 µg/L	8.5137 ppb	18:31:09
2	Se 196.026†	21.6	-5.0	-4.6585 µg/L	-4.6585 ppb	18:31:09
2	SiO2†	2706.8	10.1	1.8288 µg/L	1.8288 ppb	18:30:48
2	Si 251.611†	419.1	7.9	0.5375 µg/L	0.5375 ppb	18:31:09
2	Sn 189.927†	1.8	9.2	3.5999 µg/L	3.5999 ppb	18:31:09
2	Ti 334.940†	-495.9	66.1	0.1548 µg/L	0.1548 ppb	18:30:48
2	Tl 190.801†	-24.8	8.6	8.3718 µg/L	8.3718 ppb	18:31:09
2	U 409.014†	29.7	36.4	3.3034 µg/L	3.3034 ppb	18:30:48
2	V 292.402†	60.2	-50.3	-0.5766 µg/L	-0.5766 ppb	18:30:48
2	Zn 213.857†	864.6	-117.7	-2.7127 µg/L	-2.7127 ppb	18:31:09
3	Sc RADIAL	96068.2	96068.2	99.3 %		18:29:40
3	Al 396.153Radial†	-87.8	30.9	14.697 µg/L	14.697 ppb	18:29:40
3	Ca 317.933Radial†	369.5	-13.0	-4.7296 µg/L	-4.7296 ppb	18:30:00
3	Fe 238.204 Radial†	14.1	2.2	26.365 µg/L	26.365 ppb	18:30:00
3	K 766.490 Radial†	464.2	-17.7	-8.2620 µg/L	-8.2620 ppb	18:29:40
3	Mg 279.077 IEC†	8.3	0.4	5.2180 µg/L	5.2180 ppb	18:30:00
3	Na 589.592 Radial†	188.7	9.6	4.7795 µg/L	4.7795 ppb	18:29:40
3	Sr 421.552†	136.6	-1.8	-0.0109 µg/L	-0.0109 ppb	18:29:40
3	Sc 361.383	2022018.8	2022018.8	96.604 %		18:31:15
3	Y 371.029	1384364.4	1384364.4	96.615 %		18:31:15
3	Ag 328.068†	-494.9	-52.1	-0.4197 µg/L	-0.4197 ppb	18:31:20
3	As 188.979†	-0.1	3.1	4.5876 µg/L	4.5876 ppb	18:31:41
3	B 249.677†	271.5	-18.3	-0.8462 µg/L	-0.8462 ppb	18:31:20
3	Ba 233.527†	-13.9	-6.0	-0.1323 µg/L	-0.1323 ppb	18:31:41
3	Be 313.107†	-1113.3	6.4	0.0038 µg/L	0.0038 ppb	18:31:20
3	Cd 226.502†	-163.5	1.3	0.0290 µg/L	0.0290 ppb	18:31:41
3	Co 228.616†	42.7	-3.9	-0.1649 µg/L	-0.1649 ppb	18:31:41
3	Cr 267.716†	66.1	-11.8	-0.2573 µg/L	-0.2573 ppb	18:31:20
3	Cu 324.752†	4311.2	86.1	0.5674 µg/L	0.5674 ppb	18:31:20
3	Mn 257.610†	-674.9	-11.6	-0.0338 µg/L	-0.0338 ppb	18:31:20
3	Mo 202.031†	22.3	17.9	1.7760 µg/L	1.7760 ppb	18:31:41
3	Ni 231.604†	377.3	13.7	0.7689 µg/L	0.7689 ppb	18:31:41
3	P 214.914†	268.2	5.2	8.6706 µg/L	8.6706 ppb	18:31:41
3	Pb 220.353†	27.0	-2.3	-0.5913 µg/L	-0.5913 ppb	18:31:41
3	S 181.975 Axial†	20.7	-1.2	-3.6820 µg/L	-3.6820 ppb	18:31:41
3	Sb 206.836†	30.3	8.6	7.7272 µg/L	7.7272 ppb	18:31:41
3	Se 196.026†	16.5	-10.2	-9.5147 µg/L	-9.5147 ppb	18:31:41
3	SiO2†	2719.8	35.7	6.4472 µg/L	6.4472 ppb	18:31:20
3	Si 251.611†	404.2	-5.7	-0.3876 µg/L	-0.3876 ppb	18:31:41
3	Sn 189.927†	-0.4	7.0	2.7189 µg/L	2.7189 ppb	18:31:41
3	Ti 334.940†	-584.8	-28.2	-0.0663 µg/L	-0.0663 ppb	18:31:20
3	Tl 190.801†	-37.5	-4.7	-4.6240 µg/L	-4.6240 ppb	18:31:41
3	U 409.014†	15.9	22.2	2.0166 µg/L	2.0166 ppb	18:31:20
3	V 292.402†	67.1	-42.9	-0.4946 µg/L	-0.4946 ppb	18:31:20
3	Zn 213.857†	829.7	-149.9	-3.4582 µg/L	-3.4582 ppb	18:31:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2023854.9	96.691 %	0.2985			0.31%
Sc RADIAL	96051.1	99.2 %	0.08			0.08%
Y 371.029	1386328.8	96.752 %	0.2603			0.27%
Ag 328.068†	-53.1	-0.4271 µg/L	0.21018	-0.4271 ppb	0.21018	49.21%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.8	0.7969 µg/L	12.03809	0.7969 ppb	12.03809	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.4	5.0341 µg/L	0.85583	5.0341 ppb	0.85583	17.00%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-18.2	-0.8391 µg/L	0.35558	-0.8391 ppb	0.35558	42.38%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.0	-0.0434 µg/L	0.12598	-0.0434 ppb	0.12598	290.47%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	41.0	0.0241 µg/L	0.02538	0.0241 ppb	0.02538	105.46%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-10.4	-3.7735 µg/L	0.89573	-3.7735 ppb	0.89573	23.74%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.8	-0.0687 µg/L	0.09984	-0.0687 ppb	0.09984	145.41%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-9.6	-0.4095 µg/L	0.21547	-0.4095 ppb	0.21547	52.62%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		-8.7	-0.1895 µg/L	0.31612	-0.1895 ppb	0.31612 166.85%
Cu	324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
		66.2	0.4377 µg/L	0.16307	0.4377 ppb	0.16307 37.26%
Fe	238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
		2.3	27.540 µg/L	7.5031	27.540 ppb	7.5031 27.24%
K	766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
		-52.7	-24.587 µg/L	29.4416	-24.587 ppb	29.4416 119.75%
Mg	279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
		0.4	5.0501 µg/L	8.55983	5.0501 ppb	8.55983 169.50%
Mn	257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
		-12.9	-0.0376 µg/L	0.00901	-0.0376 ppb	0.00901 23.99%
Mo	202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
		19.3	1.9150 µg/L	0.13419	1.9150 ppb	0.13419 7.01%
Na	589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
		26.6	13.293 µg/L	11.7966	13.293 ppb	11.7966 88.75%
Ni	231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
		6.6	0.3717 µg/L	0.34450	0.3717 ppb	0.34450 92.69%
P	214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
		11.9	19.787 µg/L	10.1860	19.787 ppb	10.1860 51.48%
Pb	220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
		-1.3	-0.3451 µg/L	0.69273	-0.3451 ppb	0.69273 200.72%
S	181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
		-0.5	-1.4700 µg/L	2.64025	-1.4700 ppb	2.64025 179.62%
Sb	206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
		8.7	7.8368 µg/L	0.62932	7.8368 ppb	0.62932 8.03%
Se	196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
		-5.2	-4.8231 µg/L	4.61150	-4.8231 ppb	4.61150 95.61%
SiO2†		QC value within limits for Se 196.026	Recovery = Not calculated			
		35.3	6.3728 µg/L	4.50723	6.3728 ppb	4.50723 70.73%
Si	251.611†	QC value within limits for SiO2	Recovery = Not calculated			
		3.6	0.2474 µg/L	0.55064	0.2474 ppb	0.55064 222.54%
Sn	189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
		7.2	2.8070 µg/L	0.75277	2.8070 ppb	0.75277 26.82%
Sr	421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
		-7.7	-0.0459 µg/L	0.19978	-0.0459 ppb	0.19978 435.57%
Ti	334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
		41.1	0.0958 µg/L	0.14207	0.0958 ppb	0.14207 148.37%
Tl	190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
		1.7	1.7121 µg/L	6.50392	1.7121 ppb	6.50392 379.88%
U	409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
		22.4	2.0295 µg/L	1.26757	2.0295 ppb	1.26757 62.46%
V	292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
		-32.5	-0.3708 µg/L	0.28845	-0.3708 ppb	0.28845 77.79%
Zn	213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
		-128.4	-2.9613 µg/L	0.43030	-2.9613 ppb	0.43030 14.53%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

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

Autosampler Location: 7
 Date Collected: 3/16/2010 18:46:40
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96722.7	96722.7	99.9 %		18:47:13
1	Al 396.153Radial†	10556.6	10683.0	5088.6 µg/L	5088.6 ppb	18:47:13
1	Ca 317.933Radial†	14283.9	13908.3	5061.5 µg/L	5061.5 ppb	18:47:13
1	Fe 238.204 Radial†	446.2	434.5	5150.4 µg/L	5150.4 ppb	18:47:34
1	K 766.490 Radial†	11217.1	10739.3	5011.9 µg/L	5011.9 ppb	18:47:13
1	Mg 279.077 IEC†	395.7	388.0	5118.3 µg/L	5118.3 ppb	18:47:34
1	Na 589.592 Radial†	20936.6	20770.2	10367 µg/L	10367 ppb	18:47:13
1	Sr 421.552†	86230.1	86149.1	512.15 µg/L	512.15 ppb	18:47:13
1	Sc 361.383	2039867.0	2039867.0	97.456 %		18:48:37
1	Y 371.029	1392516.8	1392516.8	97.184 %		18:48:37
1	Ag 328.068†	62585.9	64679.6	523.22 µg/L	523.22 ppb	18:48:43
1	As 188.979†	345.3	357.6	526.29 µg/L	526.29 ppb	18:49:04
1	B 249.677†	11380.9	11378.6	514.55 µg/L	514.55 ppb	18:48:43
1	Ba 233.527†	23305.7	23922.4	524.13 µg/L	524.13 ppb	18:48:43
1	Be 313.107†	859349.5	882937.7	518.58 µg/L	518.58 ppb	18:48:37
1	Cd 226.502†	21225.5	21950.1	521.70 µg/L	521.70 ppb	18:48:43
1	Co 228.616†	11968.3	12232.6	524.94 µg/L	524.94 ppb	18:48:43
1	Cr 267.716†	23842.3	24384.3	530.67 µg/L	530.67 ppb	18:48:43
1	Cu 324.752†	83077.0	80868.6	529.17 µg/L	529.17 ppb	18:48:43
1	Mn 257.610†	170830.0	175975.7	528.85 µg/L	528.85 ppb	18:48:37
1	Mo 202.031†	5329.4	5463.3	540.80 µg/L	540.80 ppb	18:49:04
1	Ni 231.604†	9460.3	9330.4	522.76 µg/L	522.76 ppb	18:48:43
1	P 214.914†	1836.6	1612.1	2626.1 µg/L	2626.1 ppb	18:49:04
1	Pb 220.353†	2001.3	2023.3	531.10 µg/L	531.10 ppb	18:49:04
1	S 181.975 Axial†	339.5	325.8	1036.8 µg/L	1036.8 ppb	18:49:04
1	Sb 206.836†	606.1	599.2	537.29 µg/L	537.29 ppb	18:49:04
1	Se 196.026†	570.4	558.0	536.49 µg/L	536.49 ppb	18:49:04
1	SiO2†	33069.6	31153.0	5624.2 µg/L	5624.2 ppb	18:48:43
1	Si 251.611†	38081.4	38651.2	2627.7 µg/L	2627.7 ppb	18:48:43
1	Sn 189.927†	1338.1	1380.5	537.96 µg/L	537.96 ppb	18:49:04
1	Ti 334.940†	215703.7	221910.9	518.59 µg/L	518.59 ppb	18:48:37
1	Tl 190.801†	491.9	538.9	531.26 µg/L	531.26 ppb	18:49:04
1	U 409.014†	5630.8	5783.6	524.12 µg/L	524.12 ppb	18:48:43
1	V 292.402†	43602.3	44628.0	532.08 µg/L	532.08 ppb	18:48:43
1	Zn 213.857†	23484.8	23088.9	527.90 µg/L	527.90 ppb	18:48:43
2	Sc RADIAL	96376.6	96376.6	99.6 %		18:47:39
2	Al 396.153Radial†	10485.6	10649.7	5073.0 µg/L	5073.0 ppb	18:47:39
2	Ca 317.933Radial†	14254.3	13929.9	5069.4 µg/L	5069.4 ppb	18:47:39
2	Fe 238.204 Radial†	452.6	442.6	5245.5 µg/L	5245.5 ppb	18:48:00
2	K 766.490 Radial†	11237.9	10800.6	5040.4 µg/L	5040.4 ppb	18:47:39
2	Mg 279.077 IEC†	393.9	387.5	5112.5 µg/L	5112.5 ppb	18:48:00
2	Na 589.592 Radial†	20908.7	20817.4	10390 µg/L	10390 ppb	18:47:39
2	Sr 421.552†	85983.0	86210.9	512.51 µg/L	512.51 ppb	18:47:39
2	Sc 361.383	2036886.3	2036886.3	97.314 %		18:49:11
2	Y 371.029	1390862.0	1390862.0	97.068 %		18:49:11
2	Ag 328.068†	62277.0	64456.2	521.42 µg/L	521.42 ppb	18:49:16
2	As 188.979†	350.2	363.1	534.41 µg/L	534.41 ppb	18:49:37
2	B 249.677†	11361.8	11376.0	514.38 µg/L	514.38 ppb	18:49:16
2	Ba 233.527†	23208.6	23857.6	522.71 µg/L	522.71 ppb	18:49:16
2	Be 313.107†	861174.3	886103.2	520.44 µg/L	520.44 ppb	18:49:11
2	Cd 226.502†	21159.0	21913.6	520.83 µg/L	520.83 ppb	18:49:16
2	Co 228.616†	11921.0	12202.0	523.61 µg/L	523.61 ppb	18:49:16
2	Cr 267.716†	23763.0	24338.7	529.68 µg/L	529.68 ppb	18:49:16
2	Cu 324.752†	82694.1	80599.9	527.43 µg/L	527.43 ppb	18:49:16
2	Mn 257.610†	170934.5	176339.6	529.95 µg/L	529.95 ppb	18:49:11
2	Mo 202.031†	5218.4	5357.3	530.32 µg/L	530.32 ppb	18:49:37
2	Ni 231.604†	9457.4	9341.5	523.39 µg/L	523.39 ppb	18:49:16
2	P 214.914†	1802.1	1579.4	2571.9 µg/L	2571.9 ppb	18:49:37
2	Pb 220.353†	1971.3	1995.6	523.78 µg/L	523.78 ppb	18:49:37

2	S 181.975 Axial†	338.2	325.0	1034.4 µg/L	1034.4 ppb	18:49:37
2	Sb 206.836†	599.0	592.8	531.40 µg/L	531.40 ppb	18:49:37
2	Se 196.026†	562.6	550.8	530.08 µg/L	530.08 ppb	18:49:37
2	SiO2†	32967.0	31097.2	5614.2 µg/L	5614.2 ppb	18:49:16
2	Si 251.611†	37959.3	38583.0	2623.0 µg/L	2623.0 ppb	18:49:16
2	Sn 189.927†	1311.8	1355.5	528.23 µg/L	528.23 ppb	18:49:37
2	Ti 334.940†	215835.5	222370.2	519.66 µg/L	519.66 ppb	18:49:11
2	Tl 190.801†	490.7	538.4	530.86 µg/L	530.86 ppb	18:49:37
2	U 409.014†	5698.2	5861.3	531.16 µg/L	531.16 ppb	18:49:16
2	V 292.402†	43403.1	44488.8	530.35 µg/L	530.35 ppb	18:49:16
2	Zn 213.857†	23409.3	23046.5	526.92 µg/L	526.92 ppb	18:49:16
3	Sc RADIAL	96961.3	96961.3	100 %		18:48:05
3	Al 396.153Radial†	10510.2	10610.7	5056.1 µg/L	5056.1 ppb	18:48:05
3	Ca 317.933Radial†	14346.7	13935.8	5071.5 µg/L	5071.5 ppb	18:48:05
3	Fe 238.204 Radial†	446.5	433.8	5140.6 µg/L	5140.6 ppb	18:48:26
3	K 766.490 Radial†	11312.6	10807.1	5043.5 µg/L	5043.5 ppb	18:48:05
3	Mg 279.077 IEC†	391.1	382.4	5043.2 µg/L	5043.2 ppb	18:48:26
3	Na 589.592 Radial†	21059.5	20841.4	10402 µg/L	10402 ppb	18:48:05
3	Sr 421.552†	86519.2	86225.3	512.60 µg/L	512.60 ppb	18:48:05
3	Sc 361.383	2029515.5	2029515.5	96.962 %		18:49:44
3	Y 371.029	1385729.1	1385729.1	96.710 %		18:49:44
3	Ag 328.068†	58430.6	60721.6	491.06 µg/L	491.06 ppb	18:49:50
3	As 188.979†	295.5	308.0	453.19 µg/L	453.19 ppb	18:50:10
3	B 249.677†	10566.2	10597.9	479.01 µg/L	479.01 ppb	18:49:50
3	Ba 233.527†	21129.9	21800.4	477.62 µg/L	477.62 ppb	18:49:50
3	Be 313.107†	794825.7	820889.6	482.14 µg/L	482.14 ppb	18:49:44
3	Cd 226.502†	19140.0	19910.3	473.17 µg/L	473.17 ppb	18:49:50
3	Co 228.616†	10696.7	10983.8	471.28 µg/L	471.28 ppb	18:49:50
3	Cr 267.716†	20703.1	21271.6	462.94 µg/L	462.94 ppb	18:49:50
3	Cu 324.752†	75108.7	73085.5	478.33 µg/L	478.33 ppb	18:49:50
3	Mn 257.610†	157948.4	163584.5	491.61 µg/L	491.61 ppb	18:49:44
3	Mo 202.031†	4362.2	4493.7	444.86 µg/L	444.86 ppb	18:50:10
3	Ni 231.604†	8548.2	8439.2	472.84 µg/L	472.84 ppb	18:49:50
3	P 214.914†	1584.6	1361.8	2214.4 µg/L	2214.4 ppb	18:50:10
3	Pb 220.353†	1712.5	1735.9	455.61 µg/L	455.61 ppb	18:50:10
3	S 181.975 Axial†	303.5	290.5	924.55 µg/L	924.55 ppb	18:50:10
3	Sb 206.836†	518.2	511.7	458.42 µg/L	458.42 ppb	18:50:10
3	Se 196.026†	499.3	487.6	470.37 µg/L	470.37 ppb	18:50:10
3	SiO2†	30593.1	28771.9	5194.4 µg/L	5194.4 ppb	18:49:50
3	Si 251.611†	35056.1	35730.4	2429.1 µg/L	2429.1 ppb	18:49:50
3	Sn 189.927†	1072.9	1114.0	434.20 µg/L	434.20 ppb	18:50:10
3	Ti 334.940†	198284.9	205075.2	479.23 µg/L	479.23 ppb	18:49:44
3	Tl 190.801†	433.4	481.1	474.54 µg/L	474.54 ppb	18:50:10
3	U 409.014†	5012.4	5175.3	468.88 µg/L	468.88 ppb	18:49:50
3	V 292.402†	38709.5	39810.2	474.26 µg/L	474.26 ppb	18:49:50
3	Zn 213.857†	21112.9	20765.6	474.71 µg/L	474.71 ppb	18:49:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035422.9	97.244 %	0.2546			0.26%
Sc RADIAL	96686.9	99.9 %	0.30			0.30%
Y 371.029	1389702.7	96.987 %	0.2470			0.25%
Ag 328.068†	63285.8	511.90 µg/L	18.069	511.90 ppb	18.069	3.53%
QC value within limits for Ag 328.068 Recovery = 102.38%						
Al 396.153Radial†	10647.8	5072.6 µg/L	16.27	5072.6 ppb	16.27	0.32%
QC value within limits for Al 396.153Radial Recovery = 101.45%						
As 188.979†	342.9	504.63 µg/L	44.734	504.63 ppb	44.734	8.86%
QC value within limits for As 188.979 Recovery = 100.93%						
B 249.677†	11117.5	502.64 µg/L	20.467	502.64 ppb	20.467	4.07%
QC value within limits for B 249.677 Recovery = 100.53%						
Ba 233.527†	23193.5	508.16 µg/L	26.452	508.16 ppb	26.452	5.21%
QC value within limits for Ba 233.527 Recovery = 101.63%						
Be 313.107†	863310.2	507.05 µg/L	21.596	507.05 ppb	21.596	4.26%
QC value within limits for Be 313.107 Recovery = 101.41%						
Ca 317.933Radial†	13924.7	5067.5 µg/L	5.27	5067.5 ppb	5.27	0.10%
QC value within limits for Ca 317.933Radial Recovery = 101.35%						
Cd 226.502†	21258.0	505.23 µg/L	27.771	505.23 ppb	27.771	5.50%
QC value within limits for Cd 226.502 Recovery = 101.05%						
Co 228.616†	11806.1	506.61 µg/L	30.602	506.61 ppb	30.602	6.04%

QC value within limits for Co 228.616	Recovery = 101.32%				
Cr 267.716†	23331.5	507.76 µg/L	38.823	507.76 ppb	38.823 7.65%
QC value within limits for Cr 267.716	Recovery = 101.55%				
Cu 324.752†	78184.7	511.64 µg/L	28.863	511.64 ppb	28.863 5.64%
QC value within limits for Cu 324.752	Recovery = 102.33%				
Fe 238.204 Radial†	436.9	5178.8 µg/L	57.91	5178.8 ppb	57.91 1.12%
QC value within limits for Fe 238.204 Radial	Recovery = 103.58%				
K 766.490 Radial†	10782.3	5031.9 µg/L	17.44	5031.9 ppb	17.44 0.35%
QC value within limits for K 766.490 Radial	Recovery = 100.64%				
Mg 279.077 IEC†	386.0	5091.3 µg/L	41.78	5091.3 ppb	41.78 0.82%
QC value within limits for Mg 279.077 IEC	Recovery = 101.83%				
Mn 257.610†	171966.6	516.80 µg/L	21.823	516.80 ppb	21.823 4.22%
QC value within limits for Mn 257.610	Recovery = 103.36%				
Mo 202.031†	5104.8	505.33 µg/L	52.627	505.33 ppb	52.627 10.41%
QC value within limits for Mo 202.031	Recovery = 101.07%				
Na 589.592 Radial†	20809.7	10386 µg/L	18.1	10386 ppb	18.1 0.17%
QC value within limits for Na 589.592 Radial	Recovery = 103.86%				
Ni 231.604†	9037.0	506.33 µg/L	29.004	506.33 ppb	29.004 5.73%
QC value within limits for Ni 231.604	Recovery = 101.27%				
P 214.914†	1517.8	2470.8 µg/L	223.70	2470.8 ppb	223.70 9.05%
QC value within limits for P 214.914	Recovery = 98.83%				
Pb 220.353†	1918.3	503.50 µg/L	41.632	503.50 ppb	41.632 8.27%
QC value within limits for Pb 220.353	Recovery = 100.70%				
S 181.975 Axial†	313.8	998.59 µg/L	64.127	998.59 ppb	64.127 6.42%
QC value within limits for S 181.975 Axial	Recovery = 99.86%				
Sb 206.836†	567.9	509.04 µg/L	43.932	509.04 ppb	43.932 8.63%
QC value within limits for Sb 206.836	Recovery = 101.81%				
Se 196.026†	532.1	512.31 µg/L	36.464	512.31 ppb	36.464 7.12%
QC value within limits for Se 196.026	Recovery = 102.46%				
SiO2†	30340.7	5477.6 µg/L	245.32	5477.6 ppb	245.32 4.48%
QC value within limits for SiO2	Recovery = 102.43%				
Si 251.611†	37654.9	2559.9 µg/L	113.33	2559.9 ppb	113.33 4.43%
QC value within limits for Si 251.611	Recovery = 102.40%				
Sn 189.927†	1283.3	500.13 µg/L	57.304	500.13 ppb	57.304 11.46%
QC value within limits for Sn 189.927	Recovery = 100.03%				
Sr 421.552†	86195.1	512.42 µg/L	0.241	512.42 ppb	0.241 0.05%
QC value within limits for Sr 421.552	Recovery = 102.48%				
Ti 334.940†	216452.1	505.83 µg/L	23.042	505.83 ppb	23.042 4.56%
QC value within limits for Ti 334.940	Recovery = 101.17%				
Tl 190.801†	519.5	512.22 µg/L	32.633	512.22 ppb	32.633 6.37%
QC value within limits for Tl 190.801	Recovery = 102.44%				
U 409.014†	5606.7	508.05 µg/L	34.106	508.05 ppb	34.106 6.71%
QC value within limits for U 409.014	Recovery = 101.61%				
V 292.402†	42975.7	512.23 µg/L	32.895	512.23 ppb	32.895 6.42%
QC value within limits for V 292.402	Recovery = 102.45%				
Zn 213.857†	22300.4	509.85 µg/L	30.428	509.85 ppb	30.428 5.97%
QC value within limits for Zn 213.857	Recovery = 101.97%				

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 18:50:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94841.3	94841.3	98.0 %		18:50:50
1	Al 396.153Radial†	-95.8	21.5	10.222 µg/L	10.222 ppb	18:50:50
1	Ca 317.933Radial†	358.2	-19.7	-7.1658 µg/L	-7.1658 ppb	18:51:10
1	Fe 238.204 Radial†	14.5	2.9	33.718 µg/L	33.718 ppb	18:51:10
1	K 766.490 Radial†	426.2	-50.4	-23.510 µg/L	-23.510 ppb	18:50:50
1	Mg 279.077 IEC†	10.1	2.3	29.973 µg/L	29.973 ppb	18:51:10
1	Na 589.592 Radial†	166.9	-10.3	-5.1286 µg/L	-5.1286 ppb	18:50:50
1	Sr 421.552†	137.5	0.9	0.0051 µg/L	0.0051 ppb	18:50:50
1	Sc 361.383	2044309.8	2044309.8	97.669 %		18:52:12
1	Y 371.029	1401997.0	1401997.0	97.845 %		18:52:12
1	Ag 328.068†	-538.7	-91.4	-0.7337 µg/L	-0.7337 ppb	18:52:18
1	As 188.979†	-2.5	0.7	1.0208 µg/L	1.0208 ppb	18:52:38
1	B 249.677†	289.0	-3.5	-0.1751 µg/L	-0.1751 ppb	18:52:38
1	Ba 233.527†	-6.7	1.5	0.0323 µg/L	0.0323 ppb	18:52:38
1	Be 313.107†	-997.7	137.3	0.0806 µg/L	0.0806 ppb	18:52:18
1	Cd 226.502†	-178.2	-11.8	-0.2852 µg/L	-0.2852 ppb	18:52:38
1	Co 228.616†	41.5	-5.6	-0.2388 µg/L	-0.2388 ppb	18:52:38
1	Cr 267.716†	72.1	-6.4	-0.1389 µg/L	-0.1389 ppb	18:52:38
1	Cu 324.752†	4309.9	36.1	0.2420 µg/L	0.2420 ppb	18:52:18
1	Mn 257.610†	-647.7	23.8	0.0715 µg/L	0.0715 ppb	18:52:38
1	Mo 202.031†	24.1	19.6	1.9386 µg/L	1.9386 ppb	18:52:38
1	Ni 231.604†	366.2	-2.0	-0.1093 µg/L	-0.1093 ppb	18:52:38
1	P 214.914†	268.9	2.9	4.8237 µg/L	4.8237 ppb	18:52:38
1	Pb 220.353†	26.1	-3.4	-0.8890 µg/L	-0.8890 ppb	18:52:38
1	S 181.975 Axial†	24.8	2.8	8.9497 µg/L	8.9497 ppb	18:52:38
1	Sb 206.836†	29.9	7.9	7.0509 µg/L	7.0509 ppb	18:52:38
1	Se 196.026†	16.9	-10.1	-9.3620 µg/L	-9.3620 ppb	18:52:38
1	SiO2†	2679.3	-36.5	-6.5834 µg/L	-6.5834 ppb	18:52:38
1	Si 251.611†	410.5	-3.8	-0.2552 µg/L	-0.2552 ppb	18:52:38
1	Sn 189.927†	-6.9	0.3	0.1250 µg/L	0.1250 ppb	18:52:38
1	Ti 334.940†	-514.5	50.5	0.1156 µg/L	0.1156 ppb	18:52:18
1	Tl 190.801†	-31.5	1.8	1.7774 µg/L	1.7774 ppb	18:52:38
1	U 409.014†	-3.2	2.6	0.2301 µg/L	0.2301 ppb	18:52:18
1	V 292.402†	75.9	-34.6	-0.3980 µg/L	-0.3980 ppb	18:52:18
1	Zn 213.857†	861.7	-126.6	-2.9174 µg/L	-2.9174 ppb	18:52:38
2	Sc RADIAL	95710.0	95710.0	98.9 %		18:51:15
2	Al 396.153Radial†	-122.1	-4.2	-2.0262 µg/L	-2.0262 ppb	18:51:15
2	Ca 317.933Radial†	370.2	-10.9	-3.9805 µg/L	-3.9805 ppb	18:51:36
2	Fe 238.204 Radial†	15.7	3.9	46.555 µg/L	46.555 ppb	18:51:36
2	K 766.490 Radial†	356.7	-124.6	-58.144 µg/L	-58.144 ppb	18:51:15
2	Mg 279.077 IEC†	8.0	0.1	1.4314 µg/L	1.4314 ppb	18:51:36
2	Na 589.592 Radial†	168.5	-10.2	-5.0814 µg/L	-5.0814 ppb	18:51:15
2	Sr 421.552†	96.1	-42.3	-0.2512 µg/L	-0.2512 ppb	18:51:15
2	Sc 361.383	2048876.3	2048876.3	97.887 %		18:52:44
2	Y 371.029	1402389.8	1402389.8	97.873 %		18:52:44
2	Ag 328.068†	-551.4	-103.1	-0.8306 µg/L	-0.8306 ppb	18:52:50
2	As 188.979†	-6.2	-3.1	-4.5399 µg/L	-4.5399 ppb	18:53:10
2	B 249.677†	280.3	-13.0	-0.6152 µg/L	-0.6152 ppb	18:53:10
2	Ba 233.527†	-6.8	1.5	0.0311 µg/L	0.0311 ppb	18:53:10
2	Be 313.107†	-1021.7	115.1	0.0676 µg/L	0.0676 ppb	18:52:50
2	Cd 226.502†	-172.7	-5.8	-0.1433 µg/L	-0.1433 ppb	18:53:10
2	Co 228.616†	46.3	-0.8	-0.0309 µg/L	-0.0309 ppb	18:53:10
2	Cr 267.716†	67.0	-11.8	-0.2564 µg/L	-0.2564 ppb	18:53:10
2	Cu 324.752†	4381.0	98.9	0.6544 µg/L	0.6544 ppb	18:52:50
2	Mn 257.610†	-651.2	21.7	0.0678 µg/L	0.0678 ppb	18:53:10
2	Mo 202.031†	25.2	20.7	2.0468 µg/L	2.0468 ppb	18:53:10
2	Ni 231.604†	370.0	1.1	0.0607 µg/L	0.0607 ppb	18:53:10
2	P 214.914†	273.4	6.9	11.422 µg/L	11.422 ppb	18:53:10
2	Pb 220.353†	31.8	2.3	0.5977 µg/L	0.5977 ppb	18:53:10

2	S 181.975 Axial†	21.6	-0.5	-1.4487 µg/L	-1.4487 ppb	18:53:10
2	Sb 206.836†	26.5	4.3	3.8754 µg/L	3.8754 ppb	18:53:10
2	Se 196.026†	26.1	-0.6	-0.4409 µg/L	-0.4409 ppb	18:53:10
2	SiO2†	2682.4	-39.4	-7.1218 µg/L	-7.1218 ppb	18:53:10
2	Si 251.611†	420.7	5.7	0.3846 µg/L	0.3846 ppb	18:53:10
2	Sn 189.927†	-7.9	-0.6	-0.2467 µg/L	-0.2467 ppb	18:53:10
2	Ti 334.940†	-513.7	52.4	0.1224 µg/L	0.1224 ppb	18:52:50
2	Tl 190.801†	-32.4	1.0	1.0239 µg/L	1.0239 ppb	18:53:10
2	U 409.014†	11.5	17.6	1.5895 µg/L	1.5895 ppb	18:52:50
2	V 292.402†	28.5	-83.2	-0.9715 µg/L	-0.9715 ppb	18:52:50
2	Zn 213.857†	858.0	-132.4	-3.0514 µg/L	-3.0514 ppb	18:53:10
3	Sc RADIAL	95661.0	95661.0	98.8 %		18:51:41
3	Al 396.153Radial†	-101.4	16.7	7.9488 µg/L	7.9488 ppb	18:51:41
3	Ca 317.933Radial†	366.3	-14.7	-5.3462 µg/L	-5.3462 ppb	18:52:02
3	Fe 238.204 Radial†	11.0	-0.8	-9.6570 µg/L	-9.6570 ppb	18:52:02
3	K 766.490 Radial†	363.2	-117.9	-55.012 µg/L	-55.012 ppb	18:51:41
3	Mg 279.077 IEC†	7.1	-0.8	-10.695 µg/L	-10.695 ppb	18:52:02
3	Na 589.592 Radial†	144.4	-34.5	-17.207 µg/L	-17.207 ppb	18:51:41
3	Sr 421.552†	105.4	-32.8	-0.1950 µg/L	-0.1950 ppb	18:51:41
3	Sc 361.383	2059738.4	2059738.4	98.406 %		18:53:17
3	Y 371.029	1410128.4	1410128.4	98.413 %		18:53:17
3	Ag 328.068†	-637.2	-187.3	-1.5056 µg/L	-1.5056 ppb	18:53:22
3	As 188.979†	-3.2	0.0	0.0404 µg/L	0.0404 ppb	18:53:43
3	B 249.677†	282.7	-12.1	-0.5433 µg/L	-0.5433 ppb	18:53:43
3	Ba 233.527†	-11.1	-2.8	-0.0622 µg/L	-0.0622 ppb	18:53:43
3	Be 313.107†	-1003.3	139.3	0.0818 µg/L	0.0818 ppb	18:53:22
3	Cd 226.502†	-162.1	5.8	0.1392 µg/L	0.1392 ppb	18:53:43
3	Co 228.616†	51.1	3.9	0.1692 µg/L	0.1692 ppb	18:53:43
3	Cr 267.716†	73.3	-5.8	-0.1252 µg/L	-0.1252 ppb	18:53:43
3	Cu 324.752†	4309.8	2.9	0.0172 µg/L	0.0172 ppb	18:53:22
3	Mn 257.610†	-665.1	11.1	0.0336 µg/L	0.0336 ppb	18:53:43
3	Mo 202.031†	22.5	17.8	1.7576 µg/L	1.7576 ppb	18:53:43
3	Ni 231.604†	368.0	-2.9	-0.1626 µg/L	-0.1626 ppb	18:53:43
3	P 214.914†	269.8	1.8	2.9734 µg/L	2.9734 ppb	18:53:43
3	Pb 220.353†	26.9	-2.9	-0.7474 µg/L	-0.7474 ppb	18:53:43
3	S 181.975 Axial†	26.6	4.5	14.447 µg/L	14.447 ppb	18:53:43
3	Sb 206.836†	26.4	4.1	3.6906 µg/L	3.6906 ppb	18:53:43
3	Se 196.026†	17.1	-9.9	-9.3519 µg/L	-9.3519 ppb	18:53:43
3	SiO2†	2703.2	-32.8	-5.9143 µg/L	-5.9143 ppb	18:53:43
3	Si 251.611†	412.4	-5.0	-0.3390 µg/L	-0.3390 ppb	18:53:43
3	Sn 189.927†	-3.8	3.5	1.3774 µg/L	1.3774 ppb	18:53:43
3	Ti 334.940†	-540.7	27.8	0.0658 µg/L	0.0658 ppb	18:53:22
3	Tl 190.801†	-37.4	-3.9	-3.7654 µg/L	-3.7654 ppb	18:53:43
3	U 409.014†	-14.2	-8.6	-0.7778 µg/L	-0.7778 ppb	18:53:22
3	V 292.402†	98.6	-12.1	-0.1295 µg/L	-0.1295 ppb	18:53:22
3	Zn 213.857†	842.4	-152.8	-3.5172 µg/L	-3.5172 ppb	18:53:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2050974.9	97.987 %	0.3786			0.39%
Sc RADIAL	95404.1	98.6 %	0.50			0.51%
Y 371.029	1404838.4	98.044 %	0.3200			0.33%
Ag 328.068†	-127.2	-1.0233 µg/L	0.42044	-1.0233 ppb	0.42044	41.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.4	5.3814 µg/L	6.51507	5.3814 ppb	6.51507	121.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.8	-1.1596 µg/L	2.96819	-1.1596 ppb	2.96819	255.98%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-9.5	-0.4445 µg/L	0.23610	-0.4445 ppb	0.23610	53.11%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.1	0.0004 µg/L	0.05421	0.0004 ppb	0.05421	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	130.6	0.0767 µg/L	0.00790	0.0767 ppb	0.00790	10.31%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-15.1	-5.4975 µg/L	1.59803	-5.4975 ppb	1.59803	29.07%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-3.9	-0.0964 µg/L	0.21605	-0.0964 ppb	0.21605	224.02%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0335 µg/L	0.20400	-0.0335 ppb	0.20400	609.48%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-8.0	-0.1735 µg/L	0.07213	-0.1735 ppb	0.07213	41.58%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	46.0	0.3046 µg/L	0.32317	0.3046 ppb	0.32317	106.11%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.0	23.539 µg/L	29.4560	23.539 ppb	29.4560	125.14%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-97.6	-45.555 µg/L	19.1556	-45.555 ppb	19.1556	42.05%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.5	6.9033 µg/L	20.87871	6.9033 ppb	20.87871	302.45%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	18.9	0.0576 µg/L	0.02086	0.0576 ppb	0.02086	36.19%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	19.3	1.9144 µg/L	0.14610	1.9144 ppb	0.14610	7.63%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-18.3	-9.1391 µg/L	6.98736	-9.1391 ppb	6.98736	76.46%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-1.3	-0.0704 µg/L	0.11665	-0.0704 ppb	0.11665	165.68%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	3.9	6.4062 µg/L	4.44093	6.4062 ppb	4.44093	69.32%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-1.3	-0.3462 µg/L	0.82057	-0.3462 ppb	0.82057	236.99%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.3	7.3160 µg/L	8.07280	7.3160 ppb	8.07280	110.34%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.4	4.8723 µg/L	1.88900	4.8723 ppb	1.88900	38.77%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-6.9	-6.3849 µg/L	5.14771	-6.3849 ppb	5.14771	80.62%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-36.2	-6.5398 µg/L	0.60491	-6.5398 ppb	0.60491	9.25%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-1.0	-0.0699 µg/L	0.39580	-0.0699 ppb	0.39580	566.40%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.1	0.4186 µg/L	0.85094	0.4186 ppb	0.85094	203.29%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-24.7	-0.1470 µg/L	0.13472	-0.1470 ppb	0.13472	91.63%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	43.6	0.1013 µg/L	0.03091	0.1013 ppb	0.03091	30.52%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.3	-0.3214 µg/L	3.00634	-0.3214 ppb	3.00634	935.43%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	3.9	0.3472 µg/L	1.18797	0.3472 ppb	1.18797	342.12%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-43.3	-0.4997 µg/L	0.43010	-0.4997 ppb	0.43010	86.08%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-137.3	-3.1620 µg/L	0.31482	-3.1620 ppb	0.31482	9.96%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 3/16/2010 19:24:50

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610A.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/16/2010 19:24:53

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	97333.8	97333.8	101 %		19:25:24
1	Al 396.153Radial†	10447.7	10508.4	5005.4 µg/L	5005.4 ppb	19:25:24
1	Ca 317.933Radial†	14088.6	13624.4	4958.2 µg/L	4958.2 ppb	19:25:24
1	Fe 238.204 Radial†	441.4	427.0	5061.3 µg/L	5061.3 ppb	19:25:44
1	K 766.490 Radial†	11084.8	10537.3	4917.6 µg/L	4917.6 ppb	19:25:24
1	Mg 279.077 IEC†	387.2	377.1	4974.8 µg/L	4974.8 ppb	19:25:44
1	Na 589.592 Radial†	21088.4	20789.6	10376 µg/L	10376 ppb	19:25:24
1	Sr 421.552†	85877.4	85256.7	506.84 µg/L	506.84 ppb	19:25:24
1	Sc 361.383	2040064.8	2040064.8	97.466 %		19:26:48
1	Y 371.029	1392583.6	1392583.6	97.188 %		19:26:48
1	Ag 328.068†	61765.6	63831.8	516.35 µg/L	516.35 ppb	19:26:53
1	As 188.979†	345.5	357.7	526.52 µg/L	526.52 ppb	19:27:14
1	B 249.677†	11261.5	11255.0	508.97 µg/L	508.97 ppb	19:26:53
1	Ba 233.527†	22903.7	23507.6	515.05 µg/L	515.05 ppb	19:26:53
1	Be 313.107†	841632.2	864674.3	507.85 µg/L	507.85 ppb	19:26:48
1	Cd 226.502†	20904.3	21618.4	513.83 µg/L	513.83 ppb	19:26:53
1	Co 228.616†	11754.9	12012.5	515.50 µg/L	515.50 ppb	19:26:53
1	Cr 267.716†	23488.2	24018.6	522.71 µg/L	522.71 ppb	19:26:53
1	Cu 324.752†	81983.8	79738.8	521.77 µg/L	521.77 ppb	19:26:53
1	Mn 257.610†	166961.6	171989.7	516.87 µg/L	516.87 ppb	19:26:48
1	Mo 202.031†	5263.9	5395.6	534.10 µg/L	534.10 ppb	19:27:14
1	Ni 231.604†	9362.9	9229.5	517.11 µg/L	517.11 ppb	19:26:53
1	P 214.914†	1815.7	1590.6	2591.1 µg/L	2591.1 ppb	19:27:14
1	Pb 220.353†	2001.9	2023.8	531.21 µg/L	531.21 ppb	19:27:14
1	S 181.975 Axial†	339.7	326.0	1037.4 µg/L	1037.4 ppb	19:27:14
1	Sb 206.836†	604.1	597.1	535.37 µg/L	535.37 ppb	19:27:14
1	Se 196.026†	574.8	562.5	540.54 µg/L	540.54 ppb	19:27:14
1	SiO2†	32621.6	30690.0	5540.7 µg/L	5540.7 ppb	19:26:53
1	Si 251.611†	37576.0	38128.9	2592.2 µg/L	2592.2 ppb	19:26:53
1	Sn 189.927†	1326.3	1368.2	533.18 µg/L	533.18 ppb	19:27:14
1	Ti 334.940†	211363.2	217436.1	508.13 µg/L	508.13 ppb	19:26:48
1	Tl 190.801†	490.6	537.5	529.83 µg/L	529.83 ppb	19:27:14
1	U 409.014†	5564.2	5714.7	517.88 µg/L	517.88 ppb	19:26:53
1	V 292.402†	42971.5	43976.5	524.32 µg/L	524.32 ppb	19:26:53
1	Zn 213.857†	23156.3	22749.6	520.14 µg/L	520.14 ppb	19:26:53
2	Sc RADIAL	97550.9	97550.9	101 %		19:25:50
2	Al 396.153Radial†	10405.9	10443.9	4974.9 µg/L	4974.9 ppb	19:25:50
2	Ca 317.933Radial†	14143.0	13647.1	4966.5 µg/L	4966.5 ppb	19:25:50
2	Fe 238.204 Radial†	444.5	429.0	5085.2 µg/L	5085.2 ppb	19:26:10
2	K 766.490 Radial†	11146.0	10573.5	4934.4 µg/L	4934.4 ppb	19:25:50
2	Mg 279.077 IEC†	391.9	380.8	5023.8 µg/L	5023.8 ppb	19:26:10
2	Na 589.592 Radial†	21078.8	20733.4	10348 µg/L	10348 ppb	19:25:50
2	Sr 421.552†	86037.1	85225.1	506.65 µg/L	506.65 ppb	19:25:50
2	Sc 361.383	2065662.1	2065662.1	98.689 %		19:27:21
2	Y 371.029	1409086.2	1409086.2	98.340 %		19:27:21
2	Ag 328.068†	61954.5	63237.9	511.55 µg/L	511.55 ppb	19:27:27
2	As 188.979†	341.0	348.8	513.27 µg/L	513.27 ppb	19:27:47

2	B 249.677†	11333.3	11184.5	505.75 µg/L	505.75 ppb	19:27:27
2	Ba 233.527†	22990.2	23304.1	510.59 µg/L	510.59 ppb	19:27:27
2	Be 313.107†	850648.3	863109.7	506.93 µg/L	506.93 ppb	19:27:21
2	Cd 226.502†	20990.6	21440.1	509.58 µg/L	509.58 ppb	19:27:27
2	Co 228.616†	11807.8	11916.6	511.37 µg/L	511.37 ppb	19:27:27
2	Cr 267.716†	23514.0	23746.2	516.79 µg/L	516.79 ppb	19:27:27
2	Cu 324.752†	82160.9	78875.9	516.14 µg/L	516.14 ppb	19:27:27
2	Mn 257.610†	168850.5	171781.0	516.24 µg/L	516.24 ppb	19:27:21
2	Mo 202.031†	5161.9	5225.3	517.25 µg/L	517.25 ppb	19:27:47
2	Ni 231.604†	9371.9	9119.5	510.95 µg/L	510.95 ppb	19:27:27
2	P 214.914†	1796.2	1547.7	2520.2 µg/L	2520.2 ppb	19:27:47
2	Pb 220.353†	1961.2	1957.1	513.68 µg/L	513.68 ppb	19:27:47
2	S 181.975 Axial†	335.3	317.2	1009.6 µg/L	1009.6 ppb	19:27:47
2	Sb 206.836†	589.1	574.2	514.71 µg/L	514.71 ppb	19:27:47
2	Se 196.026†	559.3	539.4	518.91 µg/L	518.91 ppb	19:27:47
2	SiO2†	32792.9	30448.8	5497.1 µg/L	5497.1 ppb	19:27:27
2	Si 251.611†	37740.4	37817.7	2571.0 µg/L	2571.0 ppb	19:27:27
2	Sn 189.927†	1295.0	1319.6	514.27 µg/L	514.27 ppb	19:27:47
2	Ti 334.940†	213672.6	217088.9	507.32 µg/L	507.32 ppb	19:27:21
2	Tl 190.801†	475.6	516.0	508.86 µg/L	508.86 ppb	19:27:47
2	U 409.014†	5652.3	5733.3	519.56 µg/L	519.56 ppb	19:27:27
2	V 292.402†	43018.5	43477.8	518.29 µg/L	518.29 ppb	19:27:27
2	Zn 213.857†	23225.9	22525.7	515.01 µg/L	515.01 ppb	19:27:27
3	Sc RADIAL	98065.1	98065.1	101 %		19:26:16
3	Al 396.153Radial†	10471.1	10454.1	4981.5 µg/L	4981.5 ppb	19:26:16
3	Ca 317.933Radial†	14163.5	13593.8	4947.1 µg/L	4947.1 ppb	19:26:16
3	Fe 238.204 Radial†	447.1	429.3	5087.1 µg/L	5087.1 ppb	19:26:36
3	K 766.490 Radial†	11247.0	10615.2	4953.9 µg/L	4953.9 ppb	19:26:16
3	Mg 279.077 IEC†	395.2	382.0	5038.3 µg/L	5038.3 ppb	19:26:36
3	Na 589.592 Radial†	21105.0	20649.7	10306 µg/L	10306 ppb	19:26:16
3	Sr 421.552†	86120.4	84859.7	504.48 µg/L	504.48 ppb	19:26:16
3	Sc 361.383	2055645.2	2055645.2	98.210 %		19:27:54
3	Y 371.029	1404356.6	1404356.6	98.010 %		19:27:54
3	Ag 328.068†	58061.4	59579.7	481.83 µg/L	481.83 ppb	19:28:00
3	As 188.979†	287.6	296.1	435.54 µg/L	435.54 ppb	19:28:20
3	B 249.677†	10539.3	10432.0	471.50 µg/L	471.50 ppb	19:28:00
3	Ba 233.527†	20946.8	21336.9	467.47 µg/L	467.47 ppb	19:28:00
3	Be 313.107†	787966.1	803485.2	471.91 µg/L	471.91 ppb	19:27:54
3	Cd 226.502†	19021.1	19538.4	464.32 µg/L	464.32 ppb	19:28:00
3	Co 228.616†	10616.6	10762.0	461.77 µg/L	461.77 ppb	19:28:00
3	Cr 267.716†	20616.9	20912.4	455.12 µg/L	455.12 ppb	19:28:00
3	Cu 324.752†	74417.9	71397.5	467.29 µg/L	467.29 ppb	19:28:00
3	Mn 257.610†	156502.5	160041.7	480.96 µg/L	480.96 ppb	19:27:54
3	Mo 202.031†	4307.3	4380.7	433.67 µg/L	433.67 ppb	19:28:20
3	Ni 231.604†	8469.9	8247.4	462.09 µg/L	462.09 ppb	19:28:00
3	P 214.914†	1573.2	1329.4	2161.8 µg/L	2161.8 ppb	19:28:20
3	Pb 220.353†	1681.5	1682.0	441.46 µg/L	441.46 ppb	19:28:20
3	S 181.975 Axial†	298.0	280.9	894.10 µg/L	894.10 ppb	19:28:20
3	Sb 206.836†	508.4	495.0	443.39 µg/L	443.39 ppb	19:28:20
3	Se 196.026†	494.1	475.8	459.13 µg/L	459.13 ppb	19:28:20
3	SiO2†	30462.4	28237.8	5097.9 µg/L	5097.9 ppb	19:28:00
3	Si 251.611†	34877.1	35088.6	2385.5 µg/L	2385.5 ppb	19:28:00
3	Sn 189.927†	1070.6	1097.5	427.78 µg/L	427.78 ppb	19:28:20
3	Ti 334.940†	196556.0	200715.4	469.03 µg/L	469.03 ppb	19:27:54
3	Tl 190.801†	424.8	466.6	460.26 µg/L	460.26 ppb	19:28:20
3	U 409.014†	4976.9	5073.4	459.65 µg/L	459.65 ppb	19:28:00
3	V 292.402†	38444.5	39032.8	464.98 µg/L	464.98 ppb	19:28:00
3	Zn 213.857†	20945.5	20318.3	464.49 µg/L	464.49 ppb	19:28:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2053790.7	98.122 %	0.6163			0.63%
Sc RADIAL	97650.0	101 %	0.4			0.38%
Y 371.029	1402008.8	97.846 %	0.5931			0.61%
Ag 328.068†	62216.5	503.24 µg/L	18.701	503.24 ppb	18.701	3.72%
QC value within limits for Ag 328.068 Recovery = 100.65%						
Al 396.153Radial†	10468.8	4987.3 µg/L	16.03	4987.3 ppb	16.03	0.32%
QC value within limits for Al 396.153Radial Recovery = 99.75%						
As 188.979†	334.2	491.78 µg/L	49.149	491.78 ppb	49.149	9.99%

QC value within limits for As 188.979 Recovery = 98.36%						
B 249.677†	10957.2	495.41 µg/L	20.765	495.41 ppb	20.765	4.19%
QC value within limits for B 249.677 Recovery = 99.08%						
Ba 233.527†	22716.2	497.70 µg/L	26.276	497.70 ppb	26.276	5.28%
QC value within limits for Ba 233.527 Recovery = 99.54%						
Be 313.107†	843756.4	495.57 µg/L	20.488	495.57 ppb	20.488	4.13%
QC value within limits for Be 313.107 Recovery = 99.11%						
Ca 317.933Radial†	13621.8	4957.3 µg/L	9.74	4957.3 ppb	9.74	0.20%
QC value within limits for Ca 317.933Radial Recovery = 99.15%						
Cd 226.502†	20865.6	495.91 µg/L	27.436	495.91 ppb	27.436	5.53%
QC value within limits for Cd 226.502 Recovery = 99.18%						
Co 228.616†	11563.7	496.21 µg/L	29.902	496.21 ppb	29.902	6.03%
QC value within limits for Co 228.616 Recovery = 99.24%						
Cr 267.716†	22892.4	498.21 µg/L	37.433	498.21 ppb	37.433	7.51%
QC value within limits for Cr 267.716 Recovery = 99.64%						
Cu 324.752†	76670.7	501.73 µg/L	29.959	501.73 ppb	29.959	5.97%
QC value within limits for Cu 324.752 Recovery = 100.35%						
Fe 238.204 Radial†	428.4	5077.9 µg/L	14.39	5077.9 ppb	14.39	0.28%
QC value within limits for Fe 238.204 Radial Recovery = 101.56%						
K 766.490 Radial†	10575.3	4935.3 µg/L	18.20	4935.3 ppb	18.20	0.37%
QC value within limits for K 766.490 Radial Recovery = 98.71%						
Mg 279.077 IEC†	380.0	5012.3 µg/L	33.29	5012.3 ppb	33.29	0.66%
QC value within limits for Mg 279.077 IEC Recovery = 100.25%						
Mn 257.610†	167937.5	504.69 µg/L	20.555	504.69 ppb	20.555	4.07%
QC value within limits for Mn 257.610 Recovery = 100.94%						
Mo 202.031†	5000.5	495.01 µg/L	53.784	495.01 ppb	53.784	10.87%
QC value within limits for Mo 202.031 Recovery = 99.00%						
Na 589.592 Radial†	20724.2	10344 µg/L	35.1	10344 ppb	35.1	0.34%
QC value within limits for Na 589.592 Radial Recovery = 103.44%						
Ni 231.604†	8865.5	496.71 µg/L	30.143	496.71 ppb	30.143	6.07%
QC value within limits for Ni 231.604 Recovery = 99.34%						
P 214.914†	1489.2	2424.4 µg/L	230.18	2424.4 ppb	230.18	9.49%
QC value within limits for P 214.914 Recovery = 96.98%						
Pb 220.353†	1887.6	495.45 µg/L	47.575	495.45 ppb	47.575	9.60%
QC value within limits for Pb 220.353 Recovery = 99.09%						
S 181.975 Axial†	308.0	980.34 µg/L	75.969	980.34 ppb	75.969	7.75%
QC value within limits for S 181.975 Axial Recovery = 98.03%						
Sb 206.836†	555.4	497.83 µg/L	48.262	497.83 ppb	48.262	9.69%
QC value within limits for Sb 206.836 Recovery = 99.57%						
Se 196.026†	525.9	506.20 µg/L	42.167	506.20 ppb	42.167	8.33%
QC value within limits for Se 196.026 Recovery = 101.24%						
SiO2†	29792.2	5378.6 µg/L	244.01	5378.6 ppb	244.01	4.54%
QC value within limits for SiO2 Recovery = 100.58%						
Si 251.611†	37011.8	2516.2 µg/L	113.72	2516.2 ppb	113.72	4.52%
QC value within limits for Si 251.611 Recovery = 100.65%						
Sn 189.927†	1261.8	491.74 µg/L	56.191	491.74 ppb	56.191	11.43%
QC value within limits for Sn 189.927 Recovery = 98.35%						
Sr 421.552†	85113.8	505.99 µg/L	1.312	505.99 ppb	1.312	0.26%
QC value within limits for Sr 421.552 Recovery = 101.20%						
Ti 334.940†	211746.8	494.83 µg/L	22.345	494.83 ppb	22.345	4.52%
QC value within limits for Ti 334.940 Recovery = 98.97%						
Tl 190.801†	506.7	499.65 µg/L	35.688	499.65 ppb	35.688	7.14%
QC value within limits for Tl 190.801 Recovery = 99.93%						
U 409.014†	5507.1	499.03 µg/L	34.115	499.03 ppb	34.115	6.84%
QC value within limits for U 409.014 Recovery = 99.81%						
V 292.402†	42162.4	502.53 µg/L	32.663	502.53 ppb	32.663	6.50%
QC value within limits for V 292.402 Recovery = 100.51%						
Zn 213.857†	21864.5	499.88 µg/L	30.758	499.88 ppb	30.758	6.15%
QC value within limits for Zn 213.857 Recovery = 99.98%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 19:28:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95995.9	95995.9	99.2 %		19:29:00
1	Al 396.153Radial†	-145.6	-27.5	-13.150 µg/L	-13.150 ppb	19:29:00
1	Ca 317.933Radial†	377.7	-4.4	-1.6153 µg/L	-1.6153 ppb	19:29:20
1	Fe 238.204 Radial†	12.4	0.6	6.6154 µg/L	6.6154 ppb	19:29:20
1	K 766.490 Radial†	429.2	-52.6	-24.539 µg/L	-24.539 ppb	19:29:00
1	Mg 279.077 IEC†	8.8	0.9	12.126 µg/L	12.126 ppb	19:29:20
1	Na 589.592 Radial†	173.7	-5.5	-2.7297 µg/L	-2.7297 ppb	19:29:00
1	Sr 421.552†	127.9	-10.5	-0.0624 µg/L	-0.0624 ppb	19:29:00
1	Sc 361.383	2061088.0	2061088.0	98.470 %		19:30:22
1	Y 371.029	1409781.9	1409781.9	98.389 %		19:30:22
1	Ag 328.068†	-493.5	-40.9	-0.3307 µg/L	-0.3307 ppb	19:30:28
1	As 188.979†	-1.9	1.3	1.9544 µg/L	1.9544 ppb	19:30:48
1	B 249.677†	290.0	-4.8	-0.2214 µg/L	-0.2214 ppb	19:30:28
1	Ba 233.527†	-6.4	1.9	0.0419 µg/L	0.0419 ppb	19:30:48
1	Be 313.107†	-872.2	273.0	0.1604 µg/L	0.1604 ppb	19:30:28
1	Cd 226.502†	-158.2	10.0	0.2354 µg/L	0.2354 ppb	19:30:48
1	Co 228.616†	48.6	1.3	0.0590 µg/L	0.0590 ppb	19:30:48
1	Cr 267.716†	83.9	5.0	0.1076 µg/L	0.1076 ppb	19:30:28
1	Cu 324.752†	4333.7	24.3	0.1601 µg/L	0.1601 ppb	19:30:28
1	Mn 257.610†	-672.1	4.4	0.0128 µg/L	0.0128 ppb	19:30:48
1	Mo 202.031†	25.3	20.6	2.0403 µg/L	2.0403 ppb	19:30:48
1	Ni 231.604†	361.9	-9.4	-0.5283 µg/L	-0.5283 ppb	19:30:48
1	P 214.914†	270.0	1.8	2.9097 µg/L	2.9097 ppb	19:30:48
1	Pb 220.353†	29.5	-0.2	-0.0388 µg/L	-0.0388 ppb	19:30:48
1	S 181.975 Axial†	20.3	-2.0	-6.2635 µg/L	-6.2635 ppb	19:30:48
1	Sb 206.836†	22.4	-0.0	0.0268 µg/L	0.0268 ppb	19:30:48
1	Se 196.026†	16.5	-10.6	-9.9254 µg/L	-9.9254 ppb	19:30:48
1	SiO2†	2699.2	-38.6	-6.9688 µg/L	-6.9688 ppb	19:30:28
1	Si 251.611†	395.5	-22.4	-1.5240 µg/L	-1.5240 ppb	19:30:48
1	Sn 189.927†	-3.1	4.2	1.6545 µg/L	1.6545 ppb	19:30:48
1	Ti 334.940†	-553.5	15.2	0.0345 µg/L	0.0345 ppb	19:30:28
1	Tl 190.801†	-37.1	-3.5	-3.4390 µg/L	-3.4390 ppb	19:30:48
1	U 409.014†	-20.3	-14.9	-1.3495 µg/L	-1.3495 ppb	19:30:28
1	V 292.402†	78.2	-32.9	-0.3743 µg/L	-0.3743 ppb	19:30:28
1	Zn 213.857†	851.6	-144.0	-3.3142 µg/L	-3.3142 ppb	19:30:48
2	Sc RADIAL	96176.3	96176.3	99.4 %		19:29:26
2	Al 396.153Radial†	-99.4	19.3	9.1843 µg/L	9.1843 ppb	19:29:26
2	Ca 317.933Radial†	378.6	-4.3	-1.5602 µg/L	-1.5602 ppb	19:29:46
2	Fe 238.204 Radial†	12.7	0.8	9.9203 µg/L	9.9203 ppb	19:29:46
2	K 766.490 Radial†	434.6	-48.0	-22.399 µg/L	-22.399 ppb	19:29:26
2	Mg 279.077 IEC†	4.5	-3.5	-45.492 µg/L	-45.492 ppb	19:29:46
2	Na 589.592 Radial†	180.7	1.3	0.6393 µg/L	0.6393 ppb	19:29:26
2	Sr 421.552†	151.9	13.4	0.0799 µg/L	0.0799 ppb	19:29:26
2	Sc 361.383	2046846.2	2046846.2	97.790 %		19:30:55
2	Y 371.029	1400688.6	1400688.6	97.754 %		19:30:55
2	Ag 328.068†	-541.1	-93.1	-0.7500 µg/L	-0.7500 ppb	19:31:00
2	As 188.979†	-1.6	1.6	2.3317 µg/L	2.3317 ppb	19:31:21
2	B 249.677†	295.8	3.1	0.1363 µg/L	0.1363 ppb	19:31:00
2	Ba 233.527†	-3.0	5.3	0.1155 µg/L	0.1155 ppb	19:31:21
2	Be 313.107†	-1064.2	70.6	0.0415 µg/L	0.0415 ppb	19:31:00
2	Cd 226.502†	-160.0	6.9	0.1636 µg/L	0.1636 ppb	19:31:21
2	Co 228.616†	40.4	-6.8	-0.2900 µg/L	-0.2900 ppb	19:31:21
2	Cr 267.716†	65.0	-13.8	-0.2997 µg/L	-0.2997 ppb	19:31:00
2	Cu 324.752†	4288.6	8.8	0.0595 µg/L	0.0595 ppb	19:31:00
2	Mn 257.610†	-670.9	0.9	0.0064 µg/L	0.0064 ppb	19:31:21
2	Mo 202.031†	22.1	17.5	1.7294 µg/L	1.7294 ppb	19:31:21
2	Ni 231.604†	366.9	-1.7	-0.0971 µg/L	-0.0971 ppb	19:31:21
2	P 214.914†	270.0	3.7	6.1368 µg/L	6.1368 ppb	19:31:21
2	Pb 220.353†	36.9	7.6	1.9876 µg/L	1.9876 ppb	19:31:21

2	S 181.975 Axial†	17.0	-5.2	-16.536 µg/L	-16.536 ppb	19:31:21
2	Sb 206.836†	29.8	7.8	6.9638 µg/L	6.9638 ppb	19:31:21
2	Se 196.026†	25.0	-1.8	-1.6069 µg/L	-1.6069 ppb	19:31:21
2	SiO2†	2670.8	-48.6	-8.7729 µg/L	-8.7729 ppb	19:31:00
2	Si 251.611†	394.8	-20.3	-1.3822 µg/L	-1.3822 ppb	19:31:21
2	Sn 189.927†	-7.5	-0.2	-0.0731 µg/L	-0.0731 ppb	19:31:21
2	Ti 334.940†	-579.2	-15.1	-0.0317 µg/L	-0.0317 ppb	19:31:00
2	Tl 190.801†	-32.5	0.9	0.8712 µg/L	0.8712 ppb	19:31:21
2	U 409.014†	5.2	11.1	1.0071 µg/L	1.0071 ppb	19:31:00
2	V 292.402†	70.4	-40.3	-0.4637 µg/L	-0.4637 ppb	19:31:00
2	Zn 213.857†	854.5	-135.0	-3.1064 µg/L	-3.1064 ppb	19:31:21
3	Sc RADIAL	96769.3	96769.3	100.0 %		19:29:52
3	Al 396.153Radial†	-107.6	11.7	5.5407 µg/L	5.5407 ppb	19:29:52
3	Ca 317.933Radial†	380.8	-4.4	-1.6145 µg/L	-1.6145 ppb	19:30:12
3	Fe 238.204 Radial†	14.4	2.5	29.435 µg/L	29.435 ppb	19:30:12
3	K 766.490 Radial†	452.5	-32.8	-15.308 µg/L	-15.308 ppb	19:29:52
3	Mg 279.077 IEC†	6.4	-1.6	-21.450 µg/L	-21.450 ppb	19:30:12
3	Na 589.592 Radial†	194.0	13.5	6.7325 µg/L	6.7325 ppb	19:29:52
3	Sr 421.552†	176.5	37.1	0.2208 µg/L	0.2208 ppb	19:29:52
3	Sc 361.383	2062871.9	2062871.9	98.555 %		19:31:27
3	Y 371.029	1412085.8	1412085.8	98.549 %		19:31:27
3	Ag 328.068†	-550.9	-98.8	-0.7921 µg/L	-0.7921 ppb	19:31:32
3	As 188.979†	-4.7	-1.5	-2.1903 µg/L	-2.1903 ppb	19:31:53
3	B 249.677†	310.6	15.8	0.6996 µg/L	0.6996 ppb	19:31:32
3	Ba 233.527†	-3.2	5.2	0.1128 µg/L	0.1128 ppb	19:31:53
3	Be 313.107†	-997.3	146.9	0.0863 µg/L	0.0863 ppb	19:31:32
3	Cd 226.502†	-160.5	7.8	0.1814 µg/L	0.1814 ppb	19:31:53
3	Co 228.616†	37.9	-9.6	-0.4106 µg/L	-0.4106 ppb	19:31:53
3	Cr 267.716†	74.6	-4.5	-0.0991 µg/L	-0.0991 ppb	19:31:32
3	Cu 324.752†	4310.8	-2.7	-0.0121 µg/L	-0.0121 ppb	19:31:32
3	Mn 257.610†	-663.8	13.4	0.0435 µg/L	0.0435 ppb	19:31:53
3	Mo 202.031†	27.0	22.3	2.2095 µg/L	2.2095 ppb	19:31:53
3	Ni 231.604†	368.9	-2.6	-0.1442 µg/L	-0.1442 ppb	19:31:53
3	P 214.914†	267.0	-1.5	-2.5250 µg/L	-2.5250 ppb	19:31:53
3	Pb 220.353†	25.9	-3.9	-1.0076 µg/L	-1.0076 ppb	19:31:53
3	S 181.975 Axial†	19.8	-2.4	-7.7048 µg/L	-7.7048 ppb	19:31:53
3	Sb 206.836†	32.1	9.8	8.7961 µg/L	8.7961 ppb	19:31:53
3	Se 196.026†	16.8	-10.3	-9.5243 µg/L	-9.5243 ppb	19:31:53
3	SiO2†	2693.1	-47.2	-8.5249 µg/L	-8.5249 ppb	19:31:32
3	Si 251.611†	408.4	-9.7	-0.6579 µg/L	-0.6579 ppb	19:31:53
3	Sn 189.927†	-8.0	-0.7	-0.2621 µg/L	-0.2621 ppb	19:31:53
3	Ti 334.940†	-483.6	86.5	0.2040 µg/L	0.2040 ppb	19:31:32
3	Tl 190.801†	-27.6	6.1	5.9673 µg/L	5.9673 ppb	19:31:53
3	U 409.014†	-21.1	-15.6	-1.4186 µg/L	-1.4186 ppb	19:31:32
3	V 292.402†	92.9	-18.0	-0.2011 µg/L	-0.2011 ppb	19:31:32
3	Zn 213.857†	820.5	-176.3	-4.0591 µg/L	-4.0591 ppb	19:31:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2056935.4	98.272 %	0.4196			0.43%
Sc RADIAL	96313.8	99.5 %	0.42			0.42%
Y 371.029	1407518.8	98.231 %	0.4206			0.43%
Ag 328.068†	-77.6	-0.6243 µg/L	0.25509	-0.6243 ppb	0.25509	40.86%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.2	0.5251 µg/L	11.98212	0.5251 ppb	11.98212	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.5	0.6986 µg/L	2.50897	0.6986 ppb	2.50897	359.16%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	4.7	0.2048 µg/L	0.46432	0.2048 ppb	0.46432	226.68%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.1	0.0901 µg/L	0.04173	0.0901 ppb	0.04173	46.32%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	163.5	0.0961 µg/L	0.06005	0.0961 ppb	0.06005	62.51%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-4.4	-1.5966 µg/L	0.03158	-1.5966 ppb	0.03158	1.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.2	0.1935 µg/L	0.03740	0.1935 ppb	0.03740	19.33%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.0	-0.2139 µg/L	0.24388	-0.2139 ppb	0.24388	114.02%

Cr	267.716†	-4.5	-0.0971 µg/L	0.20362	-0.0971 ppb	0.20362	209.77%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	10.2	0.0692 µg/L	0.08650	0.0692 ppb	0.08650	125.03%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.3	15.324 µg/L	12.3320	15.324 ppb	12.3320	80.48%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-44.5	-20.749 µg/L	4.8318	-20.749 ppb	4.8318	23.29%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-1.4	-18.272 µg/L	28.9405	-18.272 ppb	28.9405	158.39%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	6.2	0.0209 µg/L	0.01982	0.0209 ppb	0.01982	94.85%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	20.1	1.9930 µg/L	0.24352	1.9930 ppb	0.24352	12.22%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	3.1	1.5474 µg/L	4.79600	1.5474 ppb	4.79600	309.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-4.6	-0.2565 µg/L	0.23654	-0.2565 ppb	0.23654	92.21%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	1.3	2.1738 µg/L	4.37753	2.1738 ppb	4.37753	201.37%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	1.2	0.3137 µg/L	1.52838	0.3137 ppb	1.52838	487.17%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-3.2	-10.168 µg/L	5.5618	-10.168 ppb	5.5618	54.70%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	5.9	5.2622 µg/L	4.62565	5.2622 ppb	4.62565	87.90%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-7.5	-7.0189 µg/L	4.69120	-7.0189 ppb	4.69120	66.84%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-44.8	-8.0889 µg/L	0.97792	-8.0889 ppb	0.97792	12.09%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-17.5	-1.1880 µg/L	0.46455	-1.1880 ppb	0.46455	39.10%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.1	0.4398 µg/L	1.05623	0.4398 ppb	1.05623	240.18%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	13.4	0.0794 µg/L	0.14159	0.0794 ppb	0.14159	178.27%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	28.9	0.0690 µg/L	0.12154	0.0690 ppb	0.12154	176.27%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.2	1.1332 µg/L	4.70860	1.1332 ppb	4.70860	415.52%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-6.4	-0.5870 µg/L	1.38097	-0.5870 ppb	1.38097	235.26%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-30.4	-0.3464 µg/L	0.13353	-0.3464 ppb	0.13353	38.55%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-151.8	-3.4932 µg/L	0.50097	-3.4932 ppb	0.50097	14.34%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/16/2010 19:51:25

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\COPY.SIF

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/16/2010 19:51:27

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
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Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97839.2	97839.2	101 %		19:52:00
1	Al 396.153Radial†	10640.7	10645.7	5070.8 µg/L	5070.8 ppb	19:52:00
1	Ca 317.933Radial†	14667.9	14125.0	5140.4 µg/L	5140.4 ppb	19:52:00
1	Fe 238.204 Radial†	458.2	441.3	5230.8 µg/L	5230.8 ppb	19:52:21
1	K 766.490 Radial†	11480.4	10871.7	5073.6 µg/L	5073.6 ppb	19:52:00
1	Mg 279.077 IEC†	409.2	396.8	5234.7 µg/L	5234.7 ppb	19:52:21
1	Na 589.592 Radial†	21366.8	20956.7	10460 µg/L	10460 ppb	19:52:00
1	Sr 421.552†	87577.9	86497.8	514.22 µg/L	514.22 ppb	19:52:00
1	Sc 361.383	2076660.3	2076660.3	99.214 %		19:53:25
1	Y 371.029	1416112.1	1416112.1	98.830 %		19:53:25
1	Ag 328.068†	63569.4	64533.1	522.05 µg/L	522.05 ppb	19:53:30
1	As 188.979†	359.2	365.3	537.68 µg/L	537.68 ppb	19:53:51
1	B 249.677†	11637.0	11429.8	516.83 µg/L	516.83 ppb	19:53:30
1	Ba 233.527†	23764.6	23961.2	524.98 µg/L	524.98 ppb	19:53:30
1	Be 313.107†	877065.4	885171.0	519.89 µg/L	519.89 ppb	19:53:25
1	Cd 226.502†	21801.5	22144.7	526.33 µg/L	526.33 ppb	19:53:30
1	Co 228.616†	12190.7	12239.2	525.22 µg/L	525.22 ppb	19:53:30
1	Cr 267.716†	24382.2	24495.1	533.08 µg/L	533.08 ppb	19:53:30
1	Cu 324.752†	84138.2	80427.9	526.30 µg/L	526.30 ppb	19:53:30
1	Mn 257.610†	174563.9	176633.5	530.82 µg/L	530.82 ppb	19:53:25
1	Mo 202.031†	5437.4	5475.4	542.00 µg/L	542.00 ppb	19:53:51
1	Ni 231.604†	9717.0	9417.0	527.62 µg/L	527.62 ppb	19:53:30
1	P 214.914†	1880.1	1622.6	2644.0 µg/L	2644.0 ppb	19:53:51
1	Pb 220.353†	2057.1	2043.2	536.33 µg/L	536.33 ppb	19:53:51
1	S 181.975 Axial†	345.5	325.7	1036.6 µg/L	1036.6 ppb	19:53:51
1	Sb 206.836†	615.1	597.2	535.49 µg/L	535.49 ppb	19:53:51
1	Se 196.026†	593.8	571.2	549.09 µg/L	549.09 ppb	19:53:51
1	SiO2†	34250.0	31741.5	5730.5 µg/L	5730.5 ppb	19:53:30
1	Si 251.611†	39432.9	39321.1	2673.2 µg/L	2673.2 ppb	19:53:30
1	Sn 189.927†	1388.4	1406.9	548.25 µg/L	548.25 ppb	19:53:51
1	Ti 334.940†	220245.2	222566.9	520.11 µg/L	520.11 ppb	19:53:25
1	Tl 190.801†	508.4	546.5	538.75 µg/L	538.75 ppb	19:53:51
1	U 409.014†	5765.4	5816.8	527.12 µg/L	527.12 ppb	19:53:30
1	V 292.402†	44405.1	44644.5	532.28 µg/L	532.28 ppb	19:53:30
1	Zn 213.857†	23932.9	23113.6	528.44 µg/L	528.44 ppb	19:53:30
2	Sc RADIAL	97597.7	97597.7	101 %		19:52:27
2	Al 396.153Radial†	10677.1	10707.9	5100.7 µg/L	5100.7 ppb	19:52:27
2	Ca 317.933Radial†	14638.5	14131.8	5142.8 µg/L	5142.8 ppb	19:52:27
2	Fe 238.204 Radial†	457.4	441.7	5234.9 µg/L	5234.9 ppb	19:52:47
2	K 766.490 Radial†	11391.8	10811.9	5045.7 µg/L	5045.7 ppb	19:52:27
2	Mg 279.077 IEC†	406.3	395.0	5210.1 µg/L	5210.1 ppb	19:52:47
2	Na 589.592 Radial†	21351.9	20994.2	10478 µg/L	10478 ppb	19:52:27
2	Sr 421.552†	87702.3	86835.5	516.23 µg/L	516.23 ppb	19:52:27
2	Sc 361.383	2082617.3	2082617.3	99.499 %		19:53:58
2	Y 371.029	1422493.4	1422493.4	99.276 %		19:53:58
2	Ag 328.068†	63035.2	63812.9	516.23 µg/L	516.23 ppb	19:54:04
2	As 188.979†	355.6	360.6	530.71 µg/L	530.71 ppb	19:54:24

2	B 249.677†	11573.8	11332.8	512.41 µg/L	512.41 ppb	19:54:04
2	Ba 233.527†	23587.1	23714.3	519.57 µg/L	519.57 ppb	19:54:04
2	Cd 313.107†	880164.4	885757.0	520.23 µg/L	520.23 ppb	19:53:58
2	Cd 226.502†	21584.8	21864.1	519.65 µg/L	519.65 ppb	19:54:04
2	Co 228.616†	12091.5	12104.3	519.42 µg/L	519.42 ppb	19:54:04
2	Cr 267.716†	24127.8	24169.1	525.99 µg/L	525.99 ppb	19:54:04
2	Cu 324.752†	83566.8	79611.1	520.97 µg/L	520.97 ppb	19:54:04
2	Mn 257.610†	175000.5	176569.0	530.63 µg/L	530.63 ppb	19:53:58
2	Mo 202.031†	5336.6	5358.4	530.42 µg/L	530.42 ppb	19:54:24
2	Ni 231.604†	9684.1	9356.0	524.20 µg/L	524.20 ppb	19:54:04
2	P 214.914†	1853.5	1590.4	2590.9 µg/L	2590.9 ppb	19:54:24
2	Pb 220.353†	2025.2	2005.2	526.34 µg/L	526.34 ppb	19:54:24
2	S 181.975 Axial†	350.9	330.2	1050.7 µg/L	1050.7 ppb	19:54:24
2	Sb 206.836†	605.0	585.3	524.77 µg/L	524.77 ppb	19:54:24
2	Se 196.026†	587.2	562.8	541.21 µg/L	541.21 ppb	19:54:24
2	SiO2†	34117.9	31510.1	5688.7 µg/L	5688.7 ppb	19:54:04
2	Si 251.611†	39342.6	39116.7	2659.3 µg/L	2659.3 ppb	19:54:04
2	Sn 189.927†	1347.8	1362.0	530.78 µg/L	530.78 ppb	19:54:24
2	Ti 334.940†	220718.5	222407.6	519.74 µg/L	519.74 ppb	19:53:58
2	Tl 190.801†	494.8	531.4	523.98 µg/L	523.98 ppb	19:54:24
2	U 409.014†	5727.2	5761.9	522.13 µg/L	522.13 ppb	19:54:04
2	V 292.402†	44030.2	44139.7	526.21 µg/L	526.21 ppb	19:54:04
2	Zn 213.857†	23785.0	22896.0	523.46 µg/L	523.46 ppb	19:54:04
3	Sc RADIAL	98144.6	98144.6	101 %		19:52:53
3	Al 396.153Radial†	10606.4	10579.2	5041.1 µg/L	5041.1 ppb	19:52:53
3	Ca 317.933Radial†	14641.9	14054.3	5114.7 µg/L	5114.7 ppb	19:52:53
3	Fe 238.204 Radial†	459.2	440.9	5225.0 µg/L	5225.0 ppb	19:53:13
3	K 766.490 Radial†	11480.9	10836.9	5057.4 µg/L	5057.4 ppb	19:52:53
3	Mg 279.077 IEC†	406.4	392.8	5180.5 µg/L	5180.5 ppb	19:53:13
3	Na 589.592 Radial†	21376.3	20900.3	10431 µg/L	10431 ppb	19:52:53
3	Sr 421.552†	87791.8	86439.2	513.87 µg/L	513.87 ppb	19:52:53
3	Sc 361.383	2081562.8	2081562.8	99.448 %		19:54:31
3	Y 371.029	1420172.1	1420172.1	99.114 %		19:54:31
3	Ag 328.068†	59458.1	60248.0	487.24 µg/L	487.24 ppb	19:54:37
3	As 188.979†	297.0	301.9	444.20 µg/L	444.20 ppb	19:54:57
3	B 249.677†	10822.7	10583.4	478.31 µg/L	478.31 ppb	19:54:37
3	Ba 233.527†	21641.8	21770.3	476.96 µg/L	476.96 ppb	19:54:37
3	Be 313.107†	814231.0	819906.0	481.56 µg/L	481.56 ppb	19:54:31
3	Cd 226.502†	19691.6	19971.4	474.61 µg/L	474.61 ppb	19:54:37
3	Co 228.616†	10914.0	10926.5	468.82 µg/L	468.82 ppb	19:54:37
3	Cr 267.716†	21116.9	21153.8	460.37 µg/L	460.37 ppb	19:54:37
3	Cu 324.752†	76073.3	72118.5	472.03 µg/L	472.03 ppb	19:54:37
3	Mn 257.610†	162229.7	163816.5	492.30 µg/L	492.30 ppb	19:54:31
3	Mo 202.031†	4440.4	4460.0	441.52 µg/L	441.52 ppb	19:54:57
3	Ni 231.604†	8745.0	8416.6	471.57 µg/L	471.57 ppb	19:54:37
3	P 214.914†	1614.4	1351.0	2197.1 µg/L	2197.1 ppb	19:54:57
3	Pb 220.353†	1756.3	1735.9	455.61 µg/L	455.61 ppb	19:54:57
3	S 181.975 Axial†	307.8	286.9	913.20 µg/L	913.20 ppb	19:54:57
3	Sb 206.836†	523.5	503.7	451.29 µg/L	451.29 ppb	19:54:57
3	Se 196.026†	508.1	483.6	466.77 µg/L	466.77 ppb	19:54:57
3	SiO2†	31722.6	29118.8	5257.0 µg/L	5257.0 ppb	19:54:37
3	Si 251.611†	36484.6	36262.9	2465.3 µg/L	2465.3 ppb	19:54:37
3	Sn 189.927†	1107.0	1120.6	436.79 µg/L	436.79 ppb	19:54:57
3	Ti 334.940†	203069.7	204773.3	478.51 µg/L	478.51 ppb	19:54:31
3	Tl 190.801†	445.2	481.8	475.20 µg/L	475.20 ppb	19:54:57
3	U 409.014†	5074.6	5108.5	462.81 µg/L	462.81 ppb	19:54:37
3	V 292.402†	39393.0	39499.2	470.54 µg/L	470.54 ppb	19:54:37
3	Zn 213.857†	21550.1	20660.8	472.31 µg/L	472.31 ppb	19:54:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2080280.1	99.387 %	0.1519			0.15%
Sc RADIAL	97860.5	101 %	0.3			0.28%
Y 371.029	1419592.5	99.073 %	0.2254			0.23%
Ag 328.068†	62864.7	508.51 µg/L	18.644	508.51 ppb	18.644	3.67%
QC value within limits for Ag 328.068 Recovery = 101.70%						
Al 396.153Radial†	10644.3	5070.9 µg/L	29.81	5070.9 ppb	29.81	0.59%
QC value within limits for Al 396.153Radial Recovery = 101.42%						
As 188.979†	342.6	504.20 µg/L	52.079	504.20 ppb	52.079	10.33%

QC value within limits for As 188.979 Recovery = 100.84%							
B 249.677†	11115.3	502.52 µg/L	21.083	502.52 ppb	21.083	4.20%	
QC value within limits for B 249.677 Recovery = 100.50%							
Ba 233.527†	23148.6	507.17 µg/L	26.305	507.17 ppb	26.305	5.19%	
QC value within limits for Ba 233.527 Recovery = 101.43%							
Be 313.107†	863611.4	507.23 µg/L	22.231	507.23 ppb	22.231	4.38%	
QC value within limits for Be 313.107 Recovery = 101.45%							
Ca 317.933Radial†	14103.7	5132.6 µg/L	15.62	5132.6 ppb	15.62	0.30%	
QC value within limits for Ca 317.933Radial Recovery = 102.65%							
Cd 226.502†	21326.7	506.86 µg/L	28.131	506.86 ppb	28.131	5.55%	
QC value within limits for Cd 226.502 Recovery = 101.37%							
Co 228.616†	11756.7	504.49 µg/L	31.023	504.49 ppb	31.023	6.15%	
QC value within limits for Co 228.616 Recovery = 100.90%							
Cr 267.716†	23272.6	506.48 µg/L	40.087	506.48 ppb	40.087	7.91%	
QC value within limits for Cr 267.716 Recovery = 101.30%							
Cu 324.752†	77385.9	506.43 µg/L	29.915	506.43 ppb	29.915	5.91%	
QC value within limits for Cu 324.752 Recovery = 101.29%							
Fe 238.204 Radial†	441.3	5230.3 µg/L	4.97	5230.3 ppb	4.97	0.09%	
QC value within limits for Fe 238.204 Radial Recovery = 104.61%							
K 766.490 Radial†	10840.2	5058.9 µg/L	14.02	5058.9 ppb	14.02	0.28%	
QC value within limits for K 766.490 Radial Recovery = 101.18%							
Mg 279.077 IEC†	394.9	5208.4 µg/L	27.15	5208.4 ppb	27.15	0.52%	
QC value within limits for Mg 279.077 IEC Recovery = 104.17%							
Mn 257.610†	172339.7	517.92 µg/L	22.183	517.92 ppb	22.183	4.28%	
QC value within limits for Mn 257.610 Recovery = 103.58%							
Mo 202.031†	5097.9	504.65 µg/L	54.975	504.65 ppb	54.975	10.89%	
QC value within limits for Mo 202.031 Recovery = 100.93%							
Na 589.592 Radial†	20950.4	10456 µg/L	23.6	10456 ppb	23.6	0.23%	
QC value within limits for Na 589.592 Radial Recovery = 104.56%							
Ni 231.604†	9063.2	507.80 µg/L	31.419	507.80 ppb	31.419	6.19%	
QC value within limits for Ni 231.604 Recovery = 101.56%							
P 214.914†	1521.3	2477.3 µg/L	244.14	2477.3 ppb	244.14	9.85%	
QC value within limits for P 214.914 Recovery = 99.09%							
Pb 220.353†	1928.1	506.09 µg/L	44.002	506.09 ppb	44.002	8.69%	
QC value within limits for Pb 220.353 Recovery = 101.22%							
S 181.975 Axial†	314.3	1000.2 µg/L	75.64	1000.2 ppb	75.64	7.56%	
QC value within limits for S 181.975 Axial Recovery = 100.02%							
Sb 206.836†	562.1	503.85 µg/L	45.837	503.85 ppb	45.837	9.10%	
QC value within limits for Sb 206.836 Recovery = 100.77%							
Se 196.026†	539.2	519.03 µg/L	45.424	519.03 ppb	45.424	8.75%	
QC value within limits for Se 196.026 Recovery = 103.81%							
SiO2†	30790.1	5558.7 µg/L	262.14	5558.7 ppb	262.14	4.72%	
QC value within limits for SiO2 Recovery = 103.95%							
Si 251.611†	38233.6	2599.3 µg/L	116.23	2599.3 ppb	116.23	4.47%	
QC value within limits for Si 251.611 Recovery = 103.97%							
Sn 189.927†	1296.5	505.27 µg/L	59.944	505.27 ppb	59.944	11.86%	
QC value within limits for Sn 189.927 Recovery = 101.05%							
Sr 421.552†	86590.8	514.77 µg/L	1.272	514.77 ppb	1.272	0.25%	
QC value within limits for Sr 421.552 Recovery = 102.95%							
Ti 334.940†	216582.6	506.12 µg/L	23.914	506.12 ppb	23.914	4.72%	
QC value within limits for Ti 334.940 Recovery = 101.22%							
Tl 190.801†	519.9	512.64 µg/L	33.256	512.64 ppb	33.256	6.49%	
QC value within limits for Tl 190.801 Recovery = 102.53%							
U 409.014†	5562.4	504.02 µg/L	35.776	504.02 ppb	35.776	7.10%	
QC value within limits for U 409.014 Recovery = 100.80%							
V 292.402†	42761.1	509.68 µg/L	34.030	509.68 ppb	34.030	6.68%	
QC value within limits for V 292.402 Recovery = 101.94%							
Zn 213.857†	22223.4	508.07 µg/L	31.070	508.07 ppb	31.070	6.12%	
QC value within limits for Zn 213.857 Recovery = 101.61%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 19:55:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94738.0	94738.0	97.9 %		19:55:37
1	Al 396.153Radial†	-96.3	21.0	9.9621 µg/L	9.9621 ppb	19:55:37
1	Ca 317.933Radial†	358.2	-19.4	-7.0564 µg/L	-7.0564 ppb	19:55:57
1	Fe 238.204 Radial†	13.7	2.0	23.843 µg/L	23.843 ppb	19:55:57
1	K 766.490 Radial†	499.0	24.5	11.420 µg/L	11.420 ppb	19:55:37
1	Mg 279.077 IEC†	8.8	1.0	12.563 µg/L	12.563 ppb	19:55:57
1	Na 589.592 Radial†	186.8	10.3	5.1324 µg/L	5.1324 ppb	19:55:37
1	Sr 421.552†	117.4	-19.5	-0.1158 µg/L	-0.1158 ppb	19:55:37
1	Sc 361.383	2029206.5	2029206.5	96.947 %		19:56:59
1	Y 371.029	1387774.3	1387774.3	96.853 %		19:56:59
1	Ag 328.068†	-491.3	-46.6	-0.3806 µg/L	-0.3806 ppb	19:57:05
1	As 188.979†	-1.1	2.1	3.0602 µg/L	3.0602 ppb	19:57:25
1	B 249.677†	318.2	28.9	1.2985 µg/L	1.2985 ppb	19:57:25
1	Ba 233.527†	1.0	9.4	0.2036 µg/L	0.2036 ppb	19:57:25
1	Be 313.107†	-931.9	197.6	0.1160 µg/L	0.1160 ppb	19:57:05
1	Cd 226.502†	-184.0	-19.2	-0.4586 µg/L	-0.4586 ppb	19:57:25
1	Co 228.616†	49.7	3.2	0.1402 µg/L	0.1402 ppb	19:57:25
1	Cr 267.716†	63.9	-14.3	-0.3128 µg/L	-0.3128 ppb	19:57:25
1	Cu 324.752†	4325.6	85.1	0.5606 µg/L	0.5606 ppb	19:57:05
1	Mn 257.610†	-648.1	18.4	0.0560 µg/L	0.0560 ppb	19:57:25
1	Mo 202.031†	26.9	22.6	2.2395 µg/L	2.2395 ppb	19:57:25
1	Ni 231.604†	368.6	3.3	0.1867 µg/L	0.1867 ppb	19:57:25
1	P 214.914†	267.5	3.5	5.8132 µg/L	5.8132 ppb	19:57:25
1	Pb 220.353†	32.7	3.5	0.9336 µg/L	0.9336 ppb	19:57:25
1	S 181.975 Axial†	21.4	-0.4	-1.3484 µg/L	-1.3484 ppb	19:57:25
1	Sb 206.836†	26.3	4.4	3.9387 µg/L	3.9387 ppb	19:57:25
1	Se 196.026†	23.5	-3.0	-2.7947 µg/L	-2.7947 ppb	19:57:25
1	SiO2†	2774.9	82.6	14.906 µg/L	14.906 ppb	19:57:25
1	Si 251.611†	469.4	60.1	4.0872 µg/L	4.0872 ppb	19:57:25
1	Sn 189.927†	0.9	8.3	3.2361 µg/L	3.2361 ppb	19:57:25
1	Ti 334.940†	-429.3	134.4	0.3132 µg/L	0.3132 ppb	19:57:05
1	Tl 190.801†	-33.1	0.0	0.0038 µg/L	0.0038 ppb	19:57:25
1	U 409.014†	-48.8	-44.6	-4.0498 µg/L	-4.0498 ppb	19:57:05
1	V 292.402†	2.5	-109.8	-1.2865 µg/L	-1.2865 ppb	19:57:05
1	Zn 213.857†	880.5	-100.6	-2.3207 µg/L	-2.3207 ppb	19:57:25
2	Sc RADIAL	93645.4	93645.4	96.8 %		19:56:03
2	Al 396.153Radial†	-113.5	2.0	0.9249 µg/L	0.9249 ppb	19:56:03
2	Ca 317.933Radial†	374.0	1.2	0.4546 µg/L	0.4546 ppb	19:56:23
2	Fe 238.204 Radial†	13.0	1.5	17.701 µg/L	17.701 ppb	19:56:23
2	K 766.490 Radial†	494.7	26.0	12.125 µg/L	12.125 ppb	19:56:03
2	Mg 279.077 IEC†	11.0	3.4	45.008 µg/L	45.008 ppb	19:56:23
2	Na 589.592 Radial†	198.4	24.5	12.230 µg/L	12.230 ppb	19:56:03
2	Sr 421.552†	145.7	11.2	0.0667 µg/L	0.0667 ppb	19:56:03
2	Sc 361.383	2036326.4	2036326.4	97.287 %		19:57:31
2	Y 371.029	1394230.9	1394230.9	97.303 %		19:57:31
2	Ag 328.068†	-535.3	-90.0	-0.7233 µg/L	-0.7233 ppb	19:57:37
2	As 188.979†	-2.6	0.5	0.7869 µg/L	0.7869 ppb	19:57:57
2	B 249.677†	307.8	17.1	0.7654 µg/L	0.7654 ppb	19:57:57
2	Ba 233.527†	-10.8	-2.6	-0.0582 µg/L	-0.0582 ppb	19:57:57
2	Be 313.107†	-976.4	155.2	0.0911 µg/L	0.0911 ppb	19:57:37
2	Cd 226.502†	-171.9	-6.1	-0.1462 µg/L	-0.1462 ppb	19:57:57
2	Co 228.616†	45.5	-1.3	-0.0557 µg/L	-0.0557 ppb	19:57:57
2	Cr 267.716†	80.8	2.8	0.0614 µg/L	0.0614 ppb	19:57:57
2	Cu 324.752†	4328.6	72.6	0.4775 µg/L	0.4775 ppb	19:57:37
2	Mn 257.610†	-661.0	7.5	0.0207 µg/L	0.0207 ppb	19:57:57
2	Mo 202.031†	23.7	19.3	1.9083 µg/L	1.9083 ppb	19:57:57
2	Ni 231.604†	367.5	0.8	0.0475 µg/L	0.0475 ppb	19:57:57
2	P 214.914†	280.8	16.2	26.918 µg/L	26.918 ppb	19:57:57
2	Pb 220.353†	29.8	0.5	0.1343 µg/L	0.1343 ppb	19:57:57

2	S 181.975 Axial†	21.8	-0.1	-0.4129 µg/L	-0.4129 ppb	19:57:57
2	Sb 206.836†	27.1	5.1	4.5951 µg/L	4.5951 ppb	19:57:57
2	Se 196.026†	22.2	-4.5	-4.1928 µg/L	-4.1928 ppb	19:57:57
2	SiO2†	2769.1	66.6	12.026 µg/L	12.026 ppb	19:57:57
2	Si 251.611†	513.9	104.2	7.0825 µg/L	7.0825 ppb	19:57:57
2	Sn 189.927†	-5.0	2.3	0.9017 µg/L	0.9017 ppb	19:57:57
2	Ti 334.940†	-443.1	121.8	0.2812 µg/L	0.2812 ppb	19:57:37
2	Tl 190.801†	-33.3	-0.1	-0.0847 µg/L	-0.0847 ppb	19:57:57
2	U 409.014†	-30.5	-25.6	-2.3239 µg/L	-2.3239 ppb	19:57:37
2	V 292.402†	88.1	-21.7	-0.2466 µg/L	-0.2466 ppb	19:57:37
2	Zn 213.857†	875.1	-109.3	-2.5213 µg/L	-2.5213 ppb	19:57:57
3	Sc RADIAL	94860.9	94860.9	98.0 %		19:56:29
3	Al 396.153Radial†	-133.5	-16.9	-8.0813 µg/L	-8.0813 ppb	19:56:29
3	Ca 317.933Radial†	372.2	-5.5	-2.0087 µg/L	-2.0087 ppb	19:56:49
3	Fe 238.204 Radial†	13.4	1.7	20.132 µg/L	20.132 ppb	19:56:49
3	K 766.490 Radial†	417.8	-59.1	-27.580 µg/L	-27.580 ppb	19:56:29
3	Mg 279.077 IEC†	6.0	-1.8	-24.069 µg/L	-24.069 ppb	19:56:49
3	Na 589.592 Radial†	189.4	12.7	6.3217 µg/L	6.3217 ppb	19:56:29
3	Sr 421.552†	152.7	16.3	0.0971 µg/L	0.0971 ppb	19:56:29
3	Sc 361.383	1978977.7	1978977.7	94.547 %		19:58:03
3	Y 371.029	1354847.1	1354847.1	94.555 %		19:58:03
3	Ag 328.068†	-571.1	-143.8	-1.1544 µg/L	-1.1544 ppb	19:58:09
3	As 188.979†	-1.9	1.2	1.8203 µg/L	1.8203 ppb	19:58:29
3	B 249.677†	303.4	21.5	0.9661 µg/L	0.9661 ppb	19:58:29
3	Ba 233.527†	-6.9	1.1	0.0247 µg/L	0.0247 ppb	19:58:29
3	Be 313.107†	-1029.4	70.1	0.0410 µg/L	0.0410 ppb	19:58:09
3	Cd 226.502†	-174.0	-13.4	-0.3203 µg/L	-0.3203 ppb	19:58:29
3	Co 228.616†	41.4	-4.3	-0.1837 µg/L	-0.1837 ppb	19:58:29
3	Cr 267.716†	76.6	0.8	0.0179 µg/L	0.0179 ppb	19:58:29
3	Cu 324.752†	4368.0	243.2	1.5925 µg/L	1.5925 ppb	19:58:09
3	Mn 257.610†	-679.2	-31.4	-0.0916 µg/L	-0.0916 ppb	19:58:29
3	Mo 202.031†	18.8	14.7	1.4585 µg/L	1.4585 ppb	19:58:29
3	Ni 231.604†	374.3	19.0	1.0635 µg/L	1.0635 ppb	19:58:29
3	P 214.914†	272.3	15.6	25.651 µg/L	25.651 ppb	19:58:29
3	Pb 220.353†	26.9	-1.7	-0.4459 µg/L	-0.4459 ppb	19:58:29
3	S 181.975 Axial†	17.9	-3.6	-11.522 µg/L	-11.522 ppb	19:58:29
3	Sb 206.836†	24.6	3.3	2.9564 µg/L	2.9564 ppb	19:58:29
3	Se 196.026†	26.5	0.7	0.7395 µg/L	0.7395 ppb	19:58:29
3	SiO2†	2759.0	138.4	24.981 µg/L	24.981 ppb	19:58:29
3	Si 251.611†	485.8	89.7	6.0984 µg/L	6.0984 ppb	19:58:29
3	Sn 189.927†	-7.2	-0.2	-0.0782 µg/L	-0.0782 ppb	19:58:29
3	Ti 334.940†	-411.6	141.9	0.3336 µg/L	0.3336 ppb	19:58:09
3	Tl 190.801†	-34.5	-2.3	-2.2668 µg/L	-2.2668 ppb	19:58:29
3	U 409.014†	-20.8	-16.2	-1.4697 µg/L	-1.4697 ppb	19:58:09
3	V 292.402†	90.8	-16.3	-0.1847 µg/L	-0.1847 ppb	19:58:09
3	Zn 213.857†	861.9	-97.2	-2.2454 µg/L	-2.2454 ppb	19:58:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2014836.9	96.261 %	1.4934			1.55%
Sc RADIAL	94414.7	97.5 %	0.69			0.71%
Y 371.029	1378950.8	96.237 %	1.4741			1.53%
Ag 328.068†	-93.5	-0.7528 µg/L	0.38775	-0.7528 ppb	0.38775	51.51%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.0	0.9352 µg/L	9.02172	0.9352 ppb	9.02172	964.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.3	1.8891 µg/L	1.13821	1.8891 ppb	1.13821	60.25%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	22.5	1.0100 µg/L	0.26926	1.0100 ppb	0.26926	26.66%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.6	0.0567 µg/L	0.13380	0.0567 ppb	0.13380	235.80%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	141.0	0.0827 µg/L	0.03817	0.0827 ppb	0.03817	46.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-7.9	-2.8702 µg/L	3.82886	-2.8702 ppb	3.82886	133.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-12.9	-0.3084 µg/L	0.15653	-0.3084 ppb	0.15653	50.76%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0330 µg/L	0.16314	-0.0330 ppb	0.16314	493.62%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-3.6	-0.0779 µg/L	0.20462	-0.0779 ppb	0.20462 262.82%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	133.7	0.8769 µg/L	0.62114	0.8769 ppb	0.62114 70.84%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	1.7	20.558 µg/L	3.0931	20.558 ppb	3.0931 15.05%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	-2.9	-1.3450 µg/L	22.72283	-1.3450 ppb	22.72283 >999.9%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	0.8	11.167 µg/L	34.5597	11.167 ppb	34.5597 309.47%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	-1.8	-0.0050 µg/L	0.07708	-0.0050 ppb	0.07708 >999.9%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	18.9	1.8688 µg/L	0.39203	1.8688 ppb	0.39203 20.98%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	15.8	7.8947 µg/L	3.80125	7.8947 ppb	3.80125 48.15%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	7.7	0.4326 µg/L	0.55082	0.4326 ppb	0.55082 127.33%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	11.8	19.461 µg/L	11.8361	19.461 ppb	11.8361 60.82%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	0.8	0.2073 µg/L	0.69261	0.2073 ppb	0.69261 334.08%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-1.4	-4.4278 µg/L	6.16156	-4.4278 ppb	6.16156 139.16%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	4.3	3.8301 µg/L	0.82473	3.8301 ppb	0.82473 21.53%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-2.3	-2.0827 µg/L	2.54208	-2.0827 ppb	2.54208 122.06%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	95.8	17.304 µg/L	6.8024	17.304 ppb	6.8024 39.31%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	84.7	5.7561 µg/L	1.52672	5.7561 ppb	1.52672 26.52%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	3.5	1.3532 µg/L	1.70269	1.3532 ppb	1.70269 125.83%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	2.7	0.0160 µg/L	0.11514	0.0160 ppb	0.11514 721.10%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	132.7	0.3093 µg/L	0.02640	0.3093 ppb	0.02640 8.53%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	-0.8	-0.7826 µg/L	1.28613	-0.7826 ppb	1.28613 164.35%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-28.8	-2.6144 µg/L	1.31436	-2.6144 ppb	1.31436 50.27%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	-49.3	-0.5726 µg/L	0.61904	-0.5726 ppb	0.61904 108.11%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-102.4	-2.3625 µg/L	0.14260	-2.3625 ppb	0.14260 6.04%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

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

Autosampler Location: 7
 Date Collected: 3/16/2010 20:31:24
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98865.0	98865.0	102 %		20:31:57
1	Al 396.153Radial†	10627.4	10523.5	5012.4 µg/L	5012.4 ppb	20:31:57
1	Ca 317.933Radial†	14640.2	13947.4	5075.8 µg/L	5075.8 ppb	20:31:57
1	Fe 238.204 Radial†	459.7	438.1	5192.8 µg/L	5192.8 ppb	20:32:17
1	K 766.490 Radial†	11449.3	10723.5	5004.5 µg/L	5004.5 ppb	20:31:57
1	Mg 279.077 IEC†	405.4	388.9	5130.3 µg/L	5130.3 ppb	20:32:17
1	Na 589.592 Radial†	21413.6	20783.2	10373 µg/L	10373 ppb	20:31:57
1	Sr 421.552†	87790.4	85806.9	510.11 µg/L	510.11 ppb	20:31:57
1	Sc 361.383	2066065.1	2066065.1	98.708 %		20:33:21
1	Y 371.029	1409893.2	1409893.2	98.396 %		20:33:21
1	Ag 328.068†	62998.6	64283.4	520.03 µg/L	520.03 ppb	20:33:27
1	As 188.979†	351.6	359.4	529.01 µg/L	529.01 ppb	20:33:47
1	B 249.677†	11528.3	11379.8	514.58 µg/L	514.58 ppb	20:33:27
1	Ba 233.527†	23584.5	23901.6	523.67 µg/L	523.67 ppb	20:33:27
1	Be 313.107†	870015.7	882562.4	518.36 µg/L	518.36 ppb	20:33:21
1	Cd 226.502†	21576.3	22029.3	523.59 µg/L	523.59 ppb	20:33:27
1	Co 228.616†	12115.9	12226.4	524.68 µg/L	524.68 ppb	20:33:27
1	Cr 267.716†	24146.9	24382.7	530.64 µg/L	530.64 ppb	20:33:27
1	Cu 324.752†	83558.9	80275.9	525.30 µg/L	525.30 ppb	20:33:27
1	Mn 257.610†	173044.2	175996.2	528.91 µg/L	528.91 ppb	20:33:21
1	Mo 202.031†	5408.6	5474.3	541.89 µg/L	541.89 ppb	20:33:47
1	Ni 231.604†	9661.0	9410.5	527.25 µg/L	527.25 ppb	20:33:27
1	P 214.914†	1852.2	1604.0	2613.1 µg/L	2613.1 ppb	20:33:47
1	Pb 220.353†	2033.0	2029.4	532.71 µg/L	532.71 ppb	20:33:47
1	S 181.975 Axial†	350.7	332.8	1059.1 µg/L	1059.1 ppb	20:33:47
1	Sb 206.836†	613.1	598.4	536.61 µg/L	536.61 ppb	20:33:47
1	Se 196.026†	577.2	557.4	536.11 µg/L	536.11 ppb	20:33:47
1	SiO2†	33702.5	31363.9	5662.3 µg/L	5662.3 ppb	20:33:27
1	Si 251.611†	38917.7	39003.0	2651.6 µg/L	2651.6 ppb	20:33:27
1	Sn 189.927†	1359.9	1385.2	539.79 µg/L	539.79 ppb	20:33:47
1	Ti 334.940†	217967.4	221397.7	517.39 µg/L	517.39 ppb	20:33:21
1	Tl 190.801†	504.9	545.6	537.88 µg/L	537.88 ppb	20:33:47
1	U 409.014†	5718.3	5799.0	525.51 µg/L	525.51 ppb	20:33:27
1	V 292.402†	43985.7	44449.1	529.97 µg/L	529.97 ppb	20:33:27
1	Zn 213.857†	23845.4	23148.7	529.26 µg/L	529.26 ppb	20:33:27
2	Sc RADIAL	98542.5	98542.5	102 %		20:32:23
2	Al 396.153Radial†	10572.0	10503.1	5003.1 µg/L	5003.1 ppb	20:32:23
2	Ca 317.933Radial†	14565.3	13920.7	5066.0 µg/L	5066.0 ppb	20:32:23
2	Fe 238.204 Radial†	457.7	437.6	5186.4 µg/L	5186.4 ppb	20:32:43
2	K 766.490 Radial†	11397.1	10708.9	4997.7 µg/L	4997.7 ppb	20:32:23
2	Mg 279.077 IEC†	406.9	391.7	5167.3 µg/L	5167.3 ppb	20:32:43
2	Na 589.592 Radial†	21297.9	20738.2	10351 µg/L	10351 ppb	20:32:23
2	Sr 421.552†	87401.8	85706.5	509.51 µg/L	509.51 ppb	20:32:23
2	Sc 361.383	2082205.2	2082205.2	99.479 %		20:33:54
2	Y 371.029	1418990.3	1418990.3	99.031 %		20:33:54
2	Ag 328.068†	62657.0	63445.3	513.25 µg/L	513.25 ppb	20:34:00
2	As 188.979†	351.1	356.2	524.23 µg/L	524.23 ppb	20:34:20
2	B 249.677†	11497.7	11258.6	509.07 µg/L	509.07 ppb	20:34:00
2	Ba 233.527†	23521.9	23653.5	518.24 µg/L	518.24 ppb	20:34:00
2	Be 313.107†	875955.5	881701.1	517.85 µg/L	517.85 ppb	20:33:54
2	Cd 226.502†	21495.7	21778.8	517.63 µg/L	517.63 ppb	20:34:00
2	Co 228.616†	12112.1	12127.5	520.41 µg/L	520.41 ppb	20:34:00
2	Cr 267.716†	23997.0	24042.4	523.23 µg/L	523.23 ppb	20:34:00
2	Cu 324.752†	83144.7	79203.4	518.30 µg/L	518.30 ppb	20:34:00
2	Mn 257.610†	174144.9	175743.7	528.15 µg/L	528.15 ppb	20:33:54
2	Mo 202.031†	5293.5	5316.1	526.24 µg/L	526.24 ppb	20:34:20
2	Ni 231.604†	9619.3	9292.7	520.65 µg/L	520.65 ppb	20:34:00
2	P 214.914†	1824.8	1561.9	2543.8 µg/L	2543.8 ppb	20:34:20
2	Pb 220.353†	2013.0	1993.3	523.22 µg/L	523.22 ppb	20:34:20

2	S 181.975 Axial†	347.9	327.2	1041.3 µg/L	1041.3 ppb	20:34:20
2	Sb 206.836†	606.2	586.7	525.96 µg/L	525.96 ppb	20:34:20
2	Se 196.026†	579.6	555.3	534.02 µg/L	534.02 ppb	20:34:20
2	SiO2†	33723.5	31120.4	5618.3 µg/L	5618.3 ppb	20:34:00
2	Si 251.611†	38857.6	38637.0	2626.7 µg/L	2626.7 ppb	20:34:00
2	Sn 189.927†	1342.0	1356.4	528.59 µg/L	528.59 ppb	20:34:20
2	Ti 334.940†	219868.6	221597.2	517.85 µg/L	517.85 ppb	20:33:54
2	Tl 190.801†	499.5	536.2	528.69 µg/L	528.69 ppb	20:34:20
2	U 409.014†	5651.7	5687.1	515.35 µg/L	515.35 ppb	20:34:00
2	V 292.402†	43785.0	43901.9	523.37 µg/L	523.37 ppb	20:34:00
2	Zn 213.857†	23713.0	22828.4	521.92 µg/L	521.92 ppb	20:34:00
3	Sc RADIAL	98752.6	98752.6	102 %		20:32:49
3	Al 396.153Radial†	10500.9	10411.4	4960.9 µg/L	4960.9 ppb	20:32:49
3	Ca 317.933Radial†	14590.6	13915.1	5064.0 µg/L	5064.0 ppb	20:32:49
3	Fe 238.204 Radial†	462.3	441.1	5227.3 µg/L	5227.3 ppb	20:33:09
3	K 766.490 Radial†	11390.2	10678.3	4983.4 µg/L	4983.4 ppb	20:32:49
3	Mg 279.077 IEC†	407.0	390.9	5155.9 µg/L	5155.9 ppb	20:33:09
3	Na 589.592 Radial†	21342.2	20737.1	10350 µg/L	10350 ppb	20:32:49
3	Sr 421.552†	87520.8	85640.5	509.12 µg/L	509.12 ppb	20:32:49
3	Sc 361.383	2056958.0	2056958.0	98.273 %		20:34:28
3	Y 371.029	1404464.2	1404464.2	98.018 %		20:34:28
3	Ag 328.068†	58959.7	60456.1	488.93 µg/L	488.93 ppb	20:34:33
3	As 188.979†	299.9	308.5	453.83 µg/L	453.83 ppb	20:34:54
3	B 249.677†	10735.7	10625.0	480.20 µg/L	480.20 ppb	20:34:33
3	Ba 233.527†	21489.3	21875.4	479.26 µg/L	479.26 ppb	20:34:33
3	Be 313.107†	807846.1	823202.6	483.49 µg/L	483.49 ppb	20:34:28
3	Cd 226.502†	19450.3	19962.7	474.41 µg/L	474.41 ppb	20:34:33
3	Co 228.616†	10856.9	10999.6	471.96 µg/L	471.96 ppb	20:34:33
3	Cr 267.716†	21015.0	21304.1	463.64 µg/L	463.64 ppb	20:34:33
3	Cu 324.752†	75628.3	72580.8	475.05 µg/L	475.05 ppb	20:34:33
3	Mn 257.610†	161360.7	164883.5	495.51 µg/L	495.51 ppb	20:34:28
3	Mo 202.031†	4435.2	4508.0	446.28 µg/L	446.28 ppb	20:34:54
3	Ni 231.604†	8714.6	8490.9	475.73 µg/L	475.73 ppb	20:34:33
3	P 214.914†	1608.9	1364.8	2219.8 µg/L	2219.8 ppb	20:34:54
3	Pb 220.353†	1753.2	1753.9	460.32 µg/L	460.32 ppb	20:34:54
3	S 181.975 Axial†	302.5	285.3	907.85 µg/L	907.85 ppb	20:34:54
3	Sb 206.836†	526.1	512.6	459.22 µg/L	459.22 ppb	20:34:54
3	Se 196.026†	517.2	499.0	481.24 µg/L	481.24 ppb	20:34:54
3	SiO2†	31371.3	29142.9	5261.3 µg/L	5261.3 ppb	20:34:33
3	Si 251.611†	36025.5	36234.5	2463.4 µg/L	2463.4 ppb	20:34:33
3	Sn 189.927†	1107.2	1134.1	442.03 µg/L	442.03 ppb	20:34:54
3	Ti 334.940†	201582.8	205702.8	480.68 µg/L	480.68 ppb	20:34:28
3	Tl 190.801†	446.4	488.3	481.59 µg/L	481.59 ppb	20:34:54
3	U 409.014†	5030.1	5124.3	464.24 µg/L	464.24 ppb	20:34:33
3	V 292.402†	39200.9	39777.5	473.87 µg/L	473.87 ppb	20:34:33
3	Zn 213.857†	21468.1	20836.6	476.33 µg/L	476.33 ppb	20:34:33

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2068409.4	98.820 %	0.6109			0.62%
Sc RADIAL	98720.0	102 %	0.2			0.17%
Y 371.029	1411115.9	98.482 %	0.5122			0.52%
Ag 328.068†	62728.3	507.40 µg/L	16.351	507.40 ppb	16.351	3.22%
QC value within limits for Ag 328.068 Recovery = 101.48%						
Al 396.153Radial†	10479.3	4992.1 µg/L	27.46	4992.1 ppb	27.46	0.55%
QC value within limits for Al 396.153Radial Recovery = 99.84%						
As 188.979†	341.4	502.36 µg/L	42.091	502.36 ppb	42.091	8.38%
QC value within limits for As 188.979 Recovery = 100.47%						
B 249.677†	11087.8	501.28 µg/L	18.466	501.28 ppb	18.466	3.68%
QC value within limits for B 249.677 Recovery = 100.26%						
Ba 233.527†	23143.5	507.06 µg/L	24.225	507.06 ppb	24.225	4.78%
QC value within limits for Ba 233.527 Recovery = 101.41%						
Be 313.107†	862488.7	506.57 µg/L	19.984	506.57 ppb	19.984	3.94%
QC value within limits for Be 313.107 Recovery = 101.31%						
Ca 317.933Radial†	13927.7	5068.6 µg/L	6.28	5068.6 ppb	6.28	0.12%
QC value within limits for Ca 317.933Radial Recovery = 101.37%						
Cd 226.502†	21256.9	505.21 µg/L	26.839	505.21 ppb	26.839	5.31%
QC value within limits for Cd 226.502 Recovery = 101.04%						
Co 228.616†	11784.5	505.68 µg/L	29.281	505.68 ppb	29.281	5.79%

QC value within limits for Co 228.616	Recovery = 101.14%				
Cr 267.716†	23243.1	505.84 µg/L	36.727	505.84 ppb	36.727 7.26%
QC value within limits for Cr 267.716	Recovery = 101.17%				
Cu 324.752†	77353.3	506.22 µg/L	27.218	506.22 ppb	27.218 5.38%
QC value within limits for Cu 324.752	Recovery = 101.24%				
Fe 238.204 Radial†	438.9	5202.2 µg/L	22.00	5202.2 ppb	22.00 0.42%
QC value within limits for Fe 238.204 Radial	Recovery = 104.04%				
K 766.490 Radial†	10703.6	4995.2 µg/L	10.77	4995.2 ppb	10.77 0.22%
QC value within limits for K 766.490 Radial	Recovery = 99.90%				
Mg 279.077 IEC†	390.5	5151.1 µg/L	18.96	5151.1 ppb	18.96 0.37%
QC value within limits for Mg 279.077 IEC	Recovery = 103.02%				
Mn 257.610†	172207.8	517.52 µg/L	19.066	517.52 ppb	19.066 3.68%
QC value within limits for Mn 257.610	Recovery = 103.50%				
Mo 202.031†	5099.5	504.80 µg/L	51.284	504.80 ppb	51.284 10.16%
QC value within limits for Mo 202.031	Recovery = 100.96%				
Na 589.592 Radial†	20752.8	10358 µg/L	13.1	10358 ppb	13.1 0.13%
QC value within limits for Na 589.592 Radial	Recovery = 103.58%				
Ni 231.604†	9064.7	507.88 µg/L	28.034	507.88 ppb	28.034 5.52%
QC value within limits for Ni 231.604	Recovery = 101.58%				
P 214.914†	1510.3	2458.9 µg/L	209.96	2458.9 ppb	209.96 8.54%
QC value within limits for P 214.914	Recovery = 98.36%				
Pb 220.353†	1925.5	505.41 µg/L	39.341	505.41 ppb	39.341 7.78%
QC value within limits for Pb 220.353	Recovery = 101.08%				
S 181.975 Axial†	315.1	1002.8 µg/L	82.68	1002.8 ppb	82.68 8.25%
QC value within limits for S 181.975 Axial	Recovery = 100.28%				
Sb 206.836†	565.9	507.27 µg/L	41.945	507.27 ppb	41.945 8.27%
QC value within limits for Sb 206.836	Recovery = 101.45%				
Se 196.026†	537.2	517.12 µg/L	31.094	517.12 ppb	31.094 6.01%
QC value within limits for Se 196.026	Recovery = 103.42%				
SiO2†	30542.4	5514.0 µg/L	219.91	5514.0 ppb	219.91 3.99%
QC value within limits for SiO2	Recovery = 103.11%				
Si 251.611†	37958.2	2580.5 µg/L	102.24	2580.5 ppb	102.24 3.96%
QC value within limits for Si 251.611	Recovery = 103.22%				
Sn 189.927†	1291.9	503.47 µg/L	53.505	503.47 ppb	53.505 10.63%
QC value within limits for Sn 189.927	Recovery = 100.69%				
Sr 421.552†	85718.0	509.58 µg/L	0.498	509.58 ppb	0.498 0.10%
QC value within limits for Sr 421.552	Recovery = 101.92%				
Ti 334.940†	216232.5	505.31 µg/L	21.326	505.31 ppb	21.326 4.22%
QC value within limits for Ti 334.940	Recovery = 101.06%				
Tl 190.801†	523.4	516.05 µg/L	30.202	516.05 ppb	30.202 5.85%
QC value within limits for Tl 190.801	Recovery = 103.21%				
U 409.014†	5536.8	501.70 µg/L	32.834	501.70 ppb	32.834 6.54%
QC value within limits for U 409.014	Recovery = 100.34%				
V 292.402†	42709.5	509.07 µg/L	30.662	509.07 ppb	30.662 6.02%
QC value within limits for V 292.402	Recovery = 101.81%				
Zn 213.857†	22271.2	509.17 µg/L	28.676	509.17 ppb	28.676 5.63%
QC value within limits for Zn 213.857	Recovery = 101.83%				

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 20:35:03

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	96083.3	96083.3	99.3 %			20:35:34
1	Al 396.153Radial†	-138.6	-20.3	-9.7187 µg/L	-9.7187 ppb		20:35:34
1	Ca 317.933Radial†	383.4	0.9	0.3324 µg/L	0.3324 ppb		20:35:54
1	Fe 238.204 Radial†	14.3	2.4	28.751 µg/L	28.751 ppb		20:35:54
1	K 766.490 Radial†	508.9	27.3	12.757 µg/L	12.757 ppb		20:35:34
1	Mg 279.077 IEC†	7.4	-0.5	-6.4283 µg/L	-6.4283 ppb		20:35:54
1	Na 589.592 Radial†	163.7	-15.7	-7.8434 µg/L	-7.8434 ppb		20:35:34
1	Sr 421.552†	124.0	-14.5	-0.0865 µg/L	-0.0865 ppb		20:35:34
1	Sc 361.383	2048664.7	2048664.7	97.877 %			20:36:56
1	Y 371.029	1403583.7	1403583.7	97.956 %			20:36:56
1	Ag 328.068†	-536.7	-88.2	-0.7100 µg/L	-0.7100 ppb		20:37:02
1	As 188.979†	-2.7	0.4	0.6467 µg/L	0.6467 ppb		20:37:22
1	B 249.677†	286.2	-7.0	-0.3338 µg/L	-0.3338 ppb		20:37:02
1	Ba 233.527†	6.6	15.1	0.3299 µg/L	0.3299 ppb		20:37:22
1	Be 313.107†	-988.8	148.5	0.0872 µg/L	0.0872 ppb		20:37:02
1	Cd 226.502†	-166.8	0.2	0.0017 µg/L	0.0017 ppb		20:37:22
1	Co 228.616†	49.2	2.2	0.0941 µg/L	0.0941 ppb		20:37:22
1	Cr 267.716†	39.1	-40.3	-0.8771 µg/L	-0.8771 ppb		20:37:02
1	Cu 324.752†	4316.0	32.9	0.2204 µg/L	0.2204 ppb		20:37:02
1	Mn 257.610†	-672.0	0.4	0.0032 µg/L	0.0032 ppb		20:37:02
1	Mo 202.031†	24.9	20.3	2.0074 µg/L	2.0074 ppb		20:37:22
1	Ni 231.604†	365.4	-3.6	-0.2025 µg/L	-0.2025 ppb		20:37:22
1	P 214.914†	275.1	8.7	14.391 µg/L	14.391 ppb		20:37:22
1	Pb 220.353†	25.1	-4.6	-1.1950 µg/L	-1.1950 ppb		20:37:22
1	S 181.975 Axial†	17.1	-5.0	-16.070 µg/L	-16.070 ppb		20:37:22
1	Sb 206.836†	27.4	5.3	4.7262 µg/L	4.7262 ppb		20:37:22
1	Se 196.026†	27.6	0.9	0.9433 µg/L	0.9433 ppb		20:37:22
1	SiO2†	2780.0	60.6	10.934 µg/L	10.934 ppb		20:37:02
1	Si 251.611†	472.2	58.4	3.9671 µg/L	3.9671 ppb		20:37:22
1	Sn 189.927†	-1.8	5.6	2.1739 µg/L	2.1739 ppb		20:37:22
1	Ti 334.940†	-437.6	130.1	0.3048 µg/L	0.3048 ppb		20:37:02
1	Tl 190.801†	-30.5	2.9	2.8816 µg/L	2.8816 ppb		20:37:22
1	U 409.014†	4.1	10.0	0.9074 µg/L	0.9074 ppb		20:37:02
1	V 292.402†	57.8	-53.2	-0.6177 µg/L	-0.6177 ppb		20:37:02
1	Zn 213.857†	958.9	-29.2	-0.6723 µg/L	-0.6723 ppb		20:37:22
2	Sc RADIAL	95467.2	95467.2	98.6 %			20:36:00
2	Al 396.153Radial†	-106.5	11.3	5.3659 µg/L	5.3659 ppb		20:36:00
2	Ca 317.933Radial†	377.5	-2.5	-0.9254 µg/L	-0.9254 ppb		20:36:20
2	Fe 238.204 Radial†	11.9	0.1	1.5618 µg/L	1.5618 ppb		20:36:20
2	K 766.490 Radial†	463.2	-15.7	-7.3328 µg/L	-7.3328 ppb		20:36:00
2	Mg 279.077 IEC†	7.3	-0.6	-7.9575 µg/L	-7.9575 ppb		20:36:20
2	Na 589.592 Radial†	187.0	9.0	4.5063 µg/L	4.5063 ppb		20:36:00
2	Sr 421.552†	111.3	-26.5	-0.1578 µg/L	-0.1578 ppb		20:36:00
2	Sc 361.383	2055980.9	2055980.9	98.226 %			20:37:28
2	Y 371.029	1409935.7	1409935.7	98.399 %			20:37:28
2	Ag 328.068†	-495.5	-44.2	-0.3589 µg/L	-0.3589 ppb		20:37:34
2	As 188.979†	-4.7	-1.5	-2.2212 µg/L	-2.2212 ppb		20:37:54
2	B 249.677†	312.3	18.6	0.8442 µg/L	0.8442 ppb		20:37:34
2	Ba 233.527†	-5.5	2.8	0.0595 µg/L	0.0595 ppb		20:37:54
2	Be 313.107†	-1003.1	137.6	0.0807 µg/L	0.0807 ppb		20:37:34
2	Cd 226.502†	-170.3	-2.8	-0.0673 µg/L	-0.0673 ppb		20:37:54
2	Co 228.616†	39.6	-7.8	-0.3346 µg/L	-0.3346 ppb		20:37:54
2	Cr 267.716†	76.8	-2.1	-0.0460 µg/L	-0.0460 ppb		20:37:34
2	Cu 324.752†	4331.4	33.0	0.2157 µg/L	0.2157 ppb		20:37:34
2	Mn 257.610†	-677.3	-2.6	-0.0071 µg/L	-0.0071 ppb		20:37:34
2	Mo 202.031†	20.5	15.7	1.5576 µg/L	1.5576 ppb		20:37:54
2	Ni 231.604†	373.0	2.8	0.1583 µg/L	0.1583 ppb		20:37:54
2	P 214.914†	272.0	4.5	7.3893 µg/L	7.3893 ppb		20:37:54
2	Pb 220.353†	38.2	8.7	2.2847 µg/L	2.2847 ppb		20:37:54

2	S 181.975 Axial†	26.2	4.1	13.010 µg/L	13.010 ppb	20:37:54
2	Sb 206.836†	22.9	0.6	0.5175 µg/L	0.5175 ppb	20:37:54
2	Se 196.026†	22.8	-4.1	-3.8566 µg/L	-3.8566 ppb	20:37:54
2	SiO2†	2816.1	87.3	15.752 µg/L	15.752 ppb	20:37:34
2	Si 251.611†	488.9	73.6	5.0043 µg/L	5.0043 ppb	20:37:54
2	Sn 189.927†	-7.7	-0.4	-0.1488 µg/L	-0.1488 ppb	20:37:54
2	Ti 334.940†	-407.4	162.5	0.3807 µg/L	0.3807 ppb	20:37:34
2	Tl 190.801†	-35.7	-2.2	-2.1575 µg/L	-2.1575 ppb	20:37:54
2	U 409.014†	-84.0	-79.7	-7.2390 µg/L	-7.2390 ppb	20:37:34
2	V 292.402†	58.5	-52.7	-0.6185 µg/L	-0.6185 ppb	20:37:34
2	Zn 213.857†	954.7	-36.9	-0.8509 µg/L	-0.8509 ppb	20:37:54
3	Sc RADIAL	95960.9	95960.9	99.1 %		20:36:26
3	Al 396.153Radial†	-96.8	21.6	10.292 µg/L	10.292 ppb	20:36:26
3	Ca 317.933Radial†	373.7	-8.3	-3.0374 µg/L	-3.0374 ppb	20:36:46
3	Fe 238.204 Radial†	14.5	2.7	32.080 µg/L	32.080 ppb	20:36:46
3	K 766.490 Radial†	526.3	45.5	21.223 µg/L	21.223 ppb	20:36:26
3	Mg 279.077 IEC†	8.8	0.9	11.859 µg/L	11.859 ppb	20:36:46
3	Na 589.592 Radial†	192.7	13.8	6.8633 µg/L	6.8633 ppb	20:36:26
3	Sr 421.552†	108.1	-30.4	-0.1809 µg/L	-0.1809 ppb	20:36:26
3	Sc 361.383	2074157.7	2074157.7	99.095 %		20:38:00
3	Y 371.029	1421052.3	1421052.3	99.175 %		20:38:00
3	Ag 328.068†	-534.8	-79.5	-0.6376 µg/L	-0.6376 ppb	20:38:06
3	As 188.979†	-3.9	-0.6	-0.9523 µg/L	-0.9523 ppb	20:38:27
3	B 249.677†	285.9	-10.9	-0.5111 µg/L	-0.5111 ppb	20:38:06
3	Ba 233.527†	0.4	8.8	0.1922 µg/L	0.1922 ppb	20:38:27
3	Be 313.107†	-915.3	235.2	0.1381 µg/L	0.1381 ppb	20:38:06
3	Cd 226.502†	-163.8	5.3	0.1217 µg/L	0.1217 ppb	20:38:27
3	Co 228.616†	51.7	4.1	0.1778 µg/L	0.1778 ppb	20:38:27
3	Cr 267.716†	63.8	-15.9	-0.3457 µg/L	-0.3457 ppb	20:38:06
3	Cu 324.752†	4349.6	12.7	0.0887 µg/L	0.0887 ppb	20:38:06
3	Mn 257.610†	-664.0	16.9	0.0519 µg/L	0.0519 ppb	20:38:06
3	Mo 202.031†	22.9	17.9	1.7767 µg/L	1.7767 ppb	20:38:27
3	Ni 231.604†	375.3	1.8	0.1023 µg/L	0.1023 ppb	20:38:27
3	P 214.914†	263.2	-6.8	-11.269 µg/L	-11.269 ppb	20:38:27
3	Pb 220.353†	34.6	4.7	1.2351 µg/L	1.2351 ppb	20:38:27
3	S 181.975 Axial†	16.7	-5.7	-18.013 µg/L	-18.013 ppb	20:38:27
3	Sb 206.836†	24.0	1.5	1.3802 µg/L	1.3802 ppb	20:38:27
3	Se 196.026†	14.4	-12.7	-11.882 µg/L	-11.882 ppb	20:38:27
3	SiO2†	2810.1	56.0	10.109 µg/L	10.109 ppb	20:38:06
3	Si 251.611†	487.3	67.7	4.5993 µg/L	4.5993 ppb	20:38:27
3	Sn 189.927†	-4.9	2.5	0.9581 µg/L	0.9581 ppb	20:38:27
3	Ti 334.940†	-456.2	116.9	0.2724 µg/L	0.2724 ppb	20:38:06
3	Tl 190.801†	-34.6	-0.8	-0.8080 µg/L	-0.8080 ppb	20:38:27
3	U 409.014†	32.1	38.2	3.4648 µg/L	3.4648 ppb	20:38:06
3	V 292.402†	84.7	-26.8	-0.3040 µg/L	-0.3040 ppb	20:38:06
3	Zn 213.857†	916.2	-84.3	-1.9442 µg/L	-1.9442 ppb	20:38:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2059601.1	98.399 %	0.6271			0.64%
Sc RADIAL	95837.1	99.0 %	0.34			0.34%
Y 371.029	1411523.9	98.510 %	0.6171			0.63%
Ag 328.068†	-70.6	-0.5688 µg/L	0.18537	-0.5688 ppb	0.18537	32.59%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.2	1.9798 µg/L	10.42634	1.9798 ppb	10.42634	526.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.6	-0.8423 µg/L	1.43711	-0.8423 ppb	1.43711	170.62%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	0.2	-0.0002 µg/L	0.73663	-0.0002 ppb	0.73663	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	8.9	0.1939 µg/L	0.13520	0.1939 ppb	0.13520	69.74%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	173.8	0.1020 µg/L	0.03141	0.1020 ppb	0.03141	30.80%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.3	-1.2102 µg/L	1.70284	-1.2102 ppb	1.70284	140.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	0.9	0.0187 µg/L	0.09562	0.0187 ppb	0.09562	511.49%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.5	-0.0209 µg/L	0.27487	-0.0209 ppb	0.27487	>999.9%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-19.4 -0.4229 µg/L	0.42091 -0.4229 ppb	0.42091 99.53%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	26.2 0.1749 µg/L	0.07471 0.1749 ppb	0.07471 42.71%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.8 20.798 µg/L	16.7417 20.798 ppb	16.7417 80.50%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	19.0 8.8823 µg/L	14.66675 8.8823 ppb	14.66675 165.12%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.1 -0.8422 µg/L	11.02622 -0.8422 ppb	11.02622 >999.9%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	4.9 0.0160 µg/L	0.03151 0.0160 ppb	0.03151 197.16%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	18.0 1.7806 µg/L	0.22491 1.7806 ppb	0.22491 12.63%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	2.4 1.1754 µg/L	7.89893 1.1754 ppb	7.89893 672.03%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	0.3 0.0194 µg/L	0.19417 0.0194 ppb	0.19417 >999.9%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	2.1 3.5038 µg/L	13.26402 3.5038 ppb	13.26402 378.56%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	2.9 0.7749 µg/L	1.78493 0.7749 ppb	1.78493 230.34%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.2 -7.0246 µg/L	17.37736 -7.0246 ppb	17.37736 247.38%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	2.4 2.2080 µg/L	2.22308 2.2080 ppb	2.22308 100.69%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-5.3 -4.9318 µg/L	6.48001 -4.9318 ppb	6.48001 131.39%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	67.9 12.265 µg/L	3.0479 12.265 ppb	3.0479 24.85%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	66.5 4.5236 µg/L	0.52271 4.5236 ppb	0.52271 11.56%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.6 0.9944 µg/L	1.16179 0.9944 ppb	1.16179 116.83%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-23.8 -0.1417 µg/L	0.04922 -0.1417 ppb	0.04922 34.72%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	136.5 0.3193 µg/L	0.05558 0.3193 ppb	0.05558 17.41%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.0 -0.0280 µg/L	2.60853 -0.0280 ppb	2.60853 >999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-10.5 -0.9556 µg/L	5.58981 -0.9556 ppb	5.58981 584.95%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-44.3 -0.5134 µg/L	0.18136 -0.5134 ppb	0.18136 35.33%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-50.1 -1.1558 µg/L	0.68860 -1.1558 ppb	0.68860 59.58%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 21:11:25

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	96658.9	96658.9	99.9 %		21:11:57
1	Al 396.153Radial†	10560.5	10693.9	5094.0 µg/L	5094.0 ppb	21:11:57
1	Ca 317.933Radial†	14432.1	14066.1	5119.0 µg/L	5119.0 ppb	21:11:57
1	Fe 238.204 Radial†	446.4	435.0	5156.5 µg/L	5156.5 ppb	21:12:18
1	K 766.490 Radial†	11377.7	10907.6	5090.4 µg/L	5090.4 ppb	21:11:57
1	Mg 279.077 IEC†	398.3	390.8	5155.8 µg/L	5155.8 ppb	21:12:18
1	Na 589.592 Radial†	20557.3	20404.3	10184 µg/L	10184 ppb	21:11:57
1	Sr 421.552†	85096.9	85071.4	505.74 µg/L	505.74 ppb	21:11:57
1	Sc 361.383	2088004.2	2088004.2	99.756 %		21:13:21
1	Y 371.029	1424361.7	1424361.7	99.406 %		21:13:21
1	Ag 328.068†	62897.2	63511.2	513.78 µg/L	513.78 ppb	21:13:27
1	As 188.979†	356.2	360.3	530.29 µg/L	530.29 ppb	21:13:47
1	B 249.677†	11513.8	11242.5	508.36 µg/L	508.36 ppb	21:13:27
1	Ba 233.527†	23600.3	23666.4	518.52 µg/L	518.52 ppb	21:13:27
1	Be 313.107†	876347.4	879648.5	516.65 µg/L	516.65 ppb	21:13:21
1	Cd 226.502†	21563.7	21787.0	517.83 µg/L	517.83 ppb	21:13:27
1	Co 228.616†	12112.7	12094.2	518.99 µg/L	518.99 ppb	21:13:27
1	Cr 267.716†	24162.0	24140.8	525.37 µg/L	525.37 ppb	21:13:27
1	Cu 324.752†	83243.8	79070.6	517.42 µg/L	517.42 ppb	21:13:27
1	Mn 257.610†	174733.6	175847.7	528.46 µg/L	528.46 ppb	21:13:21
1	Mo 202.031†	5387.5	5395.6	534.10 µg/L	534.10 ppb	21:13:47
1	Ni 231.604†	9628.3	9275.0	519.66 µg/L	519.66 ppb	21:13:27
1	P 214.914†	1861.9	1594.0	2597.3 µg/L	2597.3 ppb	21:13:47
1	Pb 220.353†	2023.4	1998.1	524.51 µg/L	524.51 ppb	21:13:47
1	S 181.975 Axial†	349.2	327.5	1042.3 µg/L	1042.3 ppb	21:13:47
1	Sb 206.836†	608.5	587.3	526.60 µg/L	526.60 ppb	21:13:47
1	Se 196.026†	577.7	551.8	530.69 µg/L	530.69 ppb	21:13:47
1	SiO2†	33820.2	31123.2	5618.8 µg/L	5618.8 ppb	21:13:27
1	Si 251.611†	38983.1	38654.3	2627.9 µg/L	2627.9 ppb	21:13:27
1	Sn 189.927†	1361.4	1372.2	534.73 µg/L	534.73 ppb	21:13:47
1	Ti 334.940†	219866.1	220980.8	516.41 µg/L	516.41 ppb	21:13:21
1	Tl 190.801†	504.9	540.3	532.60 µg/L	532.60 ppb	21:13:47
1	U 409.014†	5653.6	5673.2	514.09 µg/L	514.09 ppb	21:13:27
1	V 292.402†	43958.8	43954.0	524.05 µg/L	524.05 ppb	21:13:27
1	Zn 213.857†	23747.6	22796.8	521.20 µg/L	521.20 ppb	21:13:27
2	Sc RADIAL	96924.0	96924.0	100 %		21:12:23
2	Al 396.153Radial†	10625.5	10729.9	5111.2 µg/L	5111.2 ppb	21:12:23
2	Ca 317.933Radial†	14470.4	14064.8	5118.5 µg/L	5118.5 ppb	21:12:23
2	Fe 238.204 Radial†	449.7	437.1	5180.7 µg/L	5180.7 ppb	21:12:44
2	K 766.490 Radial†	11323.2	10822.0	5050.4 µg/L	5050.4 ppb	21:12:23
2	Mg 279.077 IEC†	403.4	394.8	5208.4 µg/L	5208.4 ppb	21:12:44
2	Na 589.592 Radial†	20613.9	20404.4	10184 µg/L	10184 ppb	21:12:23
2	Sr 421.552†	85468.0	85209.0	506.56 µg/L	506.56 ppb	21:12:23
2	Sc 361.383	2070112.7	2070112.7	98.901 %		21:13:54
2	Y 371.029	1412512.0	1412512.0	98.579 %		21:13:54
2	Ag 328.068†	62871.2	64029.8	517.98 µg/L	517.98 ppb	21:14:00
2	As 188.979†	350.6	357.8	526.58 µg/L	526.58 ppb	21:14:20
2	B 249.677†	11515.8	11344.3	512.97 µg/L	512.97 ppb	21:14:00
2	Ba 233.527†	23557.1	23827.2	522.04 µg/L	522.04 ppb	21:14:00
2	Be 313.107†	868660.0	879468.3	516.54 µg/L	516.54 ppb	21:13:54
2	Cd 226.502†	21612.3	22023.0	523.44 µg/L	523.44 ppb	21:14:00
2	Co 228.616†	12122.2	12208.8	523.91 µg/L	523.91 ppb	21:14:00
2	Cr 267.716†	24075.8	24263.0	528.03 µg/L	528.03 ppb	21:14:00
2	Cu 324.752†	83200.5	79748.1	521.85 µg/L	521.85 ppb	21:14:00
2	Mn 257.610†	173112.8	175722.8	528.08 µg/L	528.08 ppb	21:13:54
2	Mo 202.031†	5298.0	5351.7	529.75 µg/L	529.75 ppb	21:14:20
2	Ni 231.604†	9614.7	9344.6	523.56 µg/L	523.56 ppb	21:14:00
2	P 214.914†	1832.3	1580.3	2573.9 µg/L	2573.9 ppb	21:14:20
2	Pb 220.353†	2019.2	2011.5	527.99 µg/L	527.99 ppb	21:14:20

2	S 181.975 Axial†	342.8	324.0	1031.2 µg/L	1031.2 ppb	21:14:20
2	Sb 206.836†	600.3	584.3	523.79 µg/L	523.79 ppb	21:14:20
2	Se 196.026†	582.7	561.8	540.11 µg/L	540.11 ppb	21:14:20
2	SiO2†	33855.2	31451.5	5678.1 µg/L	5678.1 ppb	21:14:00
2	Si 251.611†	39087.0	39097.1	2658.0 µg/L	2658.0 ppb	21:14:00
2	Sn 189.927†	1341.7	1364.1	531.57 µg/L	531.57 ppb	21:14:20
2	Ti 334.940†	217653.2	220648.3	515.63 µg/L	515.63 ppb	21:13:54
2	Tl 190.801†	499.0	538.7	531.03 µg/L	531.03 ppb	21:14:20
2	U 409.014†	5632.4	5700.8	516.59 µg/L	516.59 ppb	21:14:00
2	V 292.402†	43909.5	44284.9	527.93 µg/L	527.93 ppb	21:14:00
2	Zn 213.857†	23786.4	23041.8	526.82 µg/L	526.82 ppb	21:14:00
3	Sc RADIAL	97049.8	97049.8	100 %		21:12:49
3	Al 396.153Radial†	10603.2	10694.0	5095.9 µg/L	5095.9 ppb	21:12:49
3	Ca 317.933Radial†	14512.3	14087.9	5126.9 µg/L	5126.9 ppb	21:12:49
3	Fe 238.204 Radial†	448.8	435.6	5162.6 µg/L	5162.6 ppb	21:13:10
3	K 766.490 Radial†	11390.8	10874.8	5075.0 µg/L	5075.0 ppb	21:12:49
3	Mg 279.077 IEC†	399.2	390.2	5145.8 µg/L	5145.8 ppb	21:13:10
3	Na 589.592 Radial†	20633.4	20397.2	10180 µg/L	10180 ppb	21:12:49
3	Sr 421.552†	85599.8	85229.8	506.68 µg/L	506.68 ppb	21:12:49
3	Sc 361.383	2081264.3	2081264.3	99.434 %		21:14:28
3	Y 371.029	1419446.8	1419446.8	99.063 %		21:14:28
3	Ag 328.068†	59352.4	60150.4	486.47 µg/L	486.47 ppb	21:14:33
3	As 188.979†	299.8	304.8	448.42 µg/L	448.42 ppb	21:14:54
3	B 249.677†	10808.7	10570.8	477.77 µg/L	477.77 ppb	21:14:33
3	Ba 233.527†	21647.0	21778.6	477.14 µg/L	477.14 ppb	21:14:33
3	Be 313.107†	813784.0	819574.0	481.36 µg/L	481.36 ppb	21:14:28
3	Cd 226.502†	19757.6	20040.6	476.26 µg/L	476.26 ppb	21:14:33
3	Co 228.616†	11022.1	11036.8	473.56 µg/L	473.56 ppb	21:14:33
3	Cr 267.716†	21305.0	21346.0	464.55 µg/L	464.55 ppb	21:14:33
3	Cu 324.752†	76010.5	72066.4	471.68 µg/L	471.68 ppb	21:14:33
3	Mn 257.610†	163021.9	164636.6	494.77 µg/L	494.77 ppb	21:14:28
3	Mo 202.031†	4450.1	4470.3	442.54 µg/L	442.54 ppb	21:14:54
3	Ni 231.604†	8728.8	8401.5	470.72 µg/L	470.72 ppb	21:14:33
3	P 214.914†	1613.9	1350.7	2196.6 µg/L	2196.6 ppb	21:14:54
3	Pb 220.353†	1759.1	1739.0	456.43 µg/L	456.43 ppb	21:14:54
3	S 181.975 Axial†	304.7	283.9	903.37 µg/L	903.37 ppb	21:14:54
3	Sb 206.836†	522.5	502.7	450.36 µg/L	450.36 ppb	21:14:54
3	Se 196.026†	500.3	475.8	459.28 µg/L	459.28 ppb	21:14:54
3	SiO2†	31688.0	29088.6	5251.5 µg/L	5251.5 ppb	21:14:33
3	Si 251.611†	36359.3	36142.1	2457.1 µg/L	2457.1 ppb	21:14:33
3	Sn 189.927†	1105.3	1119.0	436.18 µg/L	436.18 ppb	21:14:54
3	Ti 334.940†	202710.2	204441.0	477.74 µg/L	477.74 ppb	21:14:28
3	Tl 190.801†	447.4	484.0	477.31 µg/L	477.31 ppb	21:14:54
3	U 409.014†	4988.4	5022.6	455.01 µg/L	455.01 ppb	21:14:33
3	V 292.402†	39594.8	39707.8	473.02 µg/L	473.02 ppb	21:14:33
3	Zn 213.857†	21686.2	20800.8	475.54 µg/L	475.54 ppb	21:14:33

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2079793.8	99.364 %	0.4317			0.43%
Sc RADIAL	96877.6	100 %	0.2			0.21%
Y 371.029	1418773.5	99.016 %	0.4155			0.42%
Ag 328.068†	62563.8	506.08 µg/L	17.110	506.08 ppb	17.110	3.38%
QC value within limits for Ag 328.068 Recovery = 101.22%						
Al 396.153Radial†	10705.9	5100.4 µg/L	9.47	5100.4 ppb	9.47	0.19%
QC value within limits for Al 396.153Radial Recovery = 102.01%						
As 188.979†	341.0	501.76 µg/L	46.235	501.76 ppb	46.235	9.21%
QC value within limits for As 188.979 Recovery = 100.35%						
B 249.677†	11052.6	499.70 µg/L	19.128	499.70 ppb	19.128	3.83%
QC value within limits for B 249.677 Recovery = 99.94%						
Ba 233.527†	23090.7	505.90 µg/L	24.968	505.90 ppb	24.968	4.94%
QC value within limits for Ba 233.527 Recovery = 101.18%						
Be 313.107†	859563.6	504.85 µg/L	20.340	504.85 ppb	20.340	4.03%
QC value within limits for Be 313.107 Recovery = 100.97%						
Ca 317.933Radial†	14073.0	5121.4 µg/L	4.73	5121.4 ppb	4.73	0.09%
QC value within limits for Ca 317.933Radial Recovery = 102.43%						
Cd 226.502†	21283.5	505.84 µg/L	25.769	505.84 ppb	25.769	5.09%
QC value within limits for Cd 226.502 Recovery = 101.17%						
Co 228.616†	11779.9	505.49 µg/L	27.759	505.49 ppb	27.759	5.49%

QC value within limits for Co 228.616 Recovery = 101.10%						
Cr 267.716†	23249.9	505.99 µg/L	35.905	505.99 ppb	35.905	7.10%
QC value within limits for Cr 267.716 Recovery = 101.20%						
Cu 324.752†	76961.7	503.65 µg/L	27.779	503.65 ppb	27.779	5.52%
QC value within limits for Cu 324.752 Recovery = 100.73%						
Fe 238.204 Radial†	435.9	5166.6 µg/L	12.56	5166.6 ppb	12.56	0.24%
QC value within limits for Fe 238.204 Radial Recovery = 103.33%						
K 766.490 Radial†	10868.1	5072.0 µg/L	20.15	5072.0 ppb	20.15	0.40%
QC value within limits for K 766.490 Radial Recovery = 101.44%						
Mg 279.077 IEC†	391.9	5170.0 µg/L	33.63	5170.0 ppb	33.63	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 103.40%						
Mn 257.610†	172069.0	517.10 µg/L	19.345	517.10 ppb	19.345	3.74%
QC value within limits for Mn 257.610 Recovery = 103.42%						
Mo 202.031†	5072.5	502.13 µg/L	51.655	502.13 ppb	51.655	10.29%
QC value within limits for Mo 202.031 Recovery = 100.43%						
Na 589.592 Radial†	20402.0	10183 µg/L	2.1	10183 ppb	2.1	0.02%
QC value within limits for Na 589.592 Radial Recovery = 101.83%						
Ni 231.604†	9007.0	504.64 µg/L	29.443	504.64 ppb	29.443	5.83%
QC value within limits for Ni 231.604 Recovery = 100.93%						
P 214.914†	1508.3	2456.0 µg/L	224.89	2456.0 ppb	224.89	9.16%
QC value within limits for P 214.914 Recovery = 98.24%						
Pb 220.353†	1916.2	502.97 µg/L	40.350	502.97 ppb	40.350	8.02%
QC value within limits for Pb 220.353 Recovery = 100.59%						
S 181.975 Axial†	311.8	992.29 µg/L	77.208	992.29 ppb	77.208	7.78%
QC value within limits for S 181.975 Axial Recovery = 99.23%						
Sb 206.836†	558.1	500.25 µg/L	43.231	500.25 ppb	43.231	8.64%
QC value within limits for Sb 206.836 Recovery = 100.05%						
Se 196.026†	529.8	510.03 µg/L	44.201	510.03 ppb	44.201	8.67%
QC value within limits for Se 196.026 Recovery = 102.01%						
SiO2†	30554.4	5516.2 µg/L	231.09	5516.2 ppb	231.09	4.19%
QC value within limits for SiO2 Recovery = 103.15%						
Si 251.611†	37964.5	2581.0 µg/L	108.35	2581.0 ppb	108.35	4.20%
QC value within limits for Si 251.611 Recovery = 103.24%						
Sn 189.927†	1285.1	500.83 µg/L	56.006	500.83 ppb	56.006	11.18%
QC value within limits for Sn 189.927 Recovery = 100.17%						
Sr 421.552†	85170.0	506.33 µg/L	0.512	506.33 ppb	0.512	0.10%
QC value within limits for Sr 421.552 Recovery = 101.27%						
Ti 334.940†	215356.7	503.26 µg/L	22.107	503.26 ppb	22.107	4.39%
QC value within limits for Ti 334.940 Recovery = 100.65%						
Tl 190.801†	521.0	513.65 µg/L	31.477	513.65 ppb	31.477	6.13%
QC value within limits for Tl 190.801 Recovery = 102.73%						
U 409.014†	5465.5	495.23 µg/L	34.854	495.23 ppb	34.854	7.04%
QC value within limits for U 409.014 Recovery = 99.05%						
V 292.402†	42648.9	508.33 µg/L	30.643	508.33 ppb	30.643	6.03%
QC value within limits for V 292.402 Recovery = 101.67%						
Zn 213.857†	22213.1	507.85 µg/L	28.125	507.85 ppb	28.125	5.54%
QC value within limits for Zn 213.857 Recovery = 101.57%						
All analyte(s) passed QC.						

Sequence No.: 24

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 21:15:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97062.8	97062.8	100 %		21:15:34
1	Al 396.153Radial†	-121.4	-1.8	-0.8939 µg/L	-0.8939 ppb	21:15:34
1	Ca 317.933Radial†	380.8	-5.6	-2.0218 µg/L	-2.0218 ppb	21:15:54
1	Fe 238.204 Radial†	12.4	0.4	4.6132 µg/L	4.6132 ppb	21:15:54
1	K 766.490 Radial†	447.0	-39.6	-18.465 µg/L	-18.465 ppb	21:15:34
1	Mg 279.077 IEC†	9.0	1.0	13.574 µg/L	13.574 ppb	21:15:54
1	Na 589.592 Radial†	222.9	41.6	20.784 µg/L	20.784 ppb	21:15:34
1	Sr 421.552†	156.3	16.5	0.0979 µg/L	0.0979 ppb	21:15:34
1	Sc 361.383	2081073.2	2081073.2	99.425 %		21:16:56
1	Y 371.029	1423928.0	1423928.0	99.376 %		21:16:56
1	Ag 328.068†	-477.2	-19.7	-0.1592 µg/L	-0.1592 ppb	21:17:02
1	As 188.979†	-2.6	0.6	0.8880 µg/L	0.8880 ppb	21:17:22
1	B 249.677†	305.4	7.8	0.3515 µg/L	0.3515 ppb	21:17:22
1	Ba 233.527†	-2.0	6.4	0.1388 µg/L	0.1388 ppb	21:17:22
1	Be 313.107†	-1008.0	145.0	0.0851 µg/L	0.0851 ppb	21:17:02
1	Cd 226.502†	-174.7	-5.2	-0.1231 µg/L	-0.1231 ppb	21:17:22
1	Co 228.616†	42.7	-5.1	-0.2196 µg/L	-0.2196 ppb	21:17:22
1	Cr 267.716†	74.0	-5.9	-0.1276 µg/L	-0.1276 ppb	21:17:22
1	Cu 324.752†	4393.8	42.5	0.2787 µg/L	0.2787 ppb	21:17:02
1	Mn 257.610†	-675.1	8.0	0.0234 µg/L	0.0234 ppb	21:17:22
1	Mo 202.031†	22.5	17.5	1.7364 µg/L	1.7364 ppb	21:17:22
1	Ni 231.604†	374.0	-0.7	-0.0391 µg/L	-0.0391 ppb	21:17:22
1	P 214.914†	275.4	4.6	7.6210 µg/L	7.6210 ppb	21:17:22
1	Pb 220.353†	27.5	-2.5	-0.6467 µg/L	-0.6467 ppb	21:17:22
1	S 181.975 Axial†	20.0	-2.4	-7.6755 µg/L	-7.6755 ppb	21:17:22
1	Sb 206.836†	22.9	0.3	0.2757 µg/L	0.2757 ppb	21:17:22
1	Se 196.026†	21.1	-6.1	-5.7182 µg/L	-5.7182 ppb	21:17:22
1	SiO2†	2826.8	63.4	11.444 µg/L	11.444 ppb	21:17:22
1	Si 251.611†	550.6	129.7	8.8187 µg/L	8.8187 ppb	21:17:22
1	Sn 189.927†	-0.8	6.6	2.5809 µg/L	2.5809 ppb	21:17:22
1	Ti 334.940†	-412.1	162.8	0.3795 µg/L	0.3795 ppb	21:17:02
1	Tl 190.801†	-29.0	4.9	4.7782 µg/L	4.7782 ppb	21:17:22
1	U 409.014†	-47.9	-42.4	-3.8462 µg/L	-3.8462 ppb	21:17:02
1	V 292.402†	95.2	-16.5	-0.1865 µg/L	-0.1865 ppb	21:17:02
1	Zn 213.857†	967.4	-35.9	-0.8274 µg/L	-0.8274 ppb	21:17:22
2	Sc RADIAL	96905.6	96905.6	100 %		21:16:00
2	Al 396.153Radial†	-91.9	27.6	13.105 µg/L	13.105 ppb	21:16:00
2	Ca 317.933Radial†	382.0	-3.8	-1.3691 µg/L	-1.3691 ppb	21:16:20
2	Fe 238.204 Radial†	15.2	3.2	37.596 µg/L	37.596 ppb	21:16:20
2	K 766.490 Radial†	514.8	28.9	13.467 µg/L	13.467 ppb	21:16:00
2	Mg 279.077 IEC†	8.7	0.7	9.1539 µg/L	9.1539 ppb	21:16:20
2	Na 589.592 Radial†	216.7	35.9	17.893 µg/L	17.893 ppb	21:16:00
2	Sr 421.552†	137.7	-1.8	-0.0110 µg/L	-0.0110 ppb	21:16:00
2	Sc 361.383	2074475.6	2074475.6	99.110 %		21:17:28
2	Y 371.029	1420759.1	1420759.1	99.155 %		21:17:28
2	Ag 328.068†	-471.2	-15.2	-0.1211 µg/L	-0.1211 ppb	21:17:34
2	As 188.979†	-4.9	-1.6	-2.4465 µg/L	-2.4465 ppb	21:17:55
2	B 249.677†	305.3	8.7	0.3749 µg/L	0.3749 ppb	21:17:55
2	Ba 233.527†	-4.7	3.7	0.0805 µg/L	0.0805 ppb	21:17:55
2	Be 313.107†	-1010.4	139.4	0.0817 µg/L	0.0817 ppb	21:17:34
2	Cd 226.502†	-164.7	4.4	0.1002 µg/L	0.1002 ppb	21:17:55
2	Co 228.616†	47.1	-0.6	-0.0236 µg/L	-0.0236 ppb	21:17:55
2	Cr 267.716†	66.1	-13.6	-0.2949 µg/L	-0.2949 ppb	21:17:55
2	Cu 324.752†	4265.5	-72.9	-0.4691 µg/L	-0.4691 ppb	21:17:34
2	Mn 257.610†	-665.2	15.8	0.0491 µg/L	0.0491 ppb	21:17:55
2	Mo 202.031†	27.9	23.1	2.2827 µg/L	2.2827 ppb	21:17:55
2	Ni 231.604†	376.7	3.1	0.1769 µg/L	0.1769 ppb	21:17:55
2	P 214.914†	269.3	-0.7	-1.0582 µg/L	-1.0582 ppb	21:17:55
2	Pb 220.353†	28.6	-1.3	-0.3294 µg/L	-0.3294 ppb	21:17:55

2	S 181.975 Axial†	22.0	-0.4	-1.1951 µg/L	-1.1951 ppb	21:17:55
2	Sb 206.836†	27.5	5.0	4.4953 µg/L	4.4953 ppb	21:17:55
2	Se 196.026†	25.6	-1.5	-1.2633 µg/L	-1.2633 ppb	21:17:55
2	SiO2†	2822.6	68.2	12.319 µg/L	12.319 ppb	21:17:55
2	Si 251.611†	573.7	154.7	10.519 µg/L	10.519 ppb	21:17:55
2	Sn 189.927†	-7.2	0.2	0.0724 µg/L	0.0724 ppb	21:17:55
2	Ti 334.940†	-368.3	205.6	0.4800 µg/L	0.4800 ppb	21:17:34
2	Tl 190.801†	-30.7	3.2	3.0819 µg/L	3.0819 ppb	21:17:55
2	U 409.014†	-79.4	-74.3	-6.7480 µg/L	-6.7480 ppb	21:17:34
2	V 292.402†	91.5	-20.0	-0.2309 µg/L	-0.2309 ppb	21:17:34
2	Zn 213.857†	953.9	-46.4	-1.0713 µg/L	-1.0713 ppb	21:17:55
3	Sc RADIAL	98063.3	98063.3	101 %		21:16:26
3	Al 396.153Radial†	-109.4	11.3	5.3452 µg/L	5.3452 ppb	21:16:26
3	Ca 317.933Radial†	388.4	-1.9	-0.7058 µg/L	-0.7058 ppb	21:16:46
3	Fe 238.204 Radial†	12.2	0.1	1.2721 µg/L	1.2721 ppb	21:16:46
3	K 766.490 Radial†	450.2	-41.0	-19.128 µg/L	-19.128 ppb	21:16:26
3	Mg 279.077 IEC†	12.2	4.0	52.912 µg/L	52.912 ppb	21:16:46
3	Na 589.592 Radial†	189.2	6.2	3.0955 µg/L	3.0955 ppb	21:16:26
3	Sr 421.552†	114.9	-26.0	-0.1549 µg/L	-0.1549 ppb	21:16:26
3	Sc 361.383	2082012.9	2082012.9	99.470 %		21:18:01
3	Y 371.029	1425859.7	1425859.7	99.511 %		21:18:01
3	Ag 328.068†	-411.0	47.0	0.3810 µg/L	0.3810 ppb	21:18:06
3	As 188.979†	-0.1	3.2	4.7029 µg/L	4.7029 ppb	21:18:27
3	B 249.677†	297.4	-0.4	-0.0181 µg/L	-0.0181 ppb	21:18:27
3	Ba 233.527†	-13.2	-4.9	-0.1057 µg/L	-0.1057 ppb	21:18:27
3	Be 313.107†	-1002.7	150.8	0.0884 µg/L	0.0884 ppb	21:18:06
3	Cd 226.502†	-169.6	0.1	0.0021 µg/L	0.0021 ppb	21:18:27
3	Co 228.616†	48.1	0.3	0.0130 µg/L	0.0130 ppb	21:18:27
3	Cr 267.716†	67.6	-12.2	-0.2660 µg/L	-0.2660 ppb	21:18:27
3	Cu 324.752†	4336.1	-17.5	-0.1142 µg/L	-0.1142 ppb	21:18:06
3	Mn 257.610†	-687.8	-4.5	-0.0170 µg/L	-0.0170 ppb	21:18:27
3	Mo 202.031†	25.5	20.5	2.0318 µg/L	2.0318 ppb	21:18:27
3	Ni 231.604†	380.5	5.6	0.3153 µg/L	0.3153 ppb	21:18:27
3	P 214.914†	280.0	9.1	15.180 µg/L	15.180 ppb	21:18:27
3	Pb 220.353†	33.7	3.7	0.9757 µg/L	0.9757 ppb	21:18:27
3	S 181.975 Axial†	23.9	1.5	4.7828 µg/L	4.7828 ppb	21:18:27
3	Sb 206.836†	29.2	6.6	5.9168 µg/L	5.9168 ppb	21:18:27
3	Se 196.026†	20.1	-7.1	-6.7089 µg/L	-6.7089 ppb	21:18:27
3	SiO2†	2851.1	86.6	15.632 µg/L	15.632 ppb	21:18:27
3	Si 251.611†	589.1	168.1	11.429 µg/L	11.429 ppb	21:18:27
3	Sn 189.927†	-5.4	2.0	0.7882 µg/L	0.7882 ppb	21:18:27
3	Ti 334.940†	-355.7	219.6	0.5093 µg/L	0.5093 ppb	21:18:06
3	Tl 190.801†	-33.6	0.3	0.2753 µg/L	0.2753 ppb	21:18:27
3	U 409.014†	-52.9	-47.4	-4.3001 µg/L	-4.3001 ppb	21:18:06
3	V 292.402†	155.3	43.8	0.5273 µg/L	0.5273 ppb	21:18:06
3	Zn 213.857†	943.3	-60.6	-1.3986 µg/L	-1.3986 ppb	21:18:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2079187.2	99.335 %		0.1962			0.20%
Sc RADIAL	97343.9	101 %		0.6			0.65%
Y 371.029	1423515.6	99.347 %		0.1797			0.18%
Ag 328.068†	4.0	0.0336 µg/L		0.30147	0.0336 ppb	0.30147	897.80%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	12.3	5.8521 µg/L		7.01318	5.8521 ppb	7.01318	119.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.7	1.0481 µg/L		3.57737	1.0481 ppb	3.57737	341.31%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	5.4	0.2361 µg/L		0.22046	0.2361 ppb	0.22046	93.37%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	1.7	0.0379 µg/L		0.12769	0.0379 ppb	0.12769	337.04%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	145.1	0.0851 µg/L		0.00335	0.0851 ppb	0.00335	3.94%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-3.8	-1.3656 µg/L		0.65800	-1.3656 ppb	0.65800	48.19%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	-0.2	-0.0069 µg/L		0.11195	-0.0069 ppb	0.11195	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-1.8	-0.0768 µg/L		0.12508	-0.0768 ppb	0.12508	162.94%

QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-10.6	-0.2295 µg/L	0.08941	-0.2295 ppb	0.08941	38.96%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-16.0	-0.1015 µg/L	0.37405	-0.1015 ppb	0.37405	368.42%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.2	14.494 µg/L	20.0766	14.494 ppb	20.0766	138.52%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-17.2	-8.0419 µg/L	18.63056	-8.0419 ppb	18.63056	231.67%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.9	25.213 µg/L	24.0891	25.213 ppb	24.0891	95.54%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	6.4	0.0185 µg/L	0.03328	0.0185 ppb	0.03328	179.82%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	20.4	2.0170 µg/L	0.27347	2.0170 ppb	0.27347	13.56%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	27.9	13.924 µg/L	9.4885	13.924 ppb	9.4885	68.14%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	2.7	0.1510 µg/L	0.17861	0.1510 ppb	0.17861	118.26%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	4.4	7.2475 µg/L	8.12542	7.2475 ppb	8.12542	112.11%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-0.0	-0.0001 µg/L	0.85988	-0.0001 ppb	0.85988	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.4	-1.3626 µg/L	6.23084	-1.3626 ppb	6.23084	457.27%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	4.0	3.5626 µg/L	2.93396	3.5626 ppb	2.93396	82.35%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.9	-4.5635 µg/L	2.90062	-4.5635 ppb	2.90062	63.56%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	72.7	13.132 µg/L	2.2092	13.132 ppb	2.2092	16.82%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	150.9	10.256 µg/L	1.3251	10.256 ppb	1.3251	12.92%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.9	1.1472 µg/L	1.29220	1.1472 ppb	1.29220	112.64%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.8	-0.0226 µg/L	0.12678	-0.0226 ppb	0.12678	560.00%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	196.0	0.4563 µg/L	0.06806	0.4563 ppb	0.06806	14.92%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.8	2.7118 µg/L	2.27415	2.7118 ppb	2.27415	83.86%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-54.7	-4.9648 µg/L	1.56090	-4.9648 ppb	1.56090	31.44%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2.4	0.0367 µg/L	0.42551	0.0367 ppb	0.42551	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-47.6	-1.0991 µg/L	0.28659	-1.0991 ppb	0.28659	26.08%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 33

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 21:47:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97772.3	97772.3	101	%		21:48:26
1	Al 396.153Radial†	10777.9	10788.7	5138.8	µg/L	5138.8 ppb	21:48:26
1	Ca 317.933Radial†	14899.9	14364.6	5227.6	µg/L	5227.6 ppb	21:48:26
1	Fe 238.204 Radial†	472.9	456.2	5406.9	µg/L	5406.9 ppb	21:48:46
1	K 766.490 Radial†	11668.9	11066.1	5164.3	µg/L	5164.3 ppb	21:48:26
1	Mg 279.077 IEC†	413.2	401.1	5290.7	µg/L	5290.7 ppb	21:48:46
1	Na 589.592 Radial†	22064.6	21662.0	10812	µg/L	10812 ppb	21:48:26
1	Sr 421.552†	90194.1	89146.9	529.97	µg/L	529.97 ppb	21:48:26
1	Sc 361.383	2036065.5	2036065.5	97.275	%		21:49:50
1	Y 371.029	1390415.9	1390415.9	97.037	%		21:49:50
1	Ag 328.068†	63581.9	65823.5	532.50	µg/L	532.50 ppb	21:49:56
1	As 188.979†	355.8	369.0	543.01	µg/L	543.01 ppb	21:50:16
1	B 249.677†	11667.3	11694.8	528.78	µg/L	528.78 ppb	21:49:56
1	Ba 233.527†	23835.8	24512.1	537.05	µg/L	537.05 ppb	21:49:56
1	Be 313.107†	885352.9	911316.0	535.25	µg/L	535.25 ppb	21:49:50
1	Cd 226.502†	21743.0	22522.7	535.30	µg/L	535.30 ppb	21:49:56
1	Co 228.616†	12247.7	12542.8	538.24	µg/L	538.24 ppb	21:49:56
1	Cr 267.716†	24374.4	24977.1	543.57	µg/L	543.57 ppb	21:49:56
1	Cu 324.752†	84640.3	82634.9	540.75	µg/L	540.75 ppb	21:49:56
1	Mn 257.610†	176407.4	182036.7	547.07	µg/L	547.07 ppb	21:49:50
1	Mo 202.031†	5446.8	5594.3	553.77	µg/L	553.77 ppb	21:50:16
1	Ni 231.604†	9732.8	9628.6	539.47	µg/L	539.47 ppb	21:49:56
1	P 214.914†	1867.0	1646.9	2682.8	µg/L	2682.8 ppb	21:50:16
1	Pb 220.353†	2058.1	2085.6	547.44	µg/L	547.44 ppb	21:50:16
1	S 181.975 Axial†	348.7	336.0	1069.2	µg/L	1069.2 ppb	21:50:16
1	Sb 206.836†	620.6	615.3	551.68	µg/L	551.68 ppb	21:50:16
1	Se 196.026†	576.7	565.5	544.27	µg/L	544.27 ppb	21:50:16
1	SiO2†	34292.2	32473.2	5862.6	µg/L	5862.6 ppb	21:49:56
1	Si 251.611†	39619.8	40305.7	2740.1	µg/L	2740.1 ppb	21:49:56
1	Sn 189.927†	1379.0	1425.1	555.33	µg/L	555.33 ppb	21:50:16
1	Ti 334.940†	222407.5	229215.8	535.66	µg/L	535.66 ppb	21:49:50
1	Tl 190.801†	505.3	553.5	545.79	µg/L	545.79 ppb	21:50:16
1	U 409.014†	5754.8	5921.8	536.62	µg/L	536.62 ppb	21:49:56
1	V 292.402†	44444.8	45577.7	543.40	µg/L	543.40 ppb	21:49:56
1	Zn 213.857†	23996.1	23659.5	540.92	µg/L	540.92 ppb	21:49:56
2	Sc RADIAL	97138.7	97138.7	100	%		21:48:52
2	Al 396.153Radial†	10690.8	10771.6	5130.7	µg/L	5130.7 ppb	21:48:52
2	Ca 317.933Radial†	14789.5	14350.8	5222.6	µg/L	5222.6 ppb	21:48:52
2	Fe 238.204 Radial†	472.7	459.0	5441.1	µg/L	5441.1 ppb	21:49:12
2	K 766.490 Radial†	11512.8	10985.9	5126.9	µg/L	5126.9 ppb	21:48:52
2	Mg 279.077 IEC†	409.6	400.1	5278.4	µg/L	5278.4 ppb	21:49:12
2	Na 589.592 Radial†	21869.7	21610.2	10786	µg/L	10786 ppb	21:48:52
2	Sr 421.552†	89385.7	88923.8	528.64	µg/L	528.64 ppb	21:48:52
2	Sc 361.383	2023565.8	2023565.8	96.678	%		21:50:24
2	Y 371.029	1382580.5	1382580.5	96.490	%		21:50:24
2	Ag 328.068†	63927.4	66584.5	538.65	µg/L	538.65 ppb	21:50:29
2	As 188.979†	351.5	366.8	539.80	µg/L	539.80 ppb	21:50:50
2	B 249.677†	11718.8	11822.2	534.56	µg/L	534.56 ppb	21:50:29
2	Ba 233.527†	23947.7	24779.2	542.90	µg/L	542.90 ppb	21:50:29
2	Be 313.107†	877927.9	909257.9	534.04	µg/L	534.04 ppb	21:50:24
2	Cd 226.502†	21827.8	22748.5	540.67	µg/L	540.67 ppb	21:50:29
2	Co 228.616†	12316.1	12691.3	544.62	µg/L	544.62 ppb	21:50:29
2	Cr 267.716†	24508.1	25270.2	549.95	µg/L	549.95 ppb	21:50:29
2	Cu 324.752†	84880.8	83421.2	545.89	µg/L	545.89 ppb	21:50:29
2	Mn 257.610†	175312.6	182024.4	547.03	µg/L	547.03 ppb	21:50:24
2	Mo 202.031†	5362.0	5541.1	548.51	µg/L	548.51 ppb	21:50:50
2	Ni 231.604†	9753.9	9712.2	544.15	µg/L	544.15 ppb	21:50:29
2	P 214.914†	1854.3	1645.7	2680.1	µg/L	2680.1 ppb	21:50:50
2	Pb 220.353†	2018.7	2057.9	540.14	µg/L	540.14 ppb	21:50:50

2	S 181.975 Axial†	347.9	337.3	1073.4 µg/L	1073.4 ppb	21:50:50
2	Sb 206.836†	607.8	606.0	543.25 µg/L	543.25 ppb	21:50:50
2	Se 196.026†	581.5	574.2	552.53 µg/L	552.53 ppb	21:50:50
2	SiO2†	34604.6	33014.1	5960.2 µg/L	5960.2 ppb	21:50:29
2	Si 251.611†	39829.3	40774.0	2772.0 µg/L	2772.0 ppb	21:50:29
2	Sn 189.927†	1354.2	1408.2	548.76 µg/L	548.76 ppb	21:50:50
2	Ti 334.940†	220615.8	228774.9	534.63 µg/L	534.63 ppb	21:50:24
2	Tl 190.801†	499.0	550.2	542.54 µg/L	542.54 ppb	21:50:50
2	U 409.014†	5827.5	6033.6	546.76 µg/L	546.76 ppb	21:50:29
2	V 292.402†	44729.1	46154.0	550.18 µg/L	550.18 ppb	21:50:29
2	Zn 213.857†	24138.1	23958.7	547.78 µg/L	547.78 ppb	21:50:29
3	Sc RADIAL	97577.3	97577.3	101 %		21:49:18
3	Al 396.153Radial†	10734.3	10766.8	5130.3 µg/L	5130.3 ppb	21:49:18
3	Ca 317.933Radial†	14887.2	14381.5	5233.7 µg/L	5233.7 ppb	21:49:18
3	Fe 238.204 Radial†	477.3	461.5	5468.7 µg/L	5468.7 ppb	21:49:39
3	K 766.490 Radial†	11587.2	11008.2	5137.3 µg/L	5137.3 ppb	21:49:18
3	Mg 279.077 IEC†	413.6	402.3	5305.3 µg/L	5305.3 ppb	21:49:39
3	Na 589.592 Radial†	21927.6	21569.7	10766 µg/L	10766 ppb	21:49:18
3	Sr 421.552†	89853.8	88987.8	529.02 µg/L	529.02 ppb	21:49:18
3	Sc 361.383	2022166.2	2022166.2	96.611 %		21:50:57
3	Y 371.029	1382316.9	1382316.9	96.472 %		21:50:57
3	Ag 328.068†	59770.9	62328.0	504.08 µg/L	504.08 ppb	21:51:03
3	As 188.979†	299.5	313.3	460.84 µg/L	460.84 ppb	21:51:23
3	B 249.677†	10865.3	10947.1	494.71 µg/L	494.71 ppb	21:51:03
3	Ba 233.527†	21707.8	22477.7	492.46 µg/L	492.46 ppb	21:51:03
3	Be 313.107†	815029.8	844781.7	496.17 µg/L	496.17 ppb	21:50:57
3	Cd 226.502†	19723.3	20585.8	489.20 µg/L	489.20 ppb	21:51:03
3	Co 228.616†	10963.9	11300.4	484.87 µg/L	484.87 ppb	21:51:03
3	Cr 267.716†	21326.6	21994.5	478.67 µg/L	478.67 ppb	21:51:03
3	Cu 324.752†	76473.5	74779.7	489.46 µg/L	489.46 ppb	21:51:03
3	Mn 257.610†	163134.3	169544.4	509.52 µg/L	509.52 ppb	21:50:57
3	Mo 202.031†	4489.9	4642.3	459.57 µg/L	459.57 ppb	21:51:23
3	Ni 231.604†	8750.7	8680.8	486.37 µg/L	486.37 ppb	21:51:03
3	P 214.914†	1610.8	1394.9	2268.1 µg/L	2268.1 ppb	21:51:23
3	Pb 220.353†	1766.6	1798.4	472.01 µg/L	472.01 ppb	21:51:23
3	S 181.975 Axial†	305.0	293.2	932.98 µg/L	932.98 ppb	21:51:23
3	Sb 206.836†	520.5	516.1	462.37 µg/L	462.37 ppb	21:51:23
3	Se 196.026†	519.0	509.9	492.16 µg/L	492.16 ppb	21:51:23
3	SiO2†	31949.4	30290.5	5468.5 µg/L	5468.5 ppb	21:51:03
3	Si 251.611†	36672.9	37535.4	2551.8 µg/L	2551.8 ppb	21:51:03
3	Sn 189.927†	1105.0	1151.2	448.73 µg/L	448.73 ppb	21:51:23
3	Ti 334.940†	203323.0	211033.2	493.14 µg/L	493.14 ppb	21:50:57
3	Tl 190.801†	450.0	499.9	492.99 µg/L	492.99 ppb	21:51:23
3	U 409.014†	5059.3	5242.6	474.94 µg/L	474.94 ppb	21:51:03
3	V 292.402†	39722.0	41003.3	488.46 µg/L	488.46 ppb	21:51:03
3	Zn 213.857†	21680.5	21432.3	489.96 µg/L	489.96 ppb	21:51:03

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2027265.8	96.854 %	0.3656			0.38%
Sc RADIAL	97496.1	101 %	0.3			0.33%
Y 371.029	1385104.4	96.666 %	0.3212			0.33%
Ag 328.068†	64912.0	525.08 µg/L	18.444	525.08 ppb	18.444	3.51%
QC value within limits for Ag 328.068 Recovery = 105.02%						
Al 396.153Radial†	10775.7	5133.3 µg/L	4.81	5133.3 ppb	4.81	0.09%
QC value within limits for Al 396.153Radial Recovery = 102.67%						
As 188.979†	349.7	514.55 µg/L	46.545	514.55 ppb	46.545	9.05%
QC value within limits for As 188.979 Recovery = 102.91%						
B 249.677†	11488.0	519.35 µg/L	21.531	519.35 ppb	21.531	4.15%
QC value within limits for B 249.677 Recovery = 103.87%						
Ba 233.527†	23923.0	524.14 µg/L	27.588	524.14 ppb	27.588	5.26%
QC value within limits for Ba 233.527 Recovery = 104.83%						
Be 313.107†	888451.9	521.82 µg/L	22.220	521.82 ppb	22.220	4.26%
QC value within limits for Be 313.107 Recovery = 104.36%						
Ca 317.933Radial†	14365.7	5228.0 µg/L	5.60	5228.0 ppb	5.60	0.11%
QC value within limits for Ca 317.933Radial Recovery = 104.56%						
Cd 226.502†	21952.3	521.73 µg/L	28.294	521.73 ppb	28.294	5.42%
QC value within limits for Cd 226.502 Recovery = 104.35%						
Co 228.616†	12178.2	522.58 µg/L	32.810	522.58 ppb	32.810	6.28%

QC value within limits for Co 228.616 Recovery = 104.52%							
Cr 267.716†	24080.6	524.06 µg/L	39.442	524.06 ppb	39.442	7.53%	
QC value within limits for Cr 267.716 Recovery = 104.81%							
Cu 324.752†	80278.6	525.37 µg/L	31.206	525.37 ppb	31.206	5.94%	
QC value within limits for Cu 324.752 Recovery = 105.07%							
Fe 238.204 Radial†	458.9	5438.9 µg/L	30.96	5438.9 ppb	30.96	0.57%	
QC value within limits for Fe 238.204 Radial Recovery = 108.78%							
K 766.490 Radial†	11020.1	5142.9 µg/L	19.31	5142.9 ppb	19.31	0.38%	
QC value within limits for K 766.490 Radial Recovery = 102.86%							
Mg 279.077 IEC†	401.2	5291.5 µg/L	13.49	5291.5 ppb	13.49	0.25%	
QC value within limits for Mg 279.077 IEC Recovery = 105.83%							
Mn 257.610†	177868.5	534.54 µg/L	21.665	534.54 ppb	21.665	4.05%	
QC value within limits for Mn 257.610 Recovery = 106.91%							
Mo 202.031†	5259.2	520.62 µg/L	52.933	520.62 ppb	52.933	10.17%	
QC value within limits for Mo 202.031 Recovery = 104.12%							
Na 589.592 Radial†	21614.0	10788 µg/L	23.1	10788 ppb	23.1	0.21%	
QC value within limits for Na 589.592 Radial Recovery = 107.88%							
Ni 231.604†	9340.5	523.33 µg/L	32.093	523.33 ppb	32.093	6.13%	
QC value within limits for Ni 231.604 Recovery = 104.67%							
P 214.914†	1562.5	2543.7 µg/L	238.63	2543.7 ppb	238.63	9.38%	
QC value within limits for P 214.914 Recovery = 101.75%							
Pb 220.353†	1980.6	519.86 µg/L	41.603	519.86 ppb	41.603	8.00%	
QC value within limits for Pb 220.353 Recovery = 103.97%							
S 181.975 Axial†	322.1	1025.2 µg/L	79.88	1025.2 ppb	79.88	7.79%	
QC value within limits for S 181.975 Axial Recovery = 102.52%							
Sb 206.836†	579.1	519.10 µg/L	49.309	519.10 ppb	49.309	9.50%	
QC value within limits for Sb 206.836 Recovery = 103.82%							
Se 196.026†	549.9	529.65 µg/L	32.729	529.65 ppb	32.729	6.18%	
QC value within limits for Se 196.026 Recovery = 105.93%							
SiO2†	31925.9	5763.8 µg/L	260.32	5763.8 ppb	260.32	4.52%	
QC value within limits for SiO2 Recovery = 107.78%							
Si 251.611†	39538.3	2688.0 µg/L	119.00	2688.0 ppb	119.00	4.43%	
QC value within limits for Si 251.611 Recovery = 107.52%							
Sn 189.927†	1328.2	517.61 µg/L	59.742	517.61 ppb	59.742	11.54%	
QC value within limits for Sn 189.927 Recovery = 103.52%							
Sr 421.552†	89019.5	529.21 µg/L	0.683	529.21 ppb	0.683	0.13%	
QC value within limits for Sr 421.552 Recovery = 105.84%							
Ti 334.940†	223008.0	521.14 µg/L	24.256	521.14 ppb	24.256	4.65%	
QC value within limits for Ti 334.940 Recovery = 104.23%							
Tl 190.801†	534.5	527.10 µg/L	29.588	527.10 ppb	29.588	5.61%	
QC value within limits for Tl 190.801 Recovery = 105.42%							
U 409.014†	5732.7	519.44 µg/L	38.872	519.44 ppb	38.872	7.48%	
QC value within limits for U 409.014 Recovery = 103.89%							
V 292.402†	44245.0	527.35 µg/L	33.850	527.35 ppb	33.850	6.42%	
QC value within limits for V 292.402 Recovery = 105.47%							
Zn 213.857†	23016.8	526.22 µg/L	31.592	526.22 ppb	31.592	6.00%	
QC value within limits for Zn 213.857 Recovery = 105.24%							
All analyte(s) passed QC.							

Sequence No.: 34

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 21:51:33

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	94390.7	94390.7	97.5 %		21:52:03
1	Al 396.153Radial†	-119.4	-3.1	-1.5454 µg/L	-1.5454 ppb	21:52:03
1	Ca 317.933Radial†	347.5	-28.9	-10.535 µg/L	-10.535 ppb	21:52:23
1	Fe 238.204 Radial†	16.4	4.9	57.546 µg/L	57.546 ppb	21:52:23
1	K 766.490 Radial†	477.9	4.7	2.2018 µg/L	2.2018 ppb	21:52:03
1	Mg 279.077 IEC†	6.7	-1.1	-14.748 µg/L	-14.748 ppb	21:52:23
1	Na 589.592 Radial†	155.9	-20.7	-10.322 µg/L	-10.322 ppb	21:52:03
1	Sr 421.552†	119.8	-16.6	-0.0985 µg/L	-0.0985 ppb	21:52:03
1	Sc 361.383	2029019.0	2029019.0	96.938 %		21:53:25
1	Y 371.029	1388215.0	1388215.0	96.884 %		21:53:25
1	Ag 328.068†	-402.4	45.1	0.3677 µg/L	0.3677 ppb	21:53:31
1	As 188.979†	-1.9	1.3	1.9515 µg/L	1.9515 ppb	21:53:52
1	B 249.677†	314.7	25.3	1.1166 µg/L	1.1166 ppb	21:53:31
1	Ba 233.527†	0.8	9.2	0.2016 µg/L	0.2016 ppb	21:53:52
1	Be 313.107†	-914.0	216.0	0.1267 µg/L	0.1267 ppb	21:53:31
1	Cd 226.502†	-166.4	-1.1	-0.0327 µg/L	-0.0327 ppb	21:53:52
1	Co 228.616†	42.0	-4.8	-0.2032 µg/L	-0.2032 ppb	21:53:52
1	Cr 267.716†	67.0	-11.1	-0.2414 µg/L	-0.2414 ppb	21:53:31
1	Cu 324.752†	4250.4	7.9	0.0627 µg/L	0.0627 ppb	21:53:31
1	Mn 257.610†	-672.7	-7.0	-0.0165 µg/L	-0.0165 ppb	21:53:52
1	Mo 202.031†	25.8	21.5	2.1301 µg/L	2.1301 ppb	21:53:52
1	Ni 231.604†	368.3	3.1	0.1727 µg/L	0.1727 ppb	21:53:52
1	P 214.914†	269.5	5.6	9.2710 µg/L	9.2710 ppb	21:53:52
1	Pb 220.353†	22.4	-7.1	-1.8556 µg/L	-1.8556 ppb	21:53:52
1	S 181.975 Axial†	24.4	2.7	8.5125 µg/L	8.5125 ppb	21:53:52
1	Sb 206.836†	23.6	1.6	1.4455 µg/L	1.4455 ppb	21:53:52
1	Se 196.026†	20.6	-6.1	-5.4921 µg/L	-5.4921 ppb	21:53:52
1	SiO2†	2893.3	204.9	36.997 µg/L	36.997 ppb	21:53:31
1	Si 251.611†	600.7	195.6	13.300 µg/L	13.300 ppb	21:53:52
1	Sn 189.927†	-2.4	5.0	1.9427 µg/L	1.9427 ppb	21:53:52
1	Ti 334.940†	-349.6	216.6	0.5075 µg/L	0.5075 ppb	21:53:31
1	Tl 190.801†	-30.1	3.0	2.9569 µg/L	2.9569 ppb	21:53:52
1	U 409.014†	-23.5	-18.4	-1.6764 µg/L	-1.6764 ppb	21:53:31
1	V 292.402†	125.0	16.7	0.2035 µg/L	0.2035 ppb	21:53:31
1	Zn 213.857†	714.3	-272.0	-6.2652 µg/L	-6.2652 ppb	21:53:52
2	Sc RADIAL	94779.5	94779.5	97.9 %		21:52:29
2	Al 396.153Radial†	-111.3	5.6	2.6322 µg/L	2.6322 ppb	21:52:29
2	Ca 317.933Radial†	353.1	-24.7	-8.9876 µg/L	-8.9876 ppb	21:52:49
2	Fe 238.204 Radial†	12.7	1.0	11.443 µg/L	11.443 ppb	21:52:49
2	K 766.490 Radial†	503.4	28.7	13.414 µg/L	13.414 ppb	21:52:29
2	Mg 279.077 IEC†	10.4	2.7	35.244 µg/L	35.244 ppb	21:52:49
2	Na 589.592 Radial†	167.9	-9.2	-4.5726 µg/L	-4.5726 ppb	21:52:29
2	Sr 421.552†	124.3	-12.5	-0.0743 µg/L	-0.0743 ppb	21:52:29
2	Sc 361.383	2023388.2	2023388.2	96.669 %		21:53:58
2	Y 371.029	1384724.1	1384724.1	96.640 %		21:53:58
2	Ag 328.068†	-498.1	-55.0	-0.4428 µg/L	-0.4428 ppb	21:54:03
2	As 188.979†	-0.6	2.7	3.9309 µg/L	3.9309 ppb	21:54:24
2	B 249.677†	300.6	11.6	0.5187 µg/L	0.5187 ppb	21:54:03
2	Ba 233.527†	-3.3	5.0	0.1096 µg/L	0.1096 ppb	21:54:24
2	Be 313.107†	-980.5	144.6	0.0848 µg/L	0.0848 ppb	21:54:03
2	Cd 226.502†	-157.7	7.4	0.1751 µg/L	0.1751 ppb	21:54:24
2	Co 228.616†	35.5	-11.3	-0.4861 µg/L	-0.4861 ppb	21:54:24
2	Cr 267.716†	44.4	-34.4	-0.7474 µg/L	-0.7474 ppb	21:54:03
2	Cu 324.752†	4267.9	38.3	0.2520 µg/L	0.2520 ppb	21:54:03
2	Mn 257.610†	-659.4	4.8	0.0128 µg/L	0.0128 ppb	21:54:24
2	Mo 202.031†	22.6	18.3	1.8095 µg/L	1.8095 ppb	21:54:24
2	Ni 231.604†	363.6	-0.7	-0.0400 µg/L	-0.0400 ppb	21:54:24
2	P 214.914†	267.4	4.2	6.9881 µg/L	6.9881 ppb	21:54:24
2	Pb 220.353†	30.6	1.4	0.3798 µg/L	0.3798 ppb	21:54:24

2	S 181.975 Axial†	27.2	5.6	17.892 µg/L	17.892 ppb	21:54:24
2	Sb 206.836†	25.1	3.3	2.9604 µg/L	2.9604 ppb	21:54:24
2	Se 196.026†	15.5	-11.3	-10.633 µg/L	-10.633 ppb	21:54:24
2	SiO2†	2871.6	190.8	34.443 µg/L	34.443 ppb	21:54:03
2	Si 251.611†	627.8	225.4	15.323 µg/L	15.323 ppb	21:54:24
2	Sn 189.927†	-4.4	2.9	1.1250 µg/L	1.1250 ppb	21:54:24
2	Ti 334.940†	-376.3	187.9	0.4365 µg/L	0.4365 ppb	21:54:03
2	Tl 190.801†	-26.0	7.2	7.0532 µg/L	7.0532 ppb	21:54:24
2	U 409.014†	38.1	45.2	4.1028 µg/L	4.1028 ppb	21:54:03
2	V 292.402†	83.9	-25.5	-0.2858 µg/L	-0.2858 ppb	21:54:03
2	Zn 213.857†	709.8	-274.6	-6.3246 µg/L	-6.3246 ppb	21:54:24
3	Sc RADIAL	93880.6	93880.6	97.0 %		21:52:55
3	Al 396.153Radial†	-93.0	23.4	11.148 µg/L	11.148 ppb	21:52:55
3	Ca 317.933Radial†	352.9	-21.4	-7.7985 µg/L	-7.7985 ppb	21:53:15
3	Fe 238.204 Radial†	12.9	1.3	15.467 µg/L	15.467 ppb	21:53:15
3	K 766.490 Radial†	551.9	83.6	39.029 µg/L	39.029 ppb	21:52:55
3	Mg 279.077 IEC†	9.5	1.8	24.061 µg/L	24.061 ppb	21:53:15
3	Na 589.592 Radial†	184.9	10.0	4.9951 µg/L	4.9951 ppb	21:52:55
3	Sr 421.552†	133.9	-1.4	-0.0082 µg/L	-0.0082 ppb	21:52:55
3	Sc 361.383	2018677.8	2018677.8	96.444 %		21:54:30
3	Y 371.029	1382797.4	1382797.4	96.505 %		21:54:30
3	Ag 328.068†	-555.3	-115.5	-0.9289 µg/L	-0.9289 ppb	21:54:35
3	As 188.979†	-3.0	0.2	0.2205 µg/L	0.2205 ppb	21:54:56
3	B 249.677†	312.3	24.4	1.1000 µg/L	1.1000 ppb	21:54:35
3	Ba 233.527†	-4.0	4.2	0.0922 µg/L	0.0922 ppb	21:54:56
3	Be 313.107†	-964.8	158.4	0.0929 µg/L	0.0929 ppb	21:54:35
3	Cd 226.502†	-174.7	-10.5	-0.2522 µg/L	-0.2522 ppb	21:54:56
3	Co 228.616†	49.9	3.7	0.1597 µg/L	0.1597 ppb	21:54:56
3	Cr 267.716†	55.8	-22.4	-0.4871 µg/L	-0.4871 ppb	21:54:35
3	Cu 324.752†	4285.5	66.8	0.4393 µg/L	0.4393 ppb	21:54:35
3	Mn 257.610†	-662.1	0.5	0.0008 µg/L	0.0008 ppb	21:54:56
3	Mo 202.031†	18.0	13.5	1.3376 µg/L	1.3376 ppb	21:54:56
3	Ni 231.604†	364.9	1.5	0.0815 µg/L	0.0815 ppb	21:54:56
3	P 214.914†	263.4	0.7	1.1238 µg/L	1.1238 ppb	21:54:56
3	Pb 220.353†	34.4	5.5	1.4415 µg/L	1.4415 ppb	21:54:56
3	S 181.975 Axial†	15.5	-6.5	-20.741 µg/L	-20.741 ppb	21:54:56
3	Sb 206.836†	26.9	5.2	4.6521 µg/L	4.6521 ppb	21:54:56
3	Se 196.026†	25.6	-0.8	-0.6925 µg/L	-0.6925 ppb	21:54:56
3	SiO2†	2924.2	252.3	45.545 µg/L	45.545 ppb	21:54:35
3	Si 251.611†	645.5	245.2	16.670 µg/L	16.670 ppb	21:54:56
3	Sn 189.927†	-8.2	-1.0	-0.3979 µg/L	-0.3979 ppb	21:54:56
3	Ti 334.940†	-380.6	182.6	0.4250 µg/L	0.4250 ppb	21:54:35
3	Tl 190.801†	-29.6	3.4	3.3724 µg/L	3.3724 ppb	21:54:56
3	U 409.014†	-22.9	-17.9	-1.6257 µg/L	-1.6257 ppb	21:54:35
3	V 292.402†	79.4	-29.9	-0.3479 µg/L	-0.3479 ppb	21:54:35
3	Zn 213.857†	727.0	-255.1	-5.8760 µg/L	-5.8760 ppb	21:54:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2023695.0	96.684 %	0.2474			0.26%
Sc RADIAL	94350.3	97.5 %	0.47			0.48%
Y 371.029	1385245.5	96.676 %	0.1917			0.20%
Ag 328.068†	-41.8	-0.3347 µg/L	0.65499	-0.3347 ppb	0.65499	195.71%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.6	4.0783 µg/L	6.46919	4.0783 ppb	6.46919	158.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.4	2.0343 µg/L	1.85656	2.0343 ppb	1.85656	91.26%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	20.4	0.9118 µg/L	0.34048	0.9118 ppb	0.34048	37.34%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.2	0.1345 µg/L	0.05881	0.1345 ppb	0.05881	43.74%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	173.0	0.1015 µg/L	0.02224	0.1015 ppb	0.02224	21.91%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-25.0	-9.1071 µg/L	1.37226	-9.1071 ppb	1.37226	15.07%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-1.4	-0.0366 µg/L	0.21365	-0.0366 ppb	0.21365	583.80%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.1	-0.1765 µg/L	0.32368	-0.1765 ppb	0.32368	183.34%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-22.6 -0.4920 µg/L	0.25301 -0.4920 ppb	0.25301 51.43%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	37.7 0.2514 µg/L	0.18830 0.2514 ppb	0.18830 74.91%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	2.4 28.152 µg/L	25.5355 28.152 ppb	25.5355 90.71%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	39.0 18.215 µg/L	18.8772 18.215 ppb	18.8772 103.63%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.1 14.852 µg/L	26.2377 14.852 ppb	26.2377 176.66%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-0.5 -0.0010 µg/L	0.01472 -0.0010 ppb	0.01472 >999.9%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	17.8 1.7591 µg/L	0.39865 1.7591 ppb	0.39865 22.66%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-6.6 -3.2999 µg/L	7.73750 -3.2999 ppb	7.73750 234.48%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	1.3 0.0714 µg/L	0.10673 0.0714 ppb	0.10673 149.54%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	3.5 5.7943 µg/L	4.20277 5.7943 ppb	4.20277 72.53%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-0.1 -0.0114 µg/L	1.68302 -0.0114 ppb	1.68302 >999.9%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	0.6 1.8880 µg/L	20.15032 1.8880 ppb	20.15032 >999.9%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	3.3 3.0193 µg/L	1.60411 3.0193 ppb	1.60411 53.13%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-6.0 -5.6058 µg/L	4.97111 -5.6058 ppb	4.97111 88.68%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	216.0 38.995 µg/L	5.8143 38.995 ppb	5.8143 14.91%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	222.1 15.097 µg/L	1.6962 15.097 ppb	1.6962 11.24%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.3 0.8899 µg/L	1.18790 0.8899 ppb	1.18790 133.48%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-10.1 -0.0603 µg/L	0.04671 -0.0603 ppb	0.04671 77.41%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	195.7 0.4563 µg/L	0.04466 0.4563 ppb	0.04466 9.79%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	4.6 4.4609 µg/L	2.25465 4.4609 ppb	2.25465 50.54%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	3.0 0.2669 µg/L	3.32211 0.2669 ppb	3.32211 >999.9%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-12.9 -0.1434 µg/L	0.30203 -0.1434 ppb	0.30203 210.63%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-267.2 -6.1553 µg/L	0.24370 -6.1553 ppb	0.24370 3.96%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 22:27:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94106.2	94106.2	97.2 %		22:28:13
1	Al 396.153Radial†	10686.2	11110.1	5292.1 µg/L	5292.1 ppb	22:28:13
1	Ca 317.933Radial†	14708.8	14742.8	5365.2 µg/L	5365.2 ppb	22:28:13
1	Fe 238.204 Radial†	453.8	454.8	5390.6 µg/L	5390.6 ppb	22:28:33
1	K 766.490 Radial†	11576.4	11421.0	5330.0 µg/L	5330.0 ppb	22:28:13
1	Mg 279.077 IEC†	407.2	410.9	5420.1 µg/L	5420.1 ppb	22:28:33
1	Na 589.592 Radial†	21167.7	21590.4	10776 µg/L	10776 ppb	22:28:13
1	Sr 421.552†	87052.3	89393.9	531.44 µg/L	531.44 ppb	22:28:13
1	Sc 361.383	2022576.3	2022576.3	96.630 %		22:29:36
1	Y 371.029	1381603.7	1381603.7	96.422 %		22:29:36
1	Ag 328.068†	64257.5	66958.5	541.68 µg/L	541.68 ppb	22:29:42
1	As 188.979†	359.3	375.0	551.96 µg/L	551.96 ppb	22:30:02
1	B 249.677†	11730.4	11840.1	535.40 µg/L	535.40 ppb	22:29:42
1	Ba 233.527†	24138.1	24988.3	547.48 µg/L	547.48 ppb	22:29:42
1	Be 313.107†	887805.3	919924.0	540.30 µg/L	540.30 ppb	22:29:36
1	Cd 226.502†	22009.6	22947.7	545.42 µg/L	545.42 ppb	22:29:42
1	Co 228.616†	12334.9	12717.0	545.73 µg/L	545.73 ppb	22:29:42
1	Cr 267.716†	24702.5	25483.7	554.60 µg/L	554.60 ppb	22:29:42
1	Cu 324.752†	85178.7	83772.4	548.18 µg/L	548.18 ppb	22:29:42
1	Mn 257.610†	177313.3	184183.6	553.51 µg/L	553.51 ppb	22:29:36
1	Mo 202.031†	5481.9	5667.9	561.06 µg/L	561.06 ppb	22:30:02
1	Ni 231.604†	9802.6	9767.6	547.26 µg/L	547.26 ppb	22:29:42
1	P 214.914†	1870.7	1663.6	2709.8 µg/L	2709.8 ppb	22:30:02
1	Pb 220.353†	2070.2	2112.3	554.44 µg/L	554.44 ppb	22:30:02
1	S 181.975 Axial†	347.1	336.7	1071.5 µg/L	1071.5 ppb	22:30:02
1	Sb 206.836†	615.7	614.4	550.89 µg/L	550.89 ppb	22:30:02
1	Se 196.026†	594.9	588.3	565.53 µg/L	565.53 ppb	22:30:02
1	SiO2†	33946.7	32350.8	5840.5 µg/L	5840.5 ppb	22:29:42
1	Si 251.611†	39156.9	40098.3	2726.0 µg/L	2726.0 ppb	22:29:42
1	Sn 189.927†	1381.5	1437.1	560.03 µg/L	560.03 ppb	22:30:02
1	Ti 334.940†	222132.8	230456.4	538.55 µg/L	538.55 ppb	22:29:36
1	Tl 190.801†	501.4	553.0	545.23 µg/L	545.23 ppb	22:30:02
1	U 409.014†	5863.9	6074.2	550.45 µg/L	550.45 ppb	22:29:42
1	V 292.402†	44987.5	46444.0	553.72 µg/L	553.72 ppb	22:29:42
1	Zn 213.857†	24193.8	24028.6	549.37 µg/L	549.37 ppb	22:29:42
2	Sc RADIAL	94501.5	94501.5	97.6 %		22:28:38
2	Al 396.153Radial†	10779.7	11159.9	5316.0 µg/L	5316.0 ppb	22:28:38
2	Ca 317.933Radial†	14716.6	14687.4	5345.1 µg/L	5345.1 ppb	22:28:38
2	Fe 238.204 Radial†	459.7	458.9	5439.3 µg/L	5439.3 ppb	22:28:58
2	K 766.490 Radial†	11605.2	11400.7	5320.5 µg/L	5320.5 ppb	22:28:38
2	Mg 279.077 IEC†	402.9	404.7	5338.7 µg/L	5338.7 ppb	22:28:58
2	Na 589.592 Radial†	21331.5	21667.1	10814 µg/L	10814 ppb	22:28:38
2	Sr 421.552†	87626.1	89607.1	532.70 µg/L	532.70 ppb	22:28:38
2	Sc 361.383	2027679.8	2027679.8	96.874 %		22:30:09
2	Y 371.029	1383619.3	1383619.3	96.563 %		22:30:09
2	Ag 328.068†	64316.1	66851.7	540.82 µg/L	540.82 ppb	22:30:15
2	As 188.979†	356.5	371.2	546.36 µg/L	546.36 ppb	22:30:36
2	B 249.677†	11781.5	11862.3	536.38 µg/L	536.38 ppb	22:30:15
2	Ba 233.527†	24189.1	24978.1	547.26 µg/L	547.26 ppb	22:30:15
2	Be 313.107†	886721.2	916492.5	538.29 µg/L	538.29 ppb	22:30:09
2	Cd 226.502†	22126.5	23011.1	546.92 µg/L	546.92 ppb	22:30:15
2	Co 228.616†	12405.6	12757.8	547.47 µg/L	547.47 ppb	22:30:15
2	Cr 267.716†	24731.7	25449.5	553.85 µg/L	553.85 ppb	22:30:15
2	Cu 324.752†	85312.3	83688.4	547.64 µg/L	547.64 ppb	22:30:15
2	Mn 257.610†	177500.8	183915.3	552.71 µg/L	552.71 ppb	22:30:09
2	Mo 202.031†	5406.9	5576.2	551.98 µg/L	551.98 ppb	22:30:36
2	Ni 231.604†	9823.6	9763.7	547.04 µg/L	547.04 ppb	22:30:15
2	P 214.914†	1859.7	1647.3	2682.7 µg/L	2682.7 ppb	22:30:36
2	Pb 220.353†	2058.8	2095.0	549.90 µg/L	549.90 ppb	22:30:36

2	S 181.975 Axial†	345.6	334.2	1063.7 µg/L	1063.7 ppb	22:30:36
2	Sb 206.836†	615.9	613.0	549.54 µg/L	549.54 ppb	22:30:36
2	Se 196.026†	588.9	580.6	558.47 µg/L	558.47 ppb	22:30:36
2	SiO2†	34143.7	32465.7	5861.2 µg/L	5861.2 ppb	22:30:15
2	Si 251.611†	39387.5	40234.3	2735.3 µg/L	2735.3 ppb	22:30:15
2	Sn 189.927†	1365.0	1416.5	552.02 µg/L	552.02 ppb	22:30:36
2	Ti 334.940†	222253.6	230002.4	537.50 µg/L	537.50 ppb	22:30:09
2	Tl 190.801†	504.4	554.7	546.97 µg/L	546.97 ppb	22:30:36
2	U 409.014†	5786.1	5978.6	541.77 µg/L	541.77 ppb	22:30:15
2	V 292.402†	45086.4	46428.9	553.46 µg/L	553.46 ppb	22:30:15
2	Zn 213.857†	24296.9	24072.0	550.37 µg/L	550.37 ppb	22:30:15
3	Sc RADIAL	93922.4	93922.4	97.0 %		22:29:04
3	Al 396.153Radial†	10756.8	11204.3	5339.0 µg/L	5339.0 ppb	22:29:04
3	Ca 317.933Radial†	14614.9	14675.5	5340.7 µg/L	5340.7 ppb	22:29:04
3	Fe 238.204 Radial†	460.3	462.4	5479.9 µg/L	5479.9 ppb	22:29:24
3	K 766.490 Radial†	11467.8	11332.4	5288.6 µg/L	5288.6 ppb	22:29:04
3	Mg 279.077 IEC†	408.0	412.5	5439.5 µg/L	5439.5 ppb	22:29:24
3	Na 589.592 Radial†	21241.1	21708.6	10835 µg/L	10835 ppb	22:29:04
3	Sr 421.552†	87033.7	89549.9	532.36 µg/L	532.36 ppb	22:29:04
3	Sc 361.383	2017327.1	2017327.1	96.379 %		22:30:43
3	Y 371.029	1375283.0	1375283.0	95.981 %		22:30:43
3	Ag 328.068†	60022.2	62737.1	507.40 µg/L	507.40 ppb	22:30:48
3	As 188.979†	306.4	321.2	472.56 µg/L	472.56 ppb	22:31:09
3	B 249.677†	10959.1	11071.4	500.36 µg/L	500.36 ppb	22:30:48
3	Ba 233.527†	21860.9	22690.5	497.13 µg/L	497.13 ppb	22:30:48
3	Be 313.107†	823429.3	855520.5	502.48 µg/L	502.48 ppb	22:30:43
3	Cd 226.502†	19925.2	20844.2	495.35 µg/L	495.35 ppb	22:30:48
3	Co 228.616†	11050.9	11418.0	489.91 µg/L	489.91 ppb	22:30:48
3	Cr 267.716†	21613.1	22344.7	486.29 µg/L	486.29 ppb	22:30:48
3	Cu 324.752†	77194.3	75717.4	495.58 µg/L	495.58 ppb	22:30:48
3	Mn 257.610†	165860.2	172777.7	519.23 µg/L	519.23 ppb	22:30:43
3	Mo 202.031†	4540.8	4706.3	465.90 µg/L	465.90 ppb	22:31:09
3	Ni 231.604†	8784.2	8737.2	489.53 µg/L	489.53 ppb	22:30:48
3	P 214.914†	1627.7	1416.5	2303.6 µg/L	2303.6 ppb	22:31:09
3	Pb 220.353†	1782.6	1819.4	477.55 µg/L	477.55 ppb	22:31:09
3	S 181.975 Axial†	309.8	298.9	951.21 µg/L	951.21 ppb	22:31:09
3	Sb 206.836†	538.9	536.4	480.52 µg/L	480.52 ppb	22:31:09
3	Se 196.026†	521.8	514.1	496.06 µg/L	496.06 ppb	22:31:09
3	SiO2†	31586.3	29993.1	5414.8 µg/L	5414.8 ppb	22:30:48
3	Si 251.611†	36179.7	37114.7	2523.2 µg/L	2523.2 ppb	22:30:48
3	Sn 189.927†	1136.8	1186.9	462.63 µg/L	462.63 ppb	22:31:09
3	Ti 334.940†	205401.5	213694.7	499.35 µg/L	499.35 ppb	22:30:43
3	Tl 190.801†	457.4	508.7	501.71 µg/L	501.71 ppb	22:31:09
3	U 409.014†	5093.3	5290.5	479.28 µg/L	479.28 ppb	22:30:48
3	V 292.402†	40105.5	41499.8	494.39 µg/L	494.39 ppb	22:30:48
3	Zn 213.857†	21848.5	21660.4	495.18 µg/L	495.18 ppb	22:30:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2022527.7	96.628 %	0.2473			0.26%
Sc RADIAL	94176.7	97.3 %	0.31			0.31%
Y 371.029	1380168.6	96.322 %	0.3036			0.32%
Ag 328.068†	65515.8	529.97 µg/L	19.546	529.97 ppb	19.546	3.69%
QC value within limits for Ag 328.068 Recovery = 105.99%						
Al 396.153Radial†	11158.1	5315.7 µg/L	23.46	5315.7 ppb	23.46	0.44%
QC value within limits for Al 396.153Radial Recovery = 106.31%						
As 188.979†	355.8	523.63 µg/L	44.315	523.63 ppb	44.315	8.46%
QC value within limits for As 188.979 Recovery = 104.73%						
B 249.677†	11591.2	524.05 µg/L	20.520	524.05 ppb	20.520	3.92%
QC value within limits for B 249.677 Recovery = 104.81%						
Ba 233.527†	24219.0	530.62 µg/L	29.010	530.62 ppb	29.010	5.47%
QC value within limits for Ba 233.527 Recovery = 106.12%						
Be 313.107†	897312.3	527.02 µg/L	21.281	527.02 ppb	21.281	4.04%
QC value within limits for Be 313.107 Recovery = 105.40%						
Ca 317.933Radial†	14701.9	5350.3 µg/L	13.06	5350.3 ppb	13.06	0.24%
QC value within limits for Ca 317.933Radial Recovery = 107.01%						
Cd 226.502†	22267.7	529.23 µg/L	29.350	529.23 ppb	29.350	5.55%
QC value within limits for Cd 226.502 Recovery = 105.85%						
Co 228.616†	12297.6	527.71 µg/L	32.740	527.71 ppb	32.740	6.20%

QC value within limits for Co 228.616 Recovery = 105.54%							
Cr 267.716†	24426.0	531.58 µg/L	39.224	531.58 ppb	39.224	7.38%	
QC value within limits for Cr 267.716 Recovery = 106.32%							
Cu 324.752†	81059.4	530.47 µg/L	30.211	530.47 ppb	30.211	5.70%	
QC value within limits for Cu 324.752 Recovery = 106.09%							
Fe 238.204 Radial†	458.7	5436.6 µg/L	44.69	5436.6 ppb	44.69	0.82%	
QC value within limits for Fe 238.204 Radial Recovery = 108.73%							
K 766.490 Radial†	11384.7	5313.0 µg/L	21.66	5313.0 ppb	21.66	0.41%	
QC value within limits for K 766.490 Radial Recovery = 106.26%							
Mg 279.077 IEC†	409.3	5399.4 µg/L	53.51	5399.4 ppb	53.51	0.99%	
QC value within limits for Mg 279.077 IEC Recovery = 107.99%							
Mn 257.610†	180292.2	541.82 µg/L	19.563	541.82 ppb	19.563	3.61%	
QC value within limits for Mn 257.610 Recovery = 108.36%							
Mo 202.031†	5316.8	526.31 µg/L	52.514	526.31 ppb	52.514	9.98%	
QC value within limits for Mo 202.031 Recovery = 105.26%							
Na 589.592 Radial†	21655.4	10808 µg/L	29.9	10808 ppb	29.9	0.28%	
QC value within limits for Na 589.592 Radial Recovery = 108.08%							
Ni 231.604†	9422.8	527.94 µg/L	33.262	527.94 ppb	33.262	6.30%	
QC value within limits for Ni 231.604 Recovery = 105.59%							
P 214.914†	1575.8	2565.3 µg/L	227.10	2565.3 ppb	227.10	8.85%	
QC value within limits for P 214.914 Recovery = 102.61%							
Pb 220.353†	2008.9	527.30 µg/L	43.142	527.30 ppb	43.142	8.18%	
QC value within limits for Pb 220.353 Recovery = 105.46%							
S 181.975 Axial†	323.3	1028.8 µg/L	67.31	1028.8 ppb	67.31	6.54%	
QC value within limits for S 181.975 Axial Recovery = 102.88%							
Sb 206.836†	587.9	526.98 µg/L	40.249	526.98 ppb	40.249	7.64%	
QC value within limits for Sb 206.836 Recovery = 105.40%							
Se 196.026†	561.0	540.02 µg/L	38.233	540.02 ppb	38.233	7.08%	
QC value within limits for Se 196.026 Recovery = 108.00%							
SiO2†	31603.2	5705.5 µg/L	251.95	5705.5 ppb	251.95	4.42%	
QC value within limits for SiO2 Recovery = 106.69%							
Si 251.611†	39149.1	2661.5 µg/L	119.86	2661.5 ppb	119.86	4.50%	
QC value within limits for Si 251.611 Recovery = 106.46%							
Sn 189.927†	1346.8	524.90 µg/L	54.068	524.90 ppb	54.068	10.30%	
QC value within limits for Sn 189.927 Recovery = 104.98%							
Sr 421.552†	89517.0	532.17 µg/L	0.656	532.17 ppb	0.656	0.12%	
QC value within limits for Sr 421.552 Recovery = 106.43%							
Ti 334.940†	224717.8	525.13 µg/L	22.332	525.13 ppb	22.332	4.25%	
QC value within limits for Ti 334.940 Recovery = 105.03%							
Tl 190.801†	538.8	531.30 µg/L	25.646	531.30 ppb	25.646	4.83%	
QC value within limits for Tl 190.801 Recovery = 106.26%							
U 409.014†	5781.1	523.83 µg/L	38.828	523.83 ppb	38.828	7.41%	
QC value within limits for U 409.014 Recovery = 104.77%							
V 292.402†	44790.9	533.86 µg/L	34.182	533.86 ppb	34.182	6.40%	
QC value within limits for V 292.402 Recovery = 106.77%							
Zn 213.857†	23253.7	531.64 µg/L	31.581	531.64 ppb	31.581	5.94%	
QC value within limits for Zn 213.857 Recovery = 106.33%							
All analyte(s) passed QC.							

Sequence No.: 10

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/16/2010 22:31:18

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	94127.1	94127.1	97.3 %		22:31:50
1	Al 396.153Radial†	300.6	428.4	204.23 µg/L	204.23 ppb	22:31:50
1	Ca 317.933Radial†	909.8	550.3	200.25 µg/L	200.25 ppb	22:32:10
1	Fe 238.204 Radial†	21.9	10.6	125.34 µg/L	125.34 ppb	22:32:10
1	K 766.490 Radial†	817.3	355.0	165.68 µg/L	165.68 ppb	22:31:50
1	Mg 279.077 IEC†	30.0	22.8	301.22 µg/L	301.22 ppb	22:32:10
1	Na 589.592 Radial†	893.6	738.3	368.49 µg/L	368.49 ppb	22:31:50
1	Sr 421.552†	1010.0	899.1	5.3450 µg/L	5.3450 ppb	22:31:50
1	Sc 361.383	2022759.6	2022759.6	96.639 %		22:33:12
1	Y 371.029	1385488.2	1385488.2	96.693 %		22:33:12
1	Ag 328.068†	204.1	671.4	5.4353 µg/L	5.4353 ppb	22:33:17
1	As 188.979†	18.4	22.3	32.932 µg/L	32.932 ppb	22:33:38
1	B 249.677†	1404.0	1153.4	52.288 µg/L	52.288 ppb	22:33:38
1	Ba 233.527†	236.9	253.6	5.5549 µg/L	5.5549 ppb	22:33:38
1	Be 313.107†	7759.9	9188.6	5.3966 µg/L	5.3966 ppb	22:33:17
1	Cd 226.502†	40.5	212.5	5.0429 µg/L	5.0429 ppb	22:33:38
1	Co 228.616†	168.6	126.4	5.4319 µg/L	5.4319 ppb	22:33:38
1	Cr 267.716†	312.8	243.4	5.2981 µg/L	5.2981 ppb	22:33:38
1	Cu 324.752†	5923.8	1753.1	11.474 µg/L	11.474 ppb	22:33:17
1	Mn 257.610†	2815.7	3600.6	10.809 µg/L	10.809 ppb	22:33:38
1	Mo 202.031†	136.8	136.4	13.506 µg/L	13.506 ppb	22:33:38
1	Ni 231.604†	460.4	99.5	5.5773 µg/L	5.5773 ppb	22:33:38
1	P 214.914†	363.6	103.8	171.29 µg/L	171.29 ppb	22:33:38
1	Pb 220.353†	68.0	40.2	10.525 µg/L	10.525 ppb	22:33:38
1	S 181.975 Axial†	51.9	31.2	99.344 µg/L	99.344 ppb	22:33:38
1	Sb 206.836†	40.3	19.0	17.101 µg/L	17.101 ppb	22:33:38
1	Se 196.026†	64.8	39.7	37.474 µg/L	37.474 ppb	22:33:38
1	SiO2†	4001.0	1360.4	245.61 µg/L	245.61 ppb	22:33:17
1	Si 251.611†	1916.8	1559.4	106.01 µg/L	106.01 ppb	22:33:38
1	Sn 189.927†	20.7	28.9	11.259 µg/L	11.259 ppb	22:33:38
1	Ti 334.940†	1892.1	2535.2	5.9076 µg/L	5.9076 ppb	22:33:17
1	Tl 190.801†	-12.1	21.6	21.225 µg/L	21.225 ppb	22:33:38
1	U 409.014†	612.3	639.4	58.026 µg/L	58.026 ppb	22:33:17
1	V 292.402†	538.6	445.0	5.4137 µg/L	5.4137 ppb	22:33:17
1	Zn 213.857†	1314.7	351.6	8.0288 µg/L	8.0288 ppb	22:33:38
2	Sc RADIAL	93978.5	93978.5	97.1 %		22:32:16
2	Al 396.153Radial†	327.4	456.5	217.61 µg/L	217.61 ppb	22:32:16
2	Ca 317.933Radial†	915.3	557.4	202.85 µg/L	202.85 ppb	22:32:36
2	Fe 238.204 Radial†	22.1	10.8	127.40 µg/L	127.40 ppb	22:32:36
2	K 766.490 Radial†	813.1	352.1	164.33 µg/L	164.33 ppb	22:32:16
2	Mg 279.077 IEC†	31.3	24.3	319.85 µg/L	319.85 ppb	22:32:36
2	Na 589.592 Radial†	873.2	718.7	358.71 µg/L	358.71 ppb	22:32:16
2	Sr 421.552†	998.9	889.4	5.2872 µg/L	5.2872 ppb	22:32:16
2	Sc 361.383	2008682.6	2008682.6	95.966 %		22:33:44
2	Y 371.029	1375643.9	1375643.9	96.006 %		22:33:44
2	Ag 328.068†	156.5	623.3	5.0458 µg/L	5.0458 ppb	22:33:49
2	As 188.979†	20.0	24.1	35.490 µg/L	35.490 ppb	22:34:10
2	B 249.677†	1388.9	1148.0	52.039 µg/L	52.039 ppb	22:34:10
2	Ba 233.527†	234.1	252.3	5.5266 µg/L	5.5266 ppb	22:34:10
2	Be 313.107†	7735.2	9219.1	5.4146 µg/L	5.4146 ppb	22:33:49
2	Cd 226.502†	45.1	217.6	5.1633 µg/L	5.1633 ppb	22:34:10
2	Co 228.616†	166.4	125.3	5.3830 µg/L	5.3830 ppb	22:34:10
2	Cr 267.716†	325.8	259.3	5.6421 µg/L	5.6421 ppb	22:34:10
2	Cu 324.752†	5886.5	1757.3	11.502 µg/L	11.502 ppb	22:33:49
2	Mn 257.610†	2818.7	3624.2	10.878 µg/L	10.878 ppb	22:34:10
2	Mo 202.031†	140.0	140.8	13.934 µg/L	13.934 ppb	22:34:10
2	Ni 231.604†	457.4	99.7	5.5859 µg/L	5.5859 ppb	22:34:10
2	P 214.914†	365.5	108.5	179.02 µg/L	179.02 ppb	22:34:10
2	Pb 220.353†	65.8	38.4	10.056 µg/L	10.056 ppb	22:34:10

2	S 181.975 Axial†	60.2	40.2	127.85 µg/L	127.85 ppb	22:34:10
2	Sb 206.836†	32.4	11.1	10.041 µg/L	10.041 ppb	22:34:10
2	Se 196.026†	57.2	32.3	30.477 µg/L	30.477 ppb	22:34:10
2	SiO2†	3964.5	1351.4	243.97 µg/L	243.97 ppb	22:33:49
2	Si 251.611†	1919.5	1576.1	107.15 µg/L	107.15 ppb	22:34:10
2	Sn 189.927†	23.0	31.4	12.249 µg/L	12.249 ppb	22:34:10
2	Ti 334.940†	1751.9	2402.8	5.5966 µg/L	5.5966 ppb	22:33:49
2	Tl 190.801†	-10.5	23.1	22.712 µg/L	22.712 ppb	22:34:10
2	U 409.014†	612.3	643.8	58.430 µg/L	58.430 ppb	22:33:49
2	V 292.402†	493.8	402.3	4.9132 µg/L	4.9132 ppb	22:33:49
2	Zn 213.857†	1319.5	366.2	8.3630 µg/L	8.3630 ppb	22:34:10
3	Sc RADIAL	93987.0	93987.0	97.1 %		22:32:42
3	Al 396.153Radial†	315.2	443.9	211.67 µg/L	211.67 ppb	22:32:42
3	Ca 317.933Radial†	918.5	560.6	204.02 µg/L	204.02 ppb	22:33:02
3	Fe 238.204 Radial†	21.3	10.0	118.55 µg/L	118.55 ppb	22:33:02
3	K 766.490 Radial†	788.8	327.0	152.61 µg/L	152.61 ppb	22:32:42
3	Mg 279.077 IEC†	30.3	23.3	306.67 µg/L	306.67 ppb	22:33:02
3	Na 589.592 Radial†	818.0	661.8	330.30 µg/L	330.30 ppb	22:32:42
3	Sr 421.552†	989.1	879.1	5.2263 µg/L	5.2263 ppb	22:32:42
3	Sc 361.383	2034646.9	2034646.9	97.207 %		22:34:16
3	Y 371.029	1393115.7	1393115.7	97.226 %		22:34:16
3	Ag 328.068†	105.2	568.4	4.6018 µg/L	4.6018 ppb	22:34:21
3	As 188.979†	19.4	23.2	34.172 µg/L	34.172 ppb	22:34:42
3	B 249.677†	1279.6	1017.0	46.098 µg/L	46.098 ppb	22:34:42
3	Ba 233.527†	213.4	228.0	4.9936 µg/L	4.9936 ppb	22:34:42
3	Be 313.107†	7124.8	8488.3	4.9854 µg/L	4.9854 ppb	22:34:21
3	Cd 226.502†	34.0	205.5	4.8769 µg/L	4.8769 ppb	22:34:42
3	Co 228.616†	155.4	111.8	4.8032 µg/L	4.8032 ppb	22:34:42
3	Cr 267.716†	264.4	191.7	4.1729 µg/L	4.1729 ppb	22:34:42
3	Cu 324.752†	5790.3	1580.0	10.342 µg/L	10.342 ppb	22:34:21
3	Mn 257.610†	2341.0	3095.3	9.2891 µg/L	9.2891 ppb	22:34:42
3	Mo 202.031†	117.3	115.5	11.435 µg/L	11.435 ppb	22:34:42
3	Ni 231.604†	445.8	81.7	4.5788 µg/L	4.5788 ppb	22:34:42
3	P 214.914†	352.6	90.3	149.06 µg/L	149.06 ppb	22:34:42
3	Pb 220.353†	62.7	34.3	8.9782 µg/L	8.9782 ppb	22:34:42
3	S 181.975 Axial†	50.6	29.6	94.057 µg/L	94.057 ppb	22:34:42
3	Sb 206.836†	33.1	11.3	10.242 µg/L	10.242 ppb	22:34:42
3	Se 196.026†	59.3	33.7	31.819 µg/L	31.819 ppb	22:34:42
3	SiO2†	3916.8	1249.6	225.59 µg/L	225.59 ppb	22:34:21
3	Si 251.611†	1747.6	1373.7	93.388 µg/L	93.388 ppb	22:34:42
3	Sn 189.927†	25.6	33.8	13.166 µg/L	13.166 ppb	22:34:42
3	Ti 334.940†	1560.1	2182.2	5.0817 µg/L	5.0817 ppb	22:34:21
3	Tl 190.801†	-12.8	21.0	20.561 µg/L	20.561 ppb	22:34:42
3	U 409.014†	539.7	561.0	50.908 µg/L	50.908 ppb	22:34:21
3	V 292.402†	467.7	368.9	4.4898 µg/L	4.4898 ppb	22:34:21
3	Zn 213.857†	1235.4	262.1	5.9738 µg/L	5.9738 ppb	22:34:42

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2022029.7	96.604 %		0.6210			0.64%
Sc RADIAL	94030.9	97.2 %		0.09			0.09%
Y 371.029	1384749.2	96.642 %		0.6113			0.63%
Ag 328.068†	621.0	5.0277 µg/L		0.41706	5.0277 ppb	0.41706	8.30%
QC value within limits for Ag 328.068 Recovery = 100.55%							
Al 396.153Radial†	442.9	211.17 µg/L		6.702	211.17 ppb	6.702	3.17%
QC value within limits for Al 396.153Radial Recovery = 105.59%							
As 188.979†	23.2	34.198 µg/L		1.2789	34.198 ppb	1.2789	3.74%
QC value within limits for As 188.979 Recovery = 113.99%							
B 249.677†	1106.1	50.142 µg/L		3.5040	50.142 ppb	3.5040	6.99%
QC value within limits for B 249.677 Recovery = 100.28%							
Ba 233.527†	244.6	5.3583 µg/L		0.31623	5.3583 ppb	0.31623	5.90%
QC value within limits for Ba 233.527 Recovery = 107.17%							
Be 313.107†	8965.4	5.2655 µg/L		0.24275	5.2655 ppb	0.24275	4.61%
QC value within limits for Be 313.107 Recovery = 105.31%							
Ca 317.933Radial†	556.1	202.37 µg/L		1.930	202.37 ppb	1.930	0.95%
QC value within limits for Ca 317.933Radial Recovery = 101.19%							
Cd 226.502†	211.9	5.0277 µg/L		0.14379	5.0277 ppb	0.14379	2.86%
QC value within limits for Cd 226.502 Recovery = 100.55%							
Co 228.616†	121.2	5.2060 µg/L		0.34970	5.2060 ppb	0.34970	6.72%

QC value within limits for Co 228.616 Recovery = 104.12%							
Cr 267.716†	231.5	5.0377 µg/L	0.76845	5.0377 ppb	0.76845	15.25%	
QC value within limits for Cr 267.716 Recovery = 100.75%							
Cu 324.752†	1696.8	11.106 µg/L	0.6617	11.106 ppb	0.6617	5.96%	
QC value within limits for Cu 324.752 Recovery = 111.06%							
Fe 238.204 Radial†	10.5	123.77 µg/L	4.630	123.77 ppb	4.630	3.74%	
QC value within limits for Fe 238.204 Radial Recovery = 123.77%							
K 766.490 Radial†	344.7	160.87 µg/L	7.187	160.87 ppb	7.187	4.47%	
QC value within limits for K 766.490 Radial Recovery = 107.25%							
Mg 279.077 IEC†	23.5	309.25 µg/L	9.578	309.25 ppb	9.578	3.10%	
QC value within limits for Mg 279.077 IEC Recovery = 103.08%							
Mn 257.610†	3440.0	10.325 µg/L	0.8981	10.325 ppb	0.8981	8.70%	
QC value within limits for Mn 257.610 Recovery = 103.25%							
Mo 202.031†	130.9	12.958 µg/L	1.3364	12.958 ppb	1.3364	10.31%	
QC value within limits for Mo 202.031 Recovery = 129.58%							
Na 589.592 Radial†	706.3	352.50 µg/L	19.839	352.50 ppb	19.839	5.63%	
QC value within limits for Na 589.592 Radial Recovery = 117.50%							
Ni 231.604†	93.6	5.2473 µg/L	0.57897	5.2473 ppb	0.57897	11.03%	
QC value within limits for Ni 231.604 Recovery = 104.95%							
P 214.914†	100.9	166.46 µg/L	15.554	166.46 ppb	15.554	9.34%	
QC value within limits for P 214.914 Recovery = 110.97%							
Pb 220.353†	37.7	9.8529 µg/L	0.79295	9.8529 ppb	0.79295	8.05%	
QC value within limits for Pb 220.353 Recovery = 98.53%							
S 181.975 Axial†	33.6	107.08 µg/L	18.176	107.08 ppb	18.176	16.97%	
QC value within limits for S 181.975 Axial Recovery = 107.08%							
Sb 206.836†	13.8	12.462 µg/L	4.0190	12.462 ppb	4.0190	32.25%	
QC value within limits for Sb 206.836 Recovery = 124.62%							
Se 196.026†	35.2	33.257 µg/L	3.7130	33.257 ppb	3.7130	11.16%	
QC value within limits for Se 196.026 Recovery = 110.86%							
SiO2†	1320.4	238.39 µg/L	11.114	238.39 ppb	11.114	4.66%	
QC value within limits for SiO2 Recovery = 111.92%							
Si 251.611†	1503.0	102.18 µg/L	7.638	102.18 ppb	7.638	7.47%	
QC value within limits for Si 251.611 Recovery = 102.18%							
Sn 189.927†	31.3	12.225 µg/L	0.9536	12.225 ppb	0.9536	7.80%	
QC value within limits for Sn 189.927 Recovery = 122.25%							
Sr 421.552†	889.2	5.2862 µg/L	0.05934	5.2862 ppb	0.05934	1.12%	
QC value within limits for Sr 421.552 Recovery = 105.72%							
Ti 334.940†	2373.4	5.5286 µg/L	0.41708	5.5286 ppb	0.41708	7.54%	
QC value within limits for Ti 334.940 Recovery = 110.57%							
Tl 190.801†	21.9	21.499 µg/L	1.1011	21.499 ppb	1.1011	5.12%	
QC value within limits for Tl 190.801 Recovery = 107.50%							
U 409.014†	614.7	55.788 µg/L	4.2307	55.788 ppb	4.2307	7.58%	
QC value within limits for U 409.014 Recovery = 111.58%							
V 292.402†	405.4	4.9389 µg/L	0.46247	4.9389 ppb	0.46247	9.36%	
QC value within limits for V 292.402 Recovery = 98.78%							
Zn 213.857†	326.6	7.4552 µg/L	1.29376	7.4552 ppb	1.29376	17.35%	
QC value within limits for Zn 213.857 Recovery = 74.55%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 22:34:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	93772.1	93772.1	96.9 %		22:35:23
1	Al 396.153Radial†	-141.7	-27.0	-12.909 µg/L	-12.909 ppb	22:35:23
1	Ca 317.933Radial†	331.8	-42.8	-15.584 µg/L	-15.584 ppb	22:35:43
1	Fe 238.204 Radial†	12.7	1.1	13.092 µg/L	13.092 ppb	22:35:43
1	K 766.490 Radial†	480.3	10.4	4.8595 µg/L	4.8595 ppb	22:35:23
1	Mg 279.077 IEC†	6.8	-1.0	-13.389 µg/L	-13.389 ppb	22:35:43
1	Na 589.592 Radial†	230.9	57.7	28.814 µg/L	28.814 ppb	22:35:23
1	Sr 421.552†	109.3	-26.6	-0.1583 µg/L	-0.1583 ppb	22:35:23
1	Sc 361.383	2027705.1	2027705.1	96.875 %		22:36:46
1	Y 371.029	1387973.1	1387973.1	96.867 %		22:36:46
1	Ag 328.068†	-436.8	9.4	0.0743 µg/L	0.0743 ppb	22:36:51
1	As 188.979†	-6.8	-3.8	-5.6222 µg/L	-5.6222 ppb	22:37:12
1	B 249.677†	292.5	2.6	0.1096 µg/L	0.1096 ppb	22:37:12
1	Ba 233.527†	-2.5	5.8	0.1265 µg/L	0.1265 ppb	22:37:12
1	Be 313.107†	-891.1	239.0	0.1404 µg/L	0.1404 ppb	22:36:51
1	Cd 226.502†	-169.8	-4.7	-0.1119 µg/L	-0.1119 ppb	22:37:12
1	Co 228.616†	49.9	3.5	0.1489 µg/L	0.1489 ppb	22:37:12
1	Cr 267.716†	71.4	-6.5	-0.1417 µg/L	-0.1417 ppb	22:37:12
1	Cu 324.752†	4233.1	-7.1	-0.0438 µg/L	-0.0438 ppb	22:36:51
1	Mn 257.610†	-688.7	-24.0	-0.0703 µg/L	-0.0703 ppb	22:37:12
1	Mo 202.031†	13.1	8.4	0.8269 µg/L	0.8269 ppb	22:37:12
1	Ni 231.604†	373.8	8.9	0.5009 µg/L	0.5009 ppb	22:37:12
1	P 214.914†	272.7	9.1	15.038 µg/L	15.038 ppb	22:37:12
1	Pb 220.353†	21.0	-8.5	-2.2180 µg/L	-2.2180 ppb	22:37:12
1	S 181.975 Axial†	19.7	-2.2	-6.9670 µg/L	-6.9670 ppb	22:37:12
1	Sb 206.836†	20.1	-2.0	-1.7588 µg/L	-1.7588 ppb	22:37:12
1	Se 196.026†	27.7	1.2	1.2177 µg/L	1.2177 ppb	22:37:12
1	SiO2†	2715.5	23.3	4.2125 µg/L	4.2125 ppb	22:37:12
1	Si 251.611†	458.0	48.7	3.3076 µg/L	3.3076 ppb	22:37:12
1	Sn 189.927†	-4.9	2.3	0.9066 µg/L	0.9066 ppb	22:37:12
1	Ti 334.940†	-525.2	35.1	0.0829 µg/L	0.0829 ppb	22:36:51
1	Tl 190.801†	-36.6	-3.7	-3.5669 µg/L	-3.5669 ppb	22:37:12
1	U 409.014†	20.7	27.2	2.4706 µg/L	2.4706 ppb	22:36:51
1	V 292.402†	85.2	-24.3	-0.2802 µg/L	-0.2802 ppb	22:36:51
1	Zn 213.857†	728.0	-257.4	-5.9283 µg/L	-5.9283 ppb	22:37:12
2	Sc RADIAL	93786.8	93786.8	96.9 %		22:35:49
2	Al 396.153Radial†	-103.7	12.3	5.8420 µg/L	5.8420 ppb	22:35:49
2	Ca 317.933Radial†	342.7	-31.6	-11.513 µg/L	-11.513 ppb	22:36:09
2	Fe 238.204 Radial†	12.4	0.8	9.8011 µg/L	9.8011 ppb	22:36:09
2	K 766.490 Radial†	343.3	-131.1	-61.161 µg/L	-61.161 ppb	22:35:49
2	Mg 279.077 IEC†	6.9	-0.9	-12.073 µg/L	-12.073 ppb	22:36:09
2	Na 589.592 Radial†	277.3	105.6	52.722 µg/L	52.722 ppb	22:35:49
2	Sr 421.552†	126.7	-8.6	-0.0513 µg/L	-0.0513 ppb	22:35:49
2	Sc 361.383	2022184.1	2022184.1	96.612 %		22:37:18
2	Y 371.029	1383562.6	1383562.6	96.559 %		22:37:18
2	Ag 328.068†	-521.0	-79.1	-0.6390 µg/L	-0.6390 ppb	22:37:23
2	As 188.979†	-1.0	2.2	3.2035 µg/L	3.2035 ppb	22:37:44
2	B 249.677†	306.5	17.9	0.8067 µg/L	0.8067 ppb	22:37:44
2	Ba 233.527†	-3.7	4.6	0.0991 µg/L	0.0991 ppb	22:37:44
2	Be 313.107†	-948.5	177.1	0.1040 µg/L	0.1040 ppb	22:37:23
2	Cd 226.502†	-169.7	-5.0	-0.1198 µg/L	-0.1198 ppb	22:37:44
2	Co 228.616†	48.4	2.0	0.0859 µg/L	0.0859 ppb	22:37:44
2	Cr 267.716†	77.9	0.4	0.0080 µg/L	0.0080 ppb	22:37:44
2	Cu 324.752†	4283.0	56.6	0.3714 µg/L	0.3714 ppb	22:37:23
2	Mn 257.610†	-683.3	-20.3	-0.0597 µg/L	-0.0597 ppb	22:37:44
2	Mo 202.031†	12.9	8.2	0.8094 µg/L	0.8094 ppb	22:37:44
2	Ni 231.604†	381.1	17.6	0.9869 µg/L	0.9869 ppb	22:37:44
2	P 214.914†	267.1	4.1	6.8036 µg/L	6.8036 ppb	22:37:44
2	Pb 220.353†	24.9	-4.4	-1.1530 µg/L	-1.1530 ppb	22:37:44

2	S 181.975 Axial†	18.7	-3.2	-10.287 µg/L	-10.287 ppb	22:37:44
2	Sb 206.836†	22.7	0.8	0.7489 µg/L	0.7489 ppb	22:37:44
2	Se 196.026†	17.4	-9.3	-8.7227 µg/L	-8.7227 ppb	22:37:44
2	SiO2†	2730.8	46.8	8.4508 µg/L	8.4508 ppb	22:37:44
2	Si 251.611†	475.7	68.3	4.6433 µg/L	4.6433 ppb	22:37:44
2	Sn 189.927†	-0.5	7.0	2.7111 µg/L	2.7111 ppb	22:37:44
2	Ti 334.940†	-498.3	61.5	0.1446 µg/L	0.1446 ppb	22:37:23
2	Tl 190.801†	-39.0	-6.3	-6.1351 µg/L	-6.1351 ppb	22:37:44
2	U 409.014†	-46.1	-41.9	-3.8086 µg/L	-3.8086 ppb	22:37:23
2	V 292.402†	49.1	-61.5	-0.7255 µg/L	-0.7255 ppb	22:37:23
2	Zn 213.857†	737.6	-245.4	-5.6548 µg/L	-5.6548 ppb	22:37:44
3	Sc RADIAL	93264.2	93264.2	96.4 %		22:36:15
3	Al 396.153Radial†	-118.9	-4.1	-1.9622 µg/L	-1.9622 ppb	22:36:15
3	Ca 317.933Radial†	342.2	-30.2	-10.981 µg/L	-10.981 ppb	22:36:35
3	Fe 238.204 Radial†	11.3	-0.2	-2.9661 µg/L	-2.9661 ppb	22:36:35
3	K 766.490 Radial†	469.4	1.8	0.8541 µg/L	0.8541 ppb	22:36:15
3	Mg 279.077 IEC†	6.5	-1.3	-16.839 µg/L	-16.839 ppb	22:36:35
3	Na 589.592 Radial†	205.6	32.8	16.356 µg/L	16.356 ppb	22:36:15
3	Sr 421.552†	123.7	-11.0	-0.0656 µg/L	-0.0656 ppb	22:36:15
3	Sc 361.383	2027556.9	2027556.9	96.868 %		22:37:50
3	Y 371.029	1389495.7	1389495.7	96.973 %		22:37:50
3	Ag 328.068†	-429.3	17.0	0.1316 µg/L	0.1316 ppb	22:37:56
3	As 188.979†	-2.3	0.9	1.3428 µg/L	1.3428 ppb	22:38:16
3	B 249.677†	300.2	10.6	0.4819 µg/L	0.4819 ppb	22:38:16
3	Ba 233.527†	-2.7	5.7	0.1224 µg/L	0.1224 ppb	22:38:16
3	Be 313.107†	-982.7	144.4	0.0849 µg/L	0.0849 ppb	22:37:56
3	Cd 226.502†	-175.2	-10.3	-0.2441 µg/L	-0.2441 ppb	22:38:16
3	Co 228.616†	36.5	-10.4	-0.4468 µg/L	-0.4468 ppb	22:38:16
3	Cr 267.716†	56.8	-21.6	-0.4694 µg/L	-0.4694 ppb	22:38:16
3	Cu 324.752†	4256.6	17.5	0.1137 µg/L	0.1137 ppb	22:37:56
3	Mn 257.610†	-711.6	-47.6	-0.1422 µg/L	-0.1422 ppb	22:38:16
3	Mo 202.031†	14.5	9.8	0.9692 µg/L	0.9692 ppb	22:38:16
3	Ni 231.604†	366.0	0.9	0.0534 µg/L	0.0534 ppb	22:38:16
3	P 214.914†	263.2	-0.7	-1.0849 µg/L	-1.0849 ppb	22:38:16
3	Pb 220.353†	26.3	-3.1	-0.8083 µg/L	-0.8083 ppb	22:38:16
3	S 181.975 Axial†	21.9	0.0	0.0723 µg/L	0.0723 ppb	22:38:16
3	Sb 206.836†	19.9	-2.2	-1.9187 µg/L	-1.9187 ppb	22:38:16
3	Se 196.026†	24.9	-1.6	-1.4956 µg/L	-1.4956 ppb	22:38:16
3	SiO2†	2724.8	33.2	5.9888 µg/L	5.9888 ppb	22:38:16
3	Si 251.611†	476.6	67.9	4.6187 µg/L	4.6187 ppb	22:38:16
3	Sn 189.927†	-1.0	6.4	2.4736 µg/L	2.4736 ppb	22:38:16
3	Ti 334.940†	-609.5	-51.9	-0.1203 µg/L	-0.1203 ppb	22:37:56
3	Tl 190.801†	-27.4	5.8	5.7170 µg/L	5.7170 ppb	22:38:16
3	U 409.014†	64.8	72.7	6.5995 µg/L	6.5995 ppb	22:37:56
3	V 292.402†	45.2	-65.6	-0.7610 µg/L	-0.7610 ppb	22:37:56
3	Zn 213.857†	745.6	-239.2	-5.5060 µg/L	-5.5060 ppb	22:38:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025815.4	96.785 %	0.1503			0.16%
Sc RADIAL	93607.7	96.7 %	0.31			0.32%
Y 371.029	1387010.5	96.799 %	0.2151			0.22%
Ag 328.068†	-17.6	-0.1444 µg/L	0.42928	-0.1444 ppb	0.42928	297.36%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.3	-3.0096 µg/L	9.41905	-3.0096 ppb	9.41905	312.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.3586 µg/L	4.65237	-0.3586 ppb	4.65237	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	10.4	0.4661 µg/L	0.34883	0.4661 ppb	0.34883	74.85%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.4	0.1160 µg/L	0.01479	0.1160 ppb	0.01479	12.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	186.8	0.1098 µg/L	0.02822	0.1098 ppb	0.02822	25.71%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-34.9	-12.693 µg/L	2.5181	-12.693 ppb	2.5181	19.84%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-6.7	-0.1586 µg/L	0.07415	-0.1586 ppb	0.07415	46.75%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.7	-0.0707 µg/L	0.32730	-0.0707 ppb	0.32730	463.18%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-9.2 -0.2010 µg/L	0.24417 -0.2010 ppb	0.24417 121.46%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	22.3 0.1471 µg/L	0.20961 0.1471 ppb	0.20961 142.52%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.6 6.6424 µg/L	8.48231 6.6424 ppb	8.48231 127.70%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-39.6 -18.482 µg/L	37.0150 -18.482 ppb	37.0150 200.27%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.1 -14.100 µg/L	2.4612 -14.100 ppb	2.4612 17.45%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-30.6 -0.0907 µg/L	0.04488 -0.0907 ppb	0.04488 49.45%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	8.8 0.8685 µg/L	0.08763 0.8685 ppb	0.08763 10.09%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	65.4 32.631 µg/L	18.4813 32.631 ppb	18.4813 56.64%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	9.2 0.5137 µg/L	0.46689 0.5137 ppb	0.46689 90.88%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	4.2 6.9190 µg/L	8.06214 6.9190 ppb	8.06214 116.52%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-5.3 -1.3931 µg/L	0.73489 -1.3931 ppb	0.73489 52.75%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.8 -5.7271 µg/L	5.28965 -5.7271 ppb	5.28965 92.36%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-1.1 -0.9762 µg/L	1.49611 -0.9762 ppb	1.49611 153.26%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.2 -3.0002 µg/L	5.13816 -3.0002 ppb	5.13816 171.26%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	34.4 6.2173 µg/L	2.12838 6.2173 ppb	2.12838 34.23%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	61.6 4.1899 µg/L	0.76414 4.1899 ppb	0.76414 18.24%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.2 2.0304 µg/L	0.98050 2.0304 ppb	0.98050 48.29%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-15.4 -0.0917 µg/L	0.05808 -0.0917 ppb	0.05808 63.32%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	14.9 0.0357 µg/L	0.13862 0.0357 ppb	0.13862 387.86%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.4 -1.3283 µg/L	6.23511 -1.3283 ppb	6.23511 469.40%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	19.3 1.7538 µg/L	5.24094 1.7538 ppb	5.24094 298.83%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-50.5 -0.5889 µg/L	0.26792 -0.5889 ppb	0.26792 45.50%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-247.3 -5.6964 µg/L	0.21417 -5.6964 ppb	0.21417 3.76%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202047709|955136|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 327

Date Collected: 3/16/2010 22:38:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047709|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	93867.2	93867.2	97.0 %		22:38:58
1	Al 396.153Radial†	-113.5	2.3	1.0648 µg/L	1.0648 ppb	22:38:58
1	Ca 317.933Radial†	379.1	5.6	2.0231 µg/L	2.0231 ppb	22:39:18
1	Fe 238.204 Radial†	16.9	5.4	64.315 µg/L	64.315 ppb	22:39:18
1	K 766.490 Radial†	483.7	13.4	6.2717 µg/L	6.2717 ppb	22:38:58
1	Mg 279.077 IEC†	6.2	-1.6	-21.355 µg/L	-21.355 ppb	22:39:18
1	Na 589.592 Radial†	274.7	102.7	51.242 µg/L	51.242 ppb	22:38:58
1	Sr 421.552†	153.4	18.7	0.1112 µg/L	0.1112 ppb	22:38:58
1	Sc 361.383	2006715.3	2006715.3	95.872 %		22:40:21
1	Y 371.029	1371309.4	1371309.4	95.704 %		22:40:21
1	Ag 328.068†	-498.3	-59.5	-0.4738 µg/L	-0.4738 ppb	22:40:26
1	As 188.979†	-3.1	0.1	0.0736 µg/L	0.0736 ppb	22:40:47
1	B 249.677†	304.9	18.7	0.8140 µg/L	0.8140 ppb	22:40:26
1	Ba 233.527†	-1.0	7.4	0.1619 µg/L	0.1619 ppb	22:40:47
1	Be 313.107†	-1054.0	59.4	0.0348 µg/L	0.0348 ppb	22:40:26
1	Cd 226.502†	-166.0	-2.5	-0.0670 µg/L	-0.0670 ppb	22:40:47
1	Co 228.616†	46.8	0.8	0.0336 µg/L	0.0336 ppb	22:40:47
1	Cr 267.716†	68.9	-8.4	-0.1824 µg/L	-0.1824 ppb	22:40:26
1	Cu 324.752†	4295.6	103.8	0.6902 µg/L	0.6902 ppb	22:40:26
1	Mn 257.610†	-522.4	142.1	0.4323 µg/L	0.4323 ppb	22:40:47
1	Mo 202.031†	14.7	10.2	1.0085 µg/L	1.0085 ppb	22:40:47
1	Ni 231.604†	365.4	4.2	0.2352 µg/L	0.2352 ppb	22:40:47
1	P 214.914†	263.4	2.4	3.8624 µg/L	3.8624 ppb	22:40:47
1	Pb 220.353†	35.2	6.6	1.7248 µg/L	1.7248 ppb	22:40:47
1	S 181.975 Axial†	23.6	2.0	6.5163 µg/L	6.5163 ppb	22:40:47
1	Sb 206.836†	21.3	-0.5	-0.4134 µg/L	-0.4134 ppb	22:40:47
1	Se 196.026†	29.4	3.3	3.3434 µg/L	3.3434 ppb	22:40:47
1	SiO2†	3036.3	387.3	69.922 µg/L	69.922 ppb	22:40:26
1	Si 251.611†	723.3	330.3	22.456 µg/L	22.456 ppb	22:40:47
1	Sn 189.927†	-3.2	4.1	1.6147 µg/L	1.6147 ppb	22:40:47
1	Ti 334.940†	-409.1	150.5	0.3536 µg/L	0.3536 ppb	22:40:26
1	Tl 190.801†	-30.8	2.0	2.0063 µg/L	2.0063 ppb	22:40:47
1	U 409.014†	46.2	54.0	4.8904 µg/L	4.8904 ppb	22:40:26
1	V 292.402†	99.6	-8.5	-0.0958 µg/L	-0.0958 ppb	22:40:26
1	Zn 213.857†	760.9	-215.2	-4.9580 µg/L	-4.9580 ppb	22:40:47
2	Sc RADIAL	94605.6	94605.6	97.7 %		22:39:24
2	Al 396.153Radial†	-96.4	20.6	9.8432 µg/L	9.8432 ppb	22:39:24
2	Ca 317.933Radial†	378.6	2.1	0.7617 µg/L	0.7617 ppb	22:39:44
2	Fe 238.204 Radial†	14.9	3.2	38.397 µg/L	38.397 ppb	22:39:44
2	K 766.490 Radial†	538.7	65.7	30.684 µg/L	30.684 ppb	22:39:24
2	Mg 279.077 IEC†	6.9	-0.9	-12.442 µg/L	-12.442 ppb	22:39:44
2	Na 589.592 Radial†	232.2	57.0	28.425 µg/L	28.425 ppb	22:39:24
2	Sr 421.552†	114.9	-21.9	-0.1299 µg/L	-0.1299 ppb	22:39:24
2	Sc 361.383	1989784.6	1989784.6	95.064 %		22:40:53
2	Y 371.029	1356902.1	1356902.1	94.698 %		22:40:53
2	Ag 328.068†	-481.4	-46.2	-0.3737 µg/L	-0.3737 ppb	22:40:59
2	As 188.979†	-1.9	1.2	1.7879 µg/L	1.7879 ppb	22:41:19
2	B 249.677†	308.6	25.2	1.1244 µg/L	1.1244 ppb	22:40:59
2	Ba 233.527†	-2.4	5.9	0.1284 µg/L	0.1284 ppb	22:41:19
2	Be 313.107†	-1038.2	66.7	0.0391 µg/L	0.0391 ppb	22:40:59
2	Cd 226.502†	-164.6	-2.5	-0.0646 µg/L	-0.0646 ppb	22:41:19
2	Co 228.616†	42.8	-3.1	-0.1316 µg/L	-0.1316 ppb	22:41:19
2	Cr 267.716†	61.1	-16.0	-0.3485 µg/L	-0.3485 ppb	22:40:59
2	Cu 324.752†	4244.0	87.7	0.5799 µg/L	0.5799 ppb	22:40:59
2	Mn 257.610†	-527.7	131.9	0.3995 µg/L	0.3995 ppb	22:41:19
2	Mo 202.031†	10.8	6.2	0.6194 µg/L	0.6194 ppb	22:41:19
2	Ni 231.604†	352.2	-6.4	-0.3610 µg/L	-0.3610 ppb	22:41:19
2	P 214.914†	263.7	5.0	8.2324 µg/L	8.2324 ppb	22:41:19
2	Pb 220.353†	28.5	-0.2	-0.0548 µg/L	-0.0548 ppb	22:41:19

2	S 181.975 Axial†	23.9	2.6	8.3266 µg/L	8.3266 ppb	22:41:19
2	Sb 206.836†	23.4	1.8	1.6637 µg/L	1.6637 ppb	22:41:19
2	Se 196.026†	21.3	-4.9	-4.5089 µg/L	-4.5089 ppb	22:41:19
2	SiO2†	2979.2	354.2	63.939 µg/L	63.939 ppb	22:40:59
2	Si 251.611†	747.5	362.3	24.628 µg/L	24.628 ppb	22:41:19
2	Sn 189.927†	6.5	14.2	5.5364 µg/L	5.5364 ppb	22:41:19
2	Ti 334.940†	-463.5	89.7	0.2107 µg/L	0.2107 ppb	22:40:59
2	Tl 190.801†	-31.9	0.6	0.5594 µg/L	0.5594 ppb	22:41:19
2	U 409.014†	-16.0	-11.0	-1.0021 µg/L	-1.0021 ppb	22:40:59
2	V 292.402†	41.6	-68.6	-0.8113 µg/L	-0.8113 ppb	22:40:59
2	Zn 213.857†	761.9	-207.4	-4.7752 µg/L	-4.7752 ppb	22:41:19
3	Sc RADIAL	94620.1	94620.1	97.8 %		22:39:50
3	Al 396.153Radial†	-105.7	11.2	5.3430 µg/L	5.3430 ppb	22:39:50
3	Ca 317.933Radial†	379.0	2.4	0.8890 µg/L	0.8890 ppb	22:40:10
3	Fe 238.204 Radial†	17.8	6.3	73.984 µg/L	73.984 ppb	22:40:10
3	K 766.490 Radial†	455.8	-19.1	-8.9067 µg/L	-8.9067 ppb	22:39:50
3	Mg 279.077 IEC†	7.9	0.1	1.5850 µg/L	1.5850 ppb	22:40:10
3	Na 589.592 Radial†	225.5	50.1	24.992 µg/L	24.992 ppb	22:39:50
3	Sr 421.552†	141.3	5.1	0.0302 µg/L	0.0302 ppb	22:39:50
3	Sc 361.383	1998001.8	1998001.8	95.456 %		22:41:25
3	Y 371.029	1366904.5	1366904.5	95.396 %		22:41:25
3	Ag 328.068†	-530.5	-95.5	-0.7637 µg/L	-0.7637 ppb	22:41:31
3	As 188.979†	-8.1	-5.3	-7.7743 µg/L	-7.7743 ppb	22:41:51
3	B 249.677†	304.8	19.9	0.8658 µg/L	0.8658 ppb	22:41:31
3	Ba 233.527†	-6.8	1.3	0.0271 µg/L	0.0271 ppb	22:41:51
3	Be 313.107†	-932.9	181.5	0.1065 µg/L	0.1065 ppb	22:41:31
3	Cd 226.502†	-163.7	-0.9	-0.0293 µg/L	-0.0293 ppb	22:41:51
3	Co 228.616†	41.7	-4.4	-0.1887 µg/L	-0.1887 ppb	22:41:51
3	Cr 267.716†	95.7	20.0	0.4356 µg/L	0.4356 ppb	22:41:31
3	Cu 324.752†	4234.3	59.2	0.4004 µg/L	0.4004 ppb	22:41:31
3	Mn 257.610†	-524.6	137.4	0.4171 µg/L	0.4171 ppb	22:41:51
3	Mo 202.031†	8.8	4.1	0.4099 µg/L	0.4099 ppb	22:41:51
3	Ni 231.604†	359.2	-0.7	-0.0355 µg/L	-0.0355 ppb	22:41:51
3	P 214.914†	253.3	-7.1	-11.814 µg/L	-11.814 ppb	22:41:51
3	Pb 220.353†	21.0	-8.2	-2.1496 µg/L	-2.1496 ppb	22:41:51
3	S 181.975 Axial†	19.4	-2.2	-6.9935 µg/L	-6.9935 ppb	22:41:51
3	Sb 206.836†	23.5	1.9	1.6729 µg/L	1.6729 ppb	22:41:51
3	Se 196.026†	21.3	-5.0	-4.4297 µg/L	-4.4297 ppb	22:41:51
3	SiO2†	3006.3	369.6	66.734 µg/L	66.734 ppb	22:41:31
3	Si 251.611†	744.0	355.3	24.157 µg/L	24.157 ppb	22:41:51
3	Sn 189.927†	1.8	9.4	3.6401 µg/L	3.6401 ppb	22:41:51
3	Ti 334.940†	-425.2	131.8	0.3080 µg/L	0.3080 ppb	22:41:31
3	Tl 190.801†	-25.7	7.2	7.0779 µg/L	7.0779 ppb	22:41:51
3	U 409.014†	-2.8	2.9	0.2488 µg/L	0.2488 ppb	22:41:31
3	V 292.402†	78.3	-30.3	-0.3626 µg/L	-0.3626 ppb	22:41:31
3	Zn 213.857†	752.4	-220.7	-5.0843 µg/L	-5.0843 ppb	22:41:51

Mean Data: 1202047709|955136|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Conc. Sample Units	Std.Dev.	RSD
Sc 361.383	1998167.2	95.464 %	0.4045			0.42%
Sc RADIAL	94364.3	97.5 %	0.44			0.46%
Y 371.029	1365038.7	95.266 %	0.5152			0.54%
Ag 328.068†	-67.1	-0.5370 µg/L	0.20253	-0.5370 ppb	0.20253	37.71%
Al 396.153Radial†	11.4	5.4170 µg/L	4.38967	5.4170 ppb	4.38967	81.04%
As 188.979†	-1.3	-1.9709 µg/L	5.09844	-1.9709 ppb	5.09844	258.68%
B 249.677†	21.3	0.9347 µg/L	0.16625	0.9347 ppb	0.16625	17.79%
Ba 233.527†	4.9	0.1058 µg/L	0.07018	0.1058 ppb	0.07018	66.35%
Be 313.107†	102.6	0.0601 µg/L	0.04023	0.0601 ppb	0.04023	66.88%
Ca 317.933Radial†	3.4	1.2246 µg/L	0.69444	1.2246 ppb	0.69444	56.71%
Cd 226.502†	-2.0	-0.0536 µg/L	0.02111	-0.0536 ppb	0.02111	39.36%
Co 228.616†	-2.2	-0.0956 µg/L	0.11541	-0.0956 ppb	0.11541	120.77%
Cr 267.716†	-1.4	-0.0318 µg/L	0.41318	-0.0318 ppb	0.41318	>999.9%
Cu 324.752†	83.6	0.5568 µg/L	0.14624	0.5568 ppb	0.14624	26.26%
Fe 238.204 Radial†	5.0	58.898 µg/L	18.4012	58.898 ppb	18.4012	31.24%
K 766.490 Radial†	20.0	9.3497 µg/L	19.97400	9.3497 ppb	19.97400	213.63%
Mg 279.077 IEC†	-0.8	-10.737 µg/L	11.5646	-10.737 ppb	11.5646	107.71%
Mn 257.610†	137.1	0.4163 µg/L	0.01641	0.4163 ppb	0.01641	3.94%
Mo 202.031†	6.8	0.6793 µg/L	0.30373	0.6793 ppb	0.30373	44.71%
Na 589.592 Radial†	69.9	34.886 µg/L	14.2682	34.886 ppb	14.2682	40.90%

Ni 231.604†	-1.0	-0.0538 µg/L	0.29854	-0.0538 ppb	0.29854	555.39%
P 214.914†	0.1	0.0937 µg/L	10.54097	0.0937 ppb	10.54097	>999.9%
Pb 220.353†	-0.6	-0.1599 µg/L	1.93932	-0.1599 ppb	1.93932	>999.9%
S 181.975 Axial†	0.8	2.6165 µg/L	8.37154	2.6165 ppb	8.37154	319.96%
Sb 206.836†	1.1	0.9744 µg/L	1.20191	0.9744 ppb	1.20191	123.35%
Se 196.026†	-2.2	-1.8651 µg/L	4.51083	-1.8651 ppb	4.51083	241.86%
SiO2†	370.4	66.865 µg/L	2.9936	66.865 ppb	2.9936	4.48%
Si 251.611†	349.3	23.747 µg/L	1.1428	23.747 ppb	1.1428	4.81%
Sn 189.927†	9.2	3.5971 µg/L	1.96122	3.5971 ppb	1.96122	54.52%
Sr 421.552†	0.6	0.0038 µg/L	0.12272	0.0038 ppb	0.12272	>999.9%
Ti 334.940†	124.0	0.2908 µg/L	0.07303	0.2908 ppb	0.07303	25.12%
Tl 190.801†	3.3	3.2145 µg/L	3.42306	3.2145 ppb	3.42306	106.49%
U 409.014†	15.3	1.3790 µg/L	3.10458	1.3790 ppb	3.10458	225.13%
V 292.402†	-35.8	-0.4232 µg/L	0.36162	-0.4232 ppb	0.36162	85.44%
Zn 213.857†	-214.4	-4.9392 µg/L	0.15541	-4.9392 ppb	0.15541	3.15%

Sequence No.: 13

Sample ID: 1202047714|955136|2

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 328

Date Collected: 3/16/2010 22:42:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047714|955136|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96501.2	96501.2	99.7 %		22:42:32
1	Al 396.153Radial†	111965.8	112418.2	53659 µg/L	53659 ppb	22:42:32
1	Ca 317.933Radial†	155909.2	155987.8	56767 µg/L	56767 ppb	22:42:32
1	Fe 238.204 Radial†	9461.5	9477.7	112110 µg/L	112110 ppb	22:42:52
1	K 766.490 Radial†	51447.5	51115.2	23855 µg/L	23855 ppb	22:42:32
1	Mg 279.077 IEC†	1697.8	1694.8	22228 µg/L	22228 ppb	22:42:52
1	Na 589.592 Radial†	11733.5	11587.8	5783.5 µg/L	5783.5 ppb	22:42:32
1	Sr 421.552†	217885.1	218393.9	1298.3 µg/L	1298.3 ppb	22:42:32
1	Sc 361.383	2020901.6	2020901.6	96.550 %		22:43:57
1	Y 371.029	1393889.5	1393889.5	97.280 %		22:43:57
1	Ag 328.068†	19803.1	20970.8	181.89 µg/L	181.89 ppb	22:44:03
1	As 188.979†	421.1	439.4	628.17 µg/L	628.17 ppb	22:44:24
1	B 249.677†	19080.2	19462.6	827.05 µg/L	827.05 ppb	22:44:03
1	Ba 233.527†	51835.0	53695.5	1175.7 µg/L	1175.7 ppb	22:44:03
1	Be 313.107†	759033.5	787312.6	461.22 µg/L	461.22 ppb	22:43:57
1	Cd 226.502†	14731.1	15428.0	354.85 µg/L	354.85 ppb	22:44:03
1	Co 228.616†	12390.0	12784.7	542.00 µg/L	542.00 ppb	22:44:24
1	Cr 267.716†	63933.2	66137.3	1438.9 µg/L	1438.9 ppb	22:44:03
1	Cu 324.752†	160297.1	161647.8	1076.9 µg/L	1076.9 ppb	22:44:03
1	Mn 257.610†	1084166.3	1123590.5	3382.0 µg/L	3382.0 ppb	22:43:57
1	Mo 202.031†	2961.1	3061.7	307.22 µg/L	307.22 ppb	22:44:24
1	Ni 231.604†	13987.1	14109.9	792.19 µg/L	792.19 ppb	22:44:24
1	P 214.914†	3454.1	3305.1	5309.9 µg/L	5309.9 ppb	22:44:24
1	Pb 220.353†	1885.4	1922.6	509.15 µg/L	509.15 ppb	22:44:24
1	S 181.975 Axial†	665.5	666.8	2121.9 µg/L	2121.9 ppb	22:44:24
1	Sb 206.836†	784.5	789.9	692.42 µg/L	692.42 ppb	22:44:24
1	Se 196.026†	1746.9	1782.0	2009.1 µg/L	2009.1 ppb	22:44:24
1	SiO2†	269277.6	276119.2	49849 µg/L	49849 ppb	22:44:03
1	Si 251.611†	328932.6	340261.3	23132 µg/L	23132 ppb	22:44:03
1	Sn 189.927†	1542.3	1604.9	629.95 µg/L	629.95 ppb	22:44:24
1	Ti 334.940†	1487704.9	1541437.9	3603.6 µg/L	3603.6 ppb	22:43:57
1	Tl 190.801†	673.0	731.1	761.53 µg/L	761.53 ppb	22:44:24
1	U 409.014†	-600.4	-616.1	-74.983 µg/L	-74.983 ppb	22:44:03
1	V 292.402†	60584.4	62636.8	730.61 µg/L	730.61 ppb	22:44:03
1	Zn 213.857†	147148.6	151397.4	3474.0 µg/L	3474.0 ppb	22:44:03
2	Sc RADIAL	95552.5	95552.5	98.7 %		22:42:58
2	Al 396.153Radial†	111205.7	112763.2	53823 µg/L	53823 ppb	22:42:58
2	Ca 317.933Radial†	154951.7	156570.4	56979 µg/L	56979 ppb	22:42:58
2	Fe 238.204 Radial†	9535.5	9646.9	114110 µg/L	114110 ppb	22:43:18
2	K 766.490 Radial†	51155.0	51331.2	23955 µg/L	23955 ppb	22:42:58
2	Mg 279.077 IEC†	1711.1	1725.2	22626 µg/L	22626 ppb	22:43:18
2	Na 589.592 Radial†	11679.2	11649.7	5814.4 µg/L	5814.4 ppb	22:42:58
2	Sr 421.552†	216723.3	219386.8	1304.2 µg/L	1304.2 ppb	22:42:58
2	Sc 361.383	2027565.9	2027565.9	96.869 %		22:44:31
2	Y 371.029	1399489.7	1399489.7	97.670 %		22:44:31
2	Ag 328.068†	19948.4	21053.4	182.73 µg/L	182.73 ppb	22:44:36
2	As 188.979†	414.5	431.2	615.73 µg/L	615.73 ppb	22:44:57
2	B 249.677†	19253.9	19577.0	831.21 µg/L	831.21 ppb	22:44:36
2	Ba 233.527†	52261.8	53959.7	1181.4 µg/L	1181.4 ppb	22:44:36
2	Be 313.107†	761601.5	787379.6	461.26 µg/L	461.26 ppb	22:44:31
2	Cd 226.502†	14842.5	15492.9	356.16 µg/L	356.16 ppb	22:44:36
2	Co 228.616†	12307.7	12657.5	536.54 µg/L	536.54 ppb	22:44:57
2	Cr 267.716†	64548.2	66554.5	1448.0 µg/L	1448.0 ppb	22:44:36
2	Cu 324.752†	161430.7	162272.4	1081.3 µg/L	1081.3 ppb	22:44:36
2	Mn 257.610†	1089396.8	1125299.3	3387.3 µg/L	3387.3 ppb	22:44:31
2	Mo 202.031†	2942.0	3032.0	304.36 µg/L	304.36 ppb	22:44:57
2	Ni 231.604†	13910.1	13982.9	785.10 µg/L	785.10 ppb	22:44:57
2	P 214.914†	3427.8	3266.2	5243.2 µg/L	5243.2 ppb	22:44:57
2	Pb 220.353†	1858.8	1888.7	500.31 µg/L	500.31 ppb	22:44:57

2	S 181.975 Axial†	678.8	678.2	2158.4 µg/L	2158.4 ppb	22:44:57
2	Sb 206.836†	777.2	779.6	683.10 µg/L	683.10 ppb	22:44:57
2	Se 196.026†	1732.5	1761.1	1995.5 µg/L	1995.5 ppb	22:44:57
2	SiO2†	271413.7	277407.5	50082 µg/L	50082 ppb	22:44:36
2	Si 251.611†	331413.5	341702.6	23230 µg/L	23230 ppb	22:44:36
2	Sn 189.927†	1535.8	1592.9	625.29 µg/L	625.29 ppb	22:44:57
2	Ti 334.940†	1492128.9	1540940.3	3602.4 µg/L	3602.4 ppb	22:44:31
2	Tl 190.801†	666.7	722.4	753.27 µg/L	753.27 ppb	22:44:57
2	U 409.014†	-738.8	-756.9	-88.057 µg/L	-88.057 ppb	22:44:36
2	V 292.402†	61105.0	62968.0	734.25 µg/L	734.25 ppb	22:44:36
2	Zn 213.857†	148454.3	152244.3	3493.4 µg/L	3493.4 ppb	22:44:36
3	Sc RADIAL	95428.6	95428.6	98.6 %		22:43:24
3	Al 396.153Radial†	111522.0	113230.2	54047 µg/L	54047 ppb	22:43:24
3	Ca 317.933Radial†	155026.6	156850.1	57081 µg/L	57081 ppb	22:43:24
3	Fe 238.204 Radial†	9515.9	9639.5	114020 µg/L	114020 ppb	22:43:44
3	K 766.490 Radial†	51332.6	51578.7	24071 µg/L	24071 ppb	22:43:24
3	Mg 279.077 IEC†	1709.9	1726.3	22641 µg/L	22641 ppb	22:43:44
3	Na 589.592 Radial†	11714.5	11700.8	5839.9 µg/L	5839.9 ppb	22:43:24
3	Sr 421.552†	217145.4	220099.9	1308.5 µg/L	1308.5 ppb	22:43:24
3	Sc 361.383	2020875.2	2020875.2	96.549 %		22:45:04
3	Y 371.029	1393498.5	1393498.5	97.252 %		22:45:04
3	Ag 328.068†	19227.2	20374.7	176.95 µg/L	176.95 ppb	22:45:10
3	As 188.979†	375.5	392.2	558.12 µg/L	558.12 ppb	22:45:30
3	B 249.677†	18474.3	18835.3	797.43 µg/L	797.43 ppb	22:45:10
3	Ba 233.527†	49294.6	51065.0	1118.0 µg/L	1118.0 ppb	22:45:10
3	Be 313.107†	730899.4	758183.2	444.16 µg/L	444.16 ppb	22:45:04
3	Cd 226.502†	13953.3	14622.6	335.41 µg/L	335.41 ppb	22:45:10
3	Co 228.616†	11032.9	11379.2	481.89 µg/L	481.89 ppb	22:45:30
3	Cr 267.716†	59618.1	61668.9	1341.7 µg/L	1341.7 ppb	22:45:10
3	Cu 324.752†	151684.3	152729.3	1019.0 µg/L	1019.0 ppb	22:45:10
3	Mn 257.610†	1047962.1	1086106.9	3269.5 µg/L	3269.5 ppb	22:45:04
3	Mo 202.031†	2645.4	2734.9	274.95 µg/L	274.95 ppb	22:45:30
3	Ni 231.604†	12476.7	12545.7	704.56 µg/L	704.56 ppb	22:45:30
3	P 214.914†	3134.7	2974.4	4764.3 µg/L	4764.3 ppb	22:45:30
3	Pb 220.353†	1740.4	1772.4	469.85 µg/L	469.85 ppb	22:45:30
3	S 181.975 Axial†	619.2	618.7	1969.1 µg/L	1969.1 ppb	22:45:30
3	Sb 206.836†	695.2	697.3	610.40 µg/L	610.40 ppb	22:45:30
3	Se 196.026†	1619.1	1649.6	1890.4 µg/L	1890.4 ppb	22:45:30
3	SiO2†	257191.3	263604.5	47590 µg/L	47590 ppb	22:45:10
3	Si 251.611†	314217.7	325024.9	22096 µg/L	22096 ppb	22:45:10
3	Sn 189.927†	1360.2	1416.3	556.53 µg/L	556.53 ppb	22:45:30
3	Ti 334.940†	1429486.4	1481158.5	3462.6 µg/L	3462.6 ppb	22:45:04
3	Tl 190.801†	612.6	668.6	699.24 µg/L	699.24 ppb	22:45:30
3	U 409.014†	-669.8	-687.9	-81.790 µg/L	-81.790 ppb	22:45:10
3	V 292.402†	56964.6	58888.4	685.65 µg/L	685.65 ppb	22:45:10
3	Zn 213.857†	139877.7	143868.6	3301.0 µg/L	3301.0 ppb	22:45:10

Mean Data: 1202047714|955136|2

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	2023114.2	96.656 %		0.1842				0.19%
Sc RADIAL	95827.5	99.0 %		0.61				0.61%
Y 371.029	1395625.9	97.401 %		0.2339				0.24%
Ag 328.068†	20799.6	180.52 µg/L		3.119	180.52 ppb		3.119	1.73%
Al 396.153Radial†	112803.9	53843 µg/L		194.9	53843 ppb		194.9	0.36%
As 188.979†	420.9	600.68 µg/L		37.375	600.68 ppb		37.375	6.22%
B 249.677†	19291.6	818.56 µg/L		18.421	818.56 ppb		18.421	2.25%
Ba 233.527†	52906.7	1158.4 µg/L		35.05	1158.4 ppb		35.05	3.03%
Be 313.107†	777625.1	455.54 µg/L		9.862	455.54 ppb		9.862	2.16%
Ca 317.933Radial†	156469.4	56943 µg/L		160.1	56943 ppb		160.1	0.28%
Cd 226.502†	15181.2	348.81 µg/L		11.625	348.81 ppb		11.625	3.33%
Co 228.616†	12273.8	520.14 µg/L		33.243	520.14 ppb		33.243	6.39%
Cr 267.716†	64786.9	1409.5 µg/L		58.92	1409.5 ppb		58.92	4.18%
Cu 324.752†	158883.2	1059.1 µg/L		34.78	1059.1 ppb		34.78	3.28%
Fe 238.204 Radial†	9588.0	113420 µg/L		1130.7	113420 ppb		1130.7	1.00%
K 766.490 Radial†	51341.7	23960 µg/L		108.2	23960 ppb		108.2	0.45%
Mg 279.077 IEC†	1715.4	22498 µg/L		234.2	22498 ppb		234.2	1.04%
Mn 257.610†	1111665.6	3346.3 µg/L		66.55	3346.3 ppb		66.55	1.99%
Mo 202.031†	2942.9	295.51 µg/L		17.862	295.51 ppb		17.862	6.04%
Na 589.592 Radial†	11646.1	5812.6 µg/L		28.24	5812.6 ppb		28.24	0.49%

Ni 231.604†	13546.2	760.61 µg/L	48.677	760.61 ppb	48.677	6.40%
P 214.914†	3181.9	5105.8 µg/L	297.61	5105.8 ppb	297.61	5.83%
Pb 220.353†	1861.2	493.10 µg/L	20.620	493.10 ppb	20.620	4.18%
S 181.975 Axial†	654.6	2083.1 µg/L	100.40	2083.1 ppb	100.40	4.82%
Sb 206.836†	755.6	661.97 µg/L	44.905	661.97 ppb	44.905	6.78%
Se 196.026†	1730.9	1965.0 µg/L	64.93	1965.0 ppb	64.93	3.30%
SiO2†	272377.1	49174 µg/L	1376.5	49174 ppb	1376.5	2.80%
Si 251.611†	335662.9	22820 µg/L	628.2	22820 ppb	628.2	2.75%
Sn 189.927†	1538.0	603.92 µg/L	41.111	603.92 ppb	41.111	6.81%
Sr 421.552†	219293.5	1303.7 µg/L	5.09	1303.7 ppb	5.09	0.39%
Ti 334.940†	1521178.9	3556.2 µg/L	81.06	3556.2 ppb	81.06	2.28%
Tl 190.801†	707.4	738.01 µg/L	33.830	738.01 ppb	33.830	4.58%
U 409.014†	-686.9	-81.610 µg/L	6.5390	-81.610 ppb	6.5390	8.01%
V 292.402†	61497.7	716.84 µg/L	27.069	716.84 ppb	27.069	3.78%
Zn 213.857†	149170.1	3422.8 µg/L	105.91	3422.8 ppb	105.91	3.09%

Sequence No.: 15

Sample ID: 1202047710|955136|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 330

Date Collected: 3/16/2010 22:49:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047710|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97606.1	97606.1	101 %		22:49:48
1	Al 396.153Radial†	180153.9	178763.8	85336 µg/L	85336 ppb	22:49:48
1	Ca 317.933Radial†	68263.9	67306.7	24494 µg/L	24494 ppb	22:49:48
1	Fe 238.204 Radial†	9991.1	9895.5	117040 µg/L	117040 ppb	22:50:09
1	K 766.490 Radial†	25404.2	24706.0	11530 µg/L	11530 ppb	22:49:48
1	Mg 279.077 IEC†	1136.0	1118.5	14620 µg/L	14620 ppb	22:50:09
1	Na 589.592 Radial†	4448.0	4230.1	2111.3 µg/L	2111.3 ppb	22:49:48
1	Sr 421.552†	40780.9	40299.8	239.58 µg/L	239.58 ppb	22:49:48
1	Sc 361.383	2028928.5	2028928.5	96.934 %		22:51:14
1	Y 371.029	1426236.2	1426236.2	99.537 %		22:51:14
1	Ag 328.068†	-1503.4	-1090.8	1.4249 µg/L	1.4249 ppb	22:51:19
1	As 188.979†	19.7	23.6	17.380 µg/L	17.380 ppb	22:51:40
1	B 249.677†	1170.5	908.2	-19.740 µg/L	-19.740 ppb	22:51:19
1	Ba 233.527†	62840.6	64836.8	1418.3 µg/L	1418.3 ppb	22:51:19
1	Be 313.107†	11863.5	13397.6	6.9664 µg/L	6.9664 ppb	22:51:19
1	Cd 226.502†	474.9	660.5	2.5358 µg/L	2.5358 ppb	22:51:40
1	Co 228.616†	882.0	861.9	32.069 µg/L	32.069 ppb	22:51:40
1	Cr 267.716†	3329.9	3354.9	73.080 µg/L	73.080 ppb	22:51:40
1	Cu 324.752†	10403.3	6355.7	63.516 µg/L	63.516 ppb	22:51:19
1	Mn 257.610†	776212.9	801453.4	2414.7 µg/L	2414.7 ppb	22:51:14
1	Mo 202.031†	33.9	29.9	7.4042 µg/L	7.4042 ppb	22:51:40
1	Ni 231.604†	1403.7	1071.2	61.556 µg/L	61.556 ppb	22:51:40
1	P 214.914†	1300.2	1068.9	1699.9 µg/L	1699.9 ppb	22:51:40
1	Pb 220.353†	342.0	322.6	93.010 µg/L	93.010 ppb	22:51:40
1	S 181.975 Axial†	246.8	232.1	738.56 µg/L	738.56 ppb	22:51:40
1	Sb 206.836†	11.7	-10.6	-10.610 µg/L	-10.610 ppb	22:51:40
1	Se 196.026†	-95.1	-125.4	241.02 µg/L	241.02 ppb	22:51:40
1	SiO2†	543171.8	557573.8	100660 µg/L	100660 ppb	22:51:14
1	Si 251.611†	662731.0	683270.6	46451 µg/L	46451 ppb	22:51:14
1	Sn 189.927†	-17.3	-10.5	-2.1530 µg/L	-2.1530 ppb	22:51:40
1	Ti 334.940†	984635.9	1016359.6	2375.9 µg/L	2375.9 ppb	22:51:14
1	Tl 190.801†	-52.7	-20.3	24.289 µg/L	24.289 ppb	22:51:40
1	U 409.014†	-1321.0	-1357.0	-140.97 µg/L	-140.97 ppb	22:51:19
1	V 292.402†	14829.5	15186.3	164.49 µg/L	164.49 ppb	22:51:19
1	Zn 213.857†	13685.2	13109.2	295.10 µg/L	295.10 ppb	22:51:40
2	Sc RADIAL	96995.0	96995.0	100 %		22:50:14
2	Al 396.153Radial†	180131.4	179866.9	85863 µg/L	85863 ppb	22:50:14
2	Ca 317.933Radial†	68145.8	67615.3	24607 µg/L	24607 ppb	22:50:14
2	Fe 238.204 Radial†	10020.4	9987.1	118130 µg/L	118130 ppb	22:50:35
2	K 766.490 Radial†	25281.8	24742.6	11547 µg/L	11547 ppb	22:50:14
2	Mg 279.077 IEC†	1141.0	1130.6	14779 µg/L	14779 ppb	22:50:35
2	Na 589.592 Radial†	4414.9	4224.9	2108.7 µg/L	2108.7 ppb	22:50:14
2	Sr 421.552†	40713.2	40487.0	240.69 µg/L	240.69 ppb	22:50:14
2	Sc 361.383	2033550.6	2033550.6	97.155 %		22:51:47
2	Y 371.029	1429529.5	1429529.5	99.767 %		22:51:47
2	Ag 328.068†	-1526.5	-1111.0	1.3408 µg/L	1.3408 ppb	22:51:53
2	As 188.979†	17.1	20.8	13.222 µg/L	13.222 ppb	22:52:14
2	B 249.677†	1121.4	854.9	-22.726 µg/L	-22.726 ppb	22:51:53
2	Ba 233.527†	62511.7	64350.9	1407.7 µg/L	1407.7 ppb	22:51:53
2	Be 313.107†	11778.3	13282.1	6.8980 µg/L	6.8980 ppb	22:51:53
2	Cd 226.502†	478.3	662.9	2.4703 µg/L	2.4703 ppb	22:52:14
2	Co 228.616†	883.2	861.0	32.029 µg/L	32.029 ppb	22:52:14
2	Cr 267.716†	3313.7	3330.5	72.548 µg/L	72.548 ppb	22:52:14
2	Cu 324.752†	10314.3	6239.7	62.962 µg/L	62.962 ppb	22:51:53
2	Mn 257.610†	778040.8	801514.7	2414.9 µg/L	2414.9 ppb	22:51:47
2	Mo 202.031†	25.6	21.2	6.5857 µg/L	6.5857 ppb	22:52:14
2	Ni 231.604†	1415.7	1080.3	62.083 µg/L	62.083 ppb	22:52:14
2	P 214.914†	1299.2	1064.8	1692.5 µg/L	1692.5 ppb	22:52:14
2	Pb 220.353†	339.2	319.0	92.119 µg/L	92.119 ppb	22:52:14

2	S 181.975 Axial†	256.9	241.9	769.93 µg/L	769.93 ppb	22:52:14
2	Sb 206.836†	20.9	-1.2	-2.2474 µg/L	-2.2474 ppb	22:52:14
2	Se 196.026†	-94.9	-125.0	244.80 µg/L	244.80 ppb	22:52:14
2	SiO2†	544239.6	557399.3	100630 µg/L	100630 ppb	22:51:47
2	Si 251.611†	664337.9	683370.6	46458 µg/L	46458 ppb	22:51:47
2	Sn 189.927†	-12.2	-5.1	-0.0523 µg/L	-0.0523 ppb	22:52:14
2	Ti 334.940†	987371.0	1016866.0	2377.0 µg/L	2377.0 ppb	22:51:47
2	Tl 190.801†	-48.9	-16.2	28.426 µg/L	28.426 ppb	22:52:14
2	U 409.014†	-1391.3	-1426.3	-147.42 µg/L	-147.42 ppb	22:51:53
2	V 292.402†	14802.5	15123.7	163.60 µg/L	163.60 ppb	22:51:53
2	Zn 213.857†	13628.3	13018.6	292.95 µg/L	292.95 ppb	22:52:14
3	Sc RADIAL	96438.7	96438.7	99.6 %		22:50:40
3	Al 396.153Radial†	178895.5	179663.4	85766 µg/L	85766 ppb	22:50:40
3	Ca 317.933Radial†	67558.5	67418.2	24535 µg/L	24535 ppb	22:50:40
3	Fe 238.204 Radial†	10072.4	10097.0	119420 µg/L	119420 ppb	22:51:01
3	K 766.490 Radial†	25168.5	24774.4	11562 µg/L	11562 ppb	22:50:40
3	Mg 279.077 IEC†	1142.6	1138.8	14885 µg/L	14885 ppb	22:51:01
3	Na 589.592 Radial†	4403.1	4238.5	2115.5 µg/L	2115.5 ppb	22:50:40
3	Sr 421.552†	40432.0	40439.1	240.41 µg/L	240.41 ppb	22:50:40
3	Sc 361.383	2019412.1	2019412.1	96.479 %		22:52:21
3	Y 371.029	1415065.0	1415065.0	98.757 %		22:52:21
3	Ag 328.068†	-1454.1	-1046.9	1.9063 µg/L	1.9063 ppb	22:52:26
3	As 188.979†	19.2	23.1	16.458 µg/L	16.458 ppb	22:52:47
3	B 249.677†	1120.5	862.0	-23.089 µg/L	-23.089 ppb	22:52:26
3	Ba 233.527†	60265.9	62473.7	1366.6 µg/L	1366.6 ppb	22:52:26
3	Be 313.107†	11228.0	12796.6	6.6466 µg/L	6.6466 ppb	22:52:26
3	Cd 226.502†	410.2	595.8	0.7223 µg/L	0.7223 ppb	22:52:47
3	Co 228.616†	814.0	795.7	29.408 µg/L	29.408 ppb	22:52:47
3	Cr 267.716†	2984.3	3012.9	65.637 µg/L	65.637 ppb	22:52:47
3	Cu 324.752†	10147.6	6141.3	62.564 µg/L	62.564 ppb	22:52:26
3	Mn 257.610†	748253.5	776247.2	2339.0 µg/L	2339.0 ppb	22:52:21
3	Mo 202.031†	23.6	19.4	6.4537 µg/L	6.4537 ppb	22:52:47
3	Ni 231.604†	1311.8	982.7	56.631 µg/L	56.631 ppb	22:52:47
3	P 214.914†	1214.5	986.4	1561.2 µg/L	1561.2 ppb	22:52:47
3	Pb 220.353†	308.2	289.2	84.327 µg/L	84.327 ppb	22:52:47
3	S 181.975 Axial†	232.4	218.3	694.78 µg/L	694.78 ppb	22:52:47
3	Sb 206.836†	23.1	1.2	0.0132 µg/L	0.0132 ppb	22:52:47
3	Se 196.026†	-78.0	-108.1	264.66 µg/L	264.66 ppb	22:52:47
3	SiO2†	525844.9	542255.3	97896 µg/L	97896 ppb	22:52:21
3	Si 251.611†	642140.7	665150.8	45219 µg/L	45219 ppb	22:52:21
3	Sn 189.927†	-25.5	-19.0	-5.4891 µg/L	-5.4891 ppb	22:52:47
3	Ti 334.940†	943912.5	978936.8	2288.3 µg/L	2288.3 ppb	22:52:21
3	Tl 190.801†	-58.7	-26.8	17.240 µg/L	17.240 ppb	22:52:47
3	U 409.014†	-1269.1	-1309.6	-137.00 µg/L	-137.00 ppb	22:52:26
3	V 292.402†	14090.9	14492.8	155.98 µg/L	155.98 ppb	22:52:26
3	Zn 213.857†	12647.3	12100.0	271.76 µg/L	271.76 ppb	22:52:47

Mean Data: 1202047710|955136|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2027297.1	96.856 %		0.3444			0.36%
Sc RADIAL	97013.2	100 %		0.6			0.60%
Y 371.029	1423610.2	99.354 %		0.5291			0.53%
Ag 328.068†	-1082.9	1.5573 µg/L		0.30514	1.5573 ppb	0.30514	19.59%
Al 396.153Radial†	179431.4	85655 µg/L		280.2	85655 ppb	280.2	0.33%
As 188.979†	22.5	15.687 µg/L		2.1838	15.687 ppb	2.1838	13.92%
B 249.677†	875.0	-21.852 µg/L		1.8378	-21.852 ppb	1.8378	8.41%
Ba 233.527†	63887.1	1397.5 µg/L		27.30	1397.5 ppb	27.30	1.95%
Be 313.107†	13158.8	6.8370 µg/L		0.16842	6.8370 ppb	0.16842	2.46%
Ca 317.933Radial†	67446.7	24545 µg/L		56.9	24545 ppb	56.9	0.23%
Cd 226.502†	639.7	1.9095 µg/L		1.02864	1.9095 ppb	1.02864	53.87%
Co 228.616†	839.5	31.169 µg/L		1.5248	31.169 ppb	1.5248	4.89%
Cr 267.716†	3232.8	70.422 µg/L		4.1525	70.422 ppb	4.1525	5.90%
Cu 324.752†	6245.5	63.014 µg/L		0.4783	63.014 ppb	0.4783	0.76%
Fe 238.204 Radial†	9993.2	118200 µg/L		1193.4	118200 ppb	1193.4	1.01%
K 766.490 Radial†	24741.0	11546 µg/L		16.0	11546 ppb	16.0	0.14%
Mg 279.077 IEC†	1129.3	14761 µg/L		133.4	14761 ppb	133.4	0.90%
Mn 257.610†	793071.7	2389.5 µg/L		43.74	2389.5 ppb	43.74	1.83%
Mo 202.031†	23.5	6.8145 µg/L		0.51495	6.8145 ppb	0.51495	7.56%
Na 589.592 Radial†	4231.2	2111.8 µg/L		3.43	2111.8 ppb	3.43	0.16%

Ni 231.604†	1044.7	60.090 µg/L	3.0072	60.090 ppb	3.0072	5.00%
P 214.914†	1040.1	1651.2 µg/L	78.04	1651.2 ppb	78.04	4.73%
Pb 220.353†	310.3	89.819 µg/L	4.7768	89.819 ppb	4.7768	5.32%
S 181.975 Axial†	230.8	734.43 µg/L	37.744	734.43 ppb	37.744	5.14%
Sb 206.836†	-3.5	-4.2813 µg/L	5.59594	-4.2813 ppb	5.59594	130.71%
Se 196.026†	-119.5	250.16 µg/L	12.700	250.16 ppb	12.700	5.08%
SiO2†	552409.5	99730 µg/L	1587.7	99730 ppb	1587.7	1.59%
Si 251.611†	677264.0	46043 µg/L	713.2	46043 ppb	713.2	1.55%
Sn 189.927†	-11.5	-2.5648 µg/L	2.74172	-2.5648 ppb	2.74172	106.90%
Sr 421.552†	40408.7	240.22 µg/L	0.578	240.22 ppb	0.578	0.24%
Ti 334.940†	1004054.1	2347.1 µg/L	50.88	2347.1 ppb	50.88	2.17%
Tl 190.801†	-21.1	23.318 µg/L	5.6557	23.318 ppb	5.6557	24.25%
U 409.014†	-1364.3	-141.80 µg/L	5.257	-141.80 ppb	5.257	3.71%
V 292.402†	14934.2	161.36 µg/L	4.677	161.36 ppb	4.677	2.90%
Zn 213.857†	12742.6	286.60 µg/L	12.900	286.60 ppb	12.900	4.50%

Sequence No.: 16

Sample ID: 1202047712|955136|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 331

Date Collected: 3/16/2010 22:52:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047712|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97246.3	97246.3	100 %		22:53:27
1	Al 396.153Radial†	331903.1	330459.1	157740 µg/L	157740 ppb	22:53:27
1	Ca 317.933Radial†	80092.0	79329.4	28870 µg/L	28870 ppb	22:53:27
1	Fe 238.204 Radial†	11646.6	11579.7	136970 µg/L	136970 ppb	22:53:48
1	K 766.490 Radial†	45644.8	44944.4	20975 µg/L	20975 ppb	22:53:27
1	Mg 279.077 IEC†	1966.6	1949.4	25561 µg/L	25561 ppb	22:53:48
1	Na 589.592 Radial†	15411.1	15157.9	7565.4 µg/L	7565.4 ppb	22:53:27
1	Sr 421.552†	128850.0	128103.6	761.56 µg/L	761.56 ppb	22:53:27
1	Sc 361.383	2032491.6	2032491.6	97.104 %		22:54:54
1	Y 371.029	1436520.9	1436520.9	100.25 %		22:54:54
1	Ag 328.068†	63530.2	65885.1	544.42 µg/L	544.42 ppb	22:54:59
1	As 188.979†	372.6	387.0	550.54 µg/L	550.54 ppb	22:55:20
1	B 249.677†	12719.3	12799.3	510.40 µg/L	510.40 ppb	22:54:59
1	Ba 233.527†	71241.6	73374.8	1606.0 µg/L	1606.0 ppb	22:54:59
1	Be 313.107†	939408.1	968583.7	567.75 µg/L	567.75 ppb	22:54:54
1	Cd 226.502†	22555.7	23399.0	541.32 µg/L	541.32 ppb	22:54:59
1	Co 228.616†	12619.1	12947.4	549.33 µg/L	549.33 ppb	22:55:20
1	Cr 267.716†	28338.5	29103.4	633.44 µg/L	633.44 ppb	22:54:59
1	Cu 324.752†	97966.8	96511.8	656.12 µg/L	656.12 ppb	22:54:59
1	Mn 257.610†	870936.1	897597.8	2704.1 µg/L	2704.1 ppb	22:54:54
1	Mo 202.031†	5157.9	5306.7	530.31 µg/L	530.31 ppb	22:55:20
1	Ni 231.604†	10694.1	10636.1	597.67 µg/L	597.67 ppb	22:55:20
1	P 214.914†	1719.4	1498.3	2363.7 µg/L	2363.7 ppb	22:55:20
1	Pb 220.353†	2344.8	2384.5	639.40 µg/L	639.40 ppb	22:55:20
1	S 181.975 Axial†	1925.9	1960.8	6240.3 µg/L	6240.3 ppb	22:55:20
1	Sb 206.836†	428.5	418.6	374.38 µg/L	374.38 ppb	22:55:20
1	Se 196.026†	485.9	473.1	858.44 µg/L	858.44 ppb	22:55:20
1	SiO2†	562232.4	576220.7	104030 µg/L	104030 ppb	22:54:54
1	Si 251.611†	686894.6	706956.4	48062 µg/L	48062 ppb	22:54:54
1	Sn 189.927†	1385.6	1434.3	560.75 µg/L	560.75 ppb	22:55:20
1	Ti 334.940†	1469150.2	1513543.3	3537.7 µg/L	3537.7 ppb	22:54:54
1	Tl 190.801†	455.4	503.1	549.58 µg/L	549.58 ppb	22:55:20
1	U 409.014†	3883.6	4005.2	342.87 µg/L	342.87 ppb	22:54:59
1	V 292.402†	60754.6	62454.3	725.74 µg/L	725.74 ppb	22:54:59
1	Zn 213.857†	41676.8	41910.9	953.34 µg/L	953.34 ppb	22:54:59
2	Sc RADIAL	96701.8	96701.8	99.9 %		22:53:53
2	Al 396.153Radial†	331439.5	331855.4	158410 µg/L	158410 ppb	22:53:53
2	Ca 317.933Radial†	79658.8	79344.8	28875 µg/L	28875 ppb	22:53:53
2	Fe 238.204 Radial†	11650.1	11648.6	137790 µg/L	137790 ppb	22:54:14
2	K 766.490 Radial†	45584.9	45140.3	21066 µg/L	21066 ppb	22:53:53
2	Mg 279.077 IEC†	1961.6	1955.3	25639 µg/L	25639 ppb	22:54:14
2	Na 589.592 Radial†	15365.0	15198.2	7585.5 µg/L	7585.5 ppb	22:53:53
2	Sr 421.552†	128479.2	128454.8	763.65 µg/L	763.65 ppb	22:53:53
2	Sc 361.383	2022378.1	2022378.1	96.621 %		22:55:27
2	Y 371.029	1429961.0	1429961.0	99.797 %		22:55:27
2	Ag 328.068†	63968.4	66665.8	550.81 µg/L	550.81 ppb	22:55:33
2	As 188.979†	382.4	399.0	568.19 µg/L	568.19 ppb	22:55:54
2	B 249.677†	12805.9	12954.4	517.03 µg/L	517.03 ppb	22:55:33
2	Ba 233.527†	71642.9	74156.9	1623.2 µg/L	1623.2 ppb	22:55:33
2	Be 313.107†	935878.0	969768.1	568.44 µg/L	568.44 ppb	22:55:27
2	Cd 226.502†	22704.9	23669.5	547.66 µg/L	547.66 ppb	22:55:33
2	Co 228.616†	12569.0	12960.5	549.89 µg/L	549.89 ppb	22:55:54
2	Cr 267.716†	28566.2	29485.1	641.75 µg/L	641.75 ppb	22:55:33
2	Cu 324.752†	98754.0	97831.1	664.89 µg/L	664.89 ppb	22:55:33
2	Mn 257.610†	867704.8	898738.7	2707.5 µg/L	2707.5 ppb	22:55:27
2	Mo 202.031†	5159.3	5334.6	533.10 µg/L	533.10 ppb	22:55:54
2	Ni 231.604†	10669.7	10665.9	599.35 µg/L	599.35 ppb	22:55:54
2	P 214.914†	1708.1	1495.5	2357.6 µg/L	2357.6 ppb	22:55:54
2	Pb 220.353†	2351.6	2403.7	644.48 µg/L	644.48 ppb	22:55:54

2	S 181.975 Axial†	1934.4	1979.5	6299.7 µg/L	6299.7 ppb	22:55:54
2	Sb 206.836†	424.3	416.4	372.40 µg/L	372.40 ppb	22:55:54
2	Se 196.026†	488.0	477.7	865.30 µg/L	865.30 ppb	22:55:54
2	SiO2†	558608.2	575365.2	103870 µg/L	103870 ppb	22:55:27
2	Si 251.611†	682549.7	705997.0	47996 µg/L	47996 ppb	22:55:27
2	Sn 189.927†	1375.7	1431.3	559.56 µg/L	559.56 ppb	22:55:54
2	Ti 334.940†	1463497.4	1515258.7	3541.7 µg/L	3541.7 ppb	22:55:27
2	Tl 190.801†	460.8	511.0	557.45 µg/L	557.45 ppb	22:55:54
2	U 409.014†	4004.7	4150.5	355.95 µg/L	355.95 ppb	22:55:33
2	V 292.402†	61193.2	63221.1	734.74 µg/L	734.74 ppb	22:55:33
2	Zn 213.857†	41972.3	42431.4	965.26 µg/L	965.26 ppb	22:55:33
3	Sc RADIAL	96142.7	96142.7	99.3 %		22:54:20
3	Al 396.153Radial†	329561.7	331894.1	158430 µg/L	158430 ppb	22:54:20
3	Ca 317.933Radial†	79406.8	79554.7	28952 µg/L	28952 ppb	22:54:20
3	Fe 238.204 Radial†	11663.6	11729.9	138750 µg/L	138750 ppb	22:54:40
3	K 766.490 Radial†	45434.5	45254.2	21119 µg/L	21119 ppb	22:54:20
3	Mg 279.077 IEC†	1969.3	1974.6	25891 µg/L	25891 ppb	22:54:40
3	Na 589.592 Radial†	15330.7	15253.0	7612.9 µg/L	7612.9 ppb	22:54:20
3	Sr 421.552†	127962.1	128682.0	765.00 µg/L	765.00 ppb	22:54:20
3	Sc 361.383	2025744.3	2025744.3	96.782 %		22:56:01
3	Y 371.029	1431446.2	1431446.2	99.901 %		22:56:01
3	Ag 328.068†	62706.8	65252.3	539.29 µg/L	539.29 ppb	22:56:07
3	As 188.979†	358.1	373.3	530.16 µg/L	530.16 ppb	22:56:27
3	B 249.677†	12482.1	12597.8	500.28 µg/L	500.28 ppb	22:56:07
3	Ba 233.527†	68826.6	71123.7	1556.8 µg/L	1556.8 ppb	22:56:07
3	Be 313.107†	906780.7	938093.6	549.88 µg/L	549.88 ppb	22:56:01
3	Cd 226.502†	21983.6	22885.2	528.87 µg/L	528.87 ppb	22:56:07
3	Co 228.616†	11580.1	11917.1	505.28 µg/L	505.28 ppb	22:56:27
3	Cr 267.716†	27083.1	27903.5	607.33 µg/L	607.33 ppb	22:56:07
3	Cu 324.752†	94504.4	93270.4	635.29 µg/L	635.29 ppb	22:56:07
3	Mn 257.610†	842998.8	871718.9	2626.4 µg/L	2626.4 ppb	22:56:01
3	Mo 202.031†	4744.6	4897.2	489.86 µg/L	489.86 ppb	22:56:27
3	Ni 231.604†	9880.3	9831.9	552.64 µg/L	552.64 ppb	22:56:27
3	P 214.914†	1607.8	1388.9	2182.3 µg/L	2182.3 ppb	22:56:27
3	Pb 220.353†	2207.1	2250.3	604.22 µg/L	604.22 ppb	22:56:27
3	S 181.975 Axial†	1830.1	1868.5	5946.3 µg/L	5946.3 ppb	22:56:27
3	Sb 206.836†	388.3	378.5	338.26 µg/L	338.26 ppb	22:56:27
3	Se 196.026†	464.7	452.8	844.79 µg/L	844.79 ppb	22:56:27
3	SiO2†	543575.9	558872.2	100900 µg/L	100900 ppb	22:56:01
3	Si 251.611†	663759.3	685407.9	46597 µg/L	46597 ppb	22:56:01
3	Sn 189.927†	1268.8	1318.5	515.64 µg/L	515.64 ppb	22:56:27
3	Ti 334.940†	1414898.5	1462526.8	3418.3 µg/L	3418.3 ppb	22:56:01
3	Tl 190.801†	428.8	477.2	523.30 µg/L	523.30 ppb	22:56:27
3	U 409.014†	3738.6	3868.8	330.23 µg/L	330.23 ppb	22:56:07
3	V 292.402†	58203.1	60026.3	696.47 µg/L	696.47 ppb	22:56:07
3	Zn 213.857†	40548.5	40888.0	929.92 µg/L	929.92 ppb	22:56:07

Mean Data: 1202047712|955136|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2026871.3	96.835 %	0.2460			0.25%
Sc RADIAL	96696.9	99.9 %	0.57			0.57%
Y 371.029	1432642.7	99.984 %	0.2401			0.24%
Ag 328.068†	65934.4	544.84 µg/L	5.774	544.84 ppb	5.774	1.06%
Al 396.153Radial†	331402.9	158190 µg/L	390.5	158190 ppb	390.5	0.25%
As 188.979†	386.4	549.63 µg/L	19.034	549.63 ppb	19.034	3.46%
B 249.677†	12783.8	509.24 µg/L	8.431	509.24 ppb	8.431	1.66%
Ba 233.527†	72885.1	1595.3 µg/L	34.48	1595.3 ppb	34.48	2.16%
Be 313.107†	958815.1	562.02 µg/L	10.523	562.02 ppb	10.523	1.87%
Ca 317.933Radial†	79409.7	28899 µg/L	45.8	28899 ppb	45.8	0.16%
Cd 226.502†	23317.9	539.28 µg/L	9.564	539.28 ppb	9.564	1.77%
Co 228.616†	12608.3	534.83 µg/L	25.595	534.83 ppb	25.595	4.79%
Cr 267.716†	28830.6	627.50 µg/L	17.963	627.50 ppb	17.963	2.86%
Cu 324.752†	95871.1	652.10 µg/L	15.208	652.10 ppb	15.208	2.33%
Fe 238.204 Radial†	11652.7	137840 µg/L	888.7	137840 ppb	888.7	0.64%
K 766.490 Radial†	45113.0	21053 µg/L	73.1	21053 ppb	73.1	0.35%
Mg 279.077 IEC†	1959.8	25697 µg/L	172.2	25697 ppb	172.2	0.67%
Mn 257.610†	889351.8	2679.3 µg/L	45.89	2679.3 ppb	45.89	1.71%
Mo 202.031†	5179.5	517.76 µg/L	24.199	517.76 ppb	24.199	4.67%
Na 589.592 Radial†	15203.1	7587.9 µg/L	23.83	7587.9 ppb	23.83	0.31%

Ni 231.604†	10378.0	583.22 µg/L	26.496	583.22 ppb	26.496	4.54%
P 214.914†	1460.9	2301.2 µg/L	102.99	2301.2 ppb	102.99	4.48%
Pb 220.353†	2346.2	629.37 µg/L	21.927	629.37 ppb	21.927	3.48%
S 181.975 Axial†	1936.3	6162.1 µg/L	189.19	6162.1 ppb	189.19	3.07%
Sb 206.836†	404.5	361.68 µg/L	20.308	361.68 ppb	20.308	5.61%
Se 196.026†	467.9	856.18 µg/L	10.439	856.18 ppb	10.439	1.22%
SiO2†	570152.7	102930 µg/L	1765.4	102930 ppb	1765.4	1.72%
Si 251.611†	699453.8	47552 µg/L	827.6	47552 ppb	827.6	1.74%
Sn 189.927†	1394.7	545.32 µg/L	25.705	545.32 ppb	25.705	4.71%
Sr 421.552†	128413.5	763.40 µg/L	1.732	763.40 ppb	1.732	0.23%
Ti 334.940†	1497109.6	3499.2 µg/L	70.07	3499.2 ppb	70.07	2.00%
Tl 190.801†	497.1	543.44 µg/L	17.885	543.44 ppb	17.885	3.29%
U 409.014†	4008.2	343.02 µg/L	12.862	343.02 ppb	12.862	3.75%
V 292.402†	61900.5	718.99 µg/L	20.011	718.99 ppb	20.011	2.78%
Zn 213.857†	41743.4	949.50 µg/L	17.980	949.50 ppb	17.980	1.89%

Sequence No.: 17

Sample ID: 1202047713|955136|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 332

Date Collected: 3/16/2010 22:56:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047713|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96078.8	96078.8	99.3 %		22:57:09
1	Al 396.153Radial†	324462.5	326977.9	156080 µg/L	156080 ppb	22:57:09
1	Ca 317.933Radial†	88027.7	88292.5	32132 µg/L	32132 ppb	22:57:09
1	Fe 238.204 Radial†	11443.9	11516.4	136220 µg/L	136220 ppb	22:57:29
1	K 766.490 Radial†	45248.8	45097.6	21046 µg/L	21046 ppb	22:57:09
1	Mg 279.077 IEC†	1937.2	1943.5	25485 µg/L	25485 ppb	22:57:29
1	Na 589.592 Radial†	15028.3	14958.7	7465.9 µg/L	7465.9 ppb	22:57:09
1	Sr 421.552†	133323.3	134168.5	797.61 µg/L	797.61 ppb	22:57:09
1	Sc 361.383	2024520.0	2024520.0	96.723 %		22:58:35
1	Y 371.029	1423467.9	1423467.9	99.344 %		22:58:35
1	Ag 328.068†	63184.5	65785.4	543.77 µg/L	543.77 ppb	22:58:41
1	As 188.979†	380.1	396.3	563.96 µg/L	563.96 ppb	22:59:01
1	B 249.677†	12850.6	12986.6	519.30 µg/L	519.30 ppb	22:58:41
1	Ba 233.527†	75704.2	78277.4	1713.3 µg/L	1713.3 ppb	22:58:41
1	Be 313.107†	921458.5	953835.3	559.00 µg/L	559.00 ppb	22:58:35
1	Cd 226.502†	22349.4	23277.1	538.51 µg/L	538.51 ppb	22:58:41
1	Co 228.616†	12696.1	13078.1	554.47 µg/L	554.47 ppb	22:59:01
1	Cr 267.716†	28505.2	29390.7	639.71 µg/L	639.71 ppb	22:58:41
1	Cu 324.752†	97765.0	96700.5	657.22 µg/L	657.22 ppb	22:58:41
1	Mn 257.610†	1015761.4	1050861.2	3164.7 µg/L	3164.7 ppb	22:58:35
1	Mo 202.031†	5172.0	5342.1	533.79 µg/L	533.79 ppb	22:59:01
1	Ni 231.604†	10703.3	10689.0	600.62 µg/L	600.62 ppb	22:59:01
1	P 214.914†	1754.8	1541.9	2436.0 µg/L	2436.0 ppb	22:59:01
1	Pb 220.353†	2373.1	2423.3	649.43 µg/L	649.43 ppb	22:59:01
1	S 181.975 Axial†	1931.8	1974.7	6284.6 µg/L	6284.6 ppb	22:59:01
1	Sb 206.836†	439.3	431.5	385.84 µg/L	385.84 ppb	22:59:01
1	Se 196.026†	469.1	457.6	841.25 µg/L	841.25 ppb	22:59:01
1	SiO2†	534858.0	550198.7	99331 µg/L	99331 ppb	22:58:35
1	Si 251.611†	653420.0	675133.0	45898 µg/L	45898 ppb	22:58:35
1	Sn 189.927†	1366.8	1420.6	555.71 µg/L	555.71 ppb	22:59:01
1	Ti 334.940†	1557834.6	1611189.5	3766.1 µg/L	3766.1 ppb	22:58:35
1	Tl 190.801†	459.8	509.5	558.80 µg/L	558.80 ppb	22:59:01
1	U 409.014†	4074.3	4218.1	362.10 µg/L	362.10 ppb	22:58:41
1	V 292.402†	63002.7	65024.8	756.25 µg/L	756.25 ppb	22:58:41
1	Zn 213.857†	40162.6	40514.4	921.21 µg/L	921.21 ppb	22:58:41
2	Sc RADIAL	95641.2	95641.2	98.8 %		22:57:35
2	Al 396.153Radial†	323014.7	327008.3	156090 µg/L	156090 ppb	22:57:35
2	Ca 317.933Radial†	87643.2	88309.1	32138 µg/L	32138 ppb	22:57:35
2	Fe 238.204 Radial†	11517.0	11643.2	137720 µg/L	137720 ppb	22:57:55
2	K 766.490 Radial†	45076.0	45131.3	21062 µg/L	21062 ppb	22:57:35
2	Mg 279.077 IEC†	1952.3	1967.8	25803 µg/L	25803 ppb	22:57:55
2	Na 589.592 Radial†	14955.4	14954.2	7463.7 µg/L	7463.7 ppb	22:57:35
2	Sr 421.552†	132980.0	134435.6	799.20 µg/L	799.20 ppb	22:57:35
2	Sc 361.383	2029318.7	2029318.7	96.952 %		22:59:09
2	Y 371.029	1428665.8	1428665.8	99.707 %		22:59:09
2	Ag 328.068†	62911.3	65349.0	540.34 µg/L	540.34 ppb	22:59:15
2	As 188.979†	375.5	390.6	555.42 µg/L	555.42 ppb	22:59:35
2	B 249.677†	12746.2	12847.5	512.20 µg/L	512.20 ppb	22:59:15
2	Ba 233.527†	75152.2	77523.0	1696.8 µg/L	1696.8 ppb	22:59:15
2	Be 313.107†	921819.1	951954.4	557.89 µg/L	557.89 ppb	22:59:09
2	Cd 226.502†	22216.7	23085.6	533.78 µg/L	533.78 ppb	22:59:15
2	Co 228.616†	12567.8	12914.8	547.47 µg/L	547.47 ppb	22:59:35
2	Cr 267.716†	28429.7	29243.1	636.50 µg/L	636.50 ppb	22:59:15
2	Cu 324.752†	97448.4	96134.9	653.80 µg/L	653.80 ppb	22:59:15
2	Mn 257.610†	1017223.3	1049885.7	3161.8 µg/L	3161.8 ppb	22:59:09
2	Mo 202.031†	5128.0	5284.1	528.10 µg/L	528.10 ppb	22:59:35
2	Ni 231.604†	10584.3	10540.1	592.29 µg/L	592.29 ppb	22:59:35
2	P 214.914†	1735.0	1517.1	2393.9 µg/L	2393.9 ppb	22:59:35
2	Pb 220.353†	2353.5	2397.3	642.63 µg/L	642.63 ppb	22:59:35

2	S 181.975 Axial†	1928.2	1966.2	6257.5 µg/L	6257.5 ppb	22:59:35
2	Sb 206.836†	425.7	416.4	372.30 µg/L	372.30 ppb	22:59:35
2	Se 196.026†	471.4	458.9	847.00 µg/L	847.00 ppb	22:59:35
2	SiO2†	533728.9	547726.4	98884 µg/L	98884 ppb	22:59:09
2	Si 251.611†	652360.5	672442.8	45715 µg/L	45715 ppb	22:59:09
2	Sn 189.927†	1359.8	1410.0	551.59 µg/L	551.59 ppb	22:59:35
2	Ti 334.940†	1557879.4	1607427.1	3757.2 µg/L	3757.2 ppb	22:59:09
2	Tl 190.801†	457.1	505.6	555.13 µg/L	555.13 ppb	22:59:35
2	U 409.014†	3975.0	4105.7	351.69 µg/L	351.69 ppb	22:59:15
2	V 292.402†	62680.4	64538.4	750.25 µg/L	750.25 ppb	22:59:15
2	Zn 213.857†	39870.7	40115.1	911.97 µg/L	911.97 ppb	22:59:15
3	Sc RADIAL	97111.1	97111.1	100 %		22:58:01
3	Al 396.153Radial†	328426.7	327454.1	156310 µg/L	156310 ppb	22:58:01
3	Ca 317.933Radial†	89162.0	88480.3	32200 µg/L	32200 ppb	22:58:01
3	Fe 238.204 Radial†	11556.0	11505.6	136100 µg/L	136100 ppb	22:58:21
3	K 766.490 Radial†	45738.5	45101.1	21048 µg/L	21048 ppb	22:58:01
3	Mg 279.077 IEC†	1954.5	1940.0	25438 µg/L	25438 ppb	22:58:21
3	Na 589.592 Radial†	15251.4	15020.1	7496.6 µg/L	7496.6 ppb	22:58:01
3	Sr 421.552†	135305.1	134715.9	800.87 µg/L	800.87 ppb	22:58:01
3	Sc 361.383	2022705.2	2022705.2	96.636 %		22:59:43
3	Y 371.029	1422437.2	1422437.2	99.272 %		22:59:43
3	Ag 328.068†	61265.9	63858.6	527.99 µg/L	527.99 ppb	22:59:49
3	As 188.979†	344.4	359.6	509.90 µg/L	509.90 ppb	23:00:09
3	B 249.677†	12354.1	12484.7	496.53 µg/L	496.53 ppb	22:59:49
3	Ba 233.527†	71861.2	74370.9	1627.8 µg/L	1627.8 ppb	22:59:49
3	Be 313.107†	888244.3	920319.8	539.36 µg/L	539.36 ppb	22:59:43
3	Cd 226.502†	21362.1	22276.3	514.68 µg/L	514.68 ppb	22:59:49
3	Co 228.616†	11491.8	11843.7	501.70 µg/L	501.70 ppb	23:00:09
3	Cr 267.716†	26764.9	27616.3	601.09 µg/L	601.09 ppb	22:59:49
3	Cu 324.752†	92727.8	91578.6	623.74 µg/L	623.74 ppb	22:59:49
3	Mn 257.610†	980063.3	1014862.8	3056.5 µg/L	3056.5 ppb	22:59:43
3	Mo 202.031†	4705.7	4864.4	486.51 µg/L	486.51 ppb	23:00:09
3	Ni 231.604†	9755.6	9718.2	546.23 µg/L	546.23 ppb	23:00:09
3	P 214.914†	1617.7	1401.6	2206.1 µg/L	2206.1 ppb	23:00:09
3	Pb 220.353†	2218.3	2265.3	607.95 µg/L	607.95 ppb	23:00:09
3	S 181.975 Axial†	1808.9	1849.4	5885.6 µg/L	5885.6 ppb	23:00:09
3	Sb 206.836†	401.4	392.7	350.89 µg/L	350.89 ppb	23:00:09
3	Se 196.026†	466.3	455.2	838.58 µg/L	838.58 ppb	23:00:09
3	SiO2†	516464.1	531660.6	95984 µg/L	95984 ppb	22:59:43
3	Si 251.611†	631100.4	652642.7	44369 µg/L	44369 ppb	22:59:43
3	Sn 189.927†	1244.1	1294.8	506.77 µg/L	506.77 ppb	23:00:09
3	Ti 334.940†	1497143.3	1549830.8	3622.6 µg/L	3622.6 ppb	22:59:43
3	Tl 190.801†	428.5	477.5	525.98 µg/L	525.98 ppb	23:00:09
3	U 409.014†	3849.8	3989.6	341.37 µg/L	341.37 ppb	22:59:49
3	V 292.402†	59260.2	61210.6	710.76 µg/L	710.76 ppb	22:59:49
3	Zn 213.857†	38253.6	38576.2	876.89 µg/L	876.89 ppb	22:59:49

Mean Data: 1202047713|955136|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025514.7	96.771 %	0.1633			0.17%
Sc RADIAL	96277.0	99.5 %	0.78			0.78%
Y 371.029	1424857.0	99.441 %	0.2330			0.23%
Ag 328.068†	64997.7	537.36 µg/L	8.299	537.36 ppb	8.299	1.54%
Al 396.153Radial†	327146.8	156160 µg/L	127.8	156160 ppb	127.8	0.08%
As 188.979†	382.2	543.10 µg/L	29.062	543.10 ppb	29.062	5.35%
B 249.677†	12773.0	509.34 µg/L	11.652	509.34 ppb	11.652	2.29%
Ba 233.527†	76723.8	1679.3 µg/L	45.36	1679.3 ppb	45.36	2.70%
Be 313.107†	942036.5	552.08 µg/L	11.033	552.08 ppb	11.033	2.00%
Ca 317.933Radial†	88360.6	32156 µg/L	37.8	32156 ppb	37.8	0.12%
Cd 226.502†	22879.7	528.99 µg/L	12.617	528.99 ppb	12.617	2.39%
Co 228.616†	12612.2	534.55 µg/L	28.662	534.55 ppb	28.662	5.36%
Cr 267.716†	28750.0	625.76 µg/L	21.430	625.76 ppb	21.430	3.42%
Cu 324.752†	94804.7	644.92 µg/L	18.423	644.92 ppb	18.423	2.86%
Fe 238.204 Radial†	11555.1	136680 µg/L	904.8	136680 ppb	904.8	0.66%
K 766.490 Radial†	45110.0	21052 µg/L	8.6	21052 ppb	8.6	0.04%
Mg 279.077 IEC†	1950.4	25575 µg/L	198.6	25575 ppb	198.6	0.78%
Mn 257.610†	1038536.6	3127.6 µg/L	61.66	3127.6 ppb	61.66	1.97%
Mo 202.031†	5163.5	516.13 µg/L	25.811	516.13 ppb	25.811	5.00%
Na 589.592 Radial†	14977.7	7475.4 µg/L	18.38	7475.4 ppb	18.38	0.25%

Ni 231.604†	10315.8	579.71 µg/L	29.294	579.71 ppb	29.294	5.05%
P 214.914†	1486.9	2345.3 µg/L	122.41	2345.3 ppb	122.41	5.22%
Pb 220.353†	2362.0	633.34 µg/L	22.245	633.34 ppb	22.245	3.51%
S 181.975 Axial†	1930.1	6142.6 µg/L	222.94	6142.6 ppb	222.94	3.63%
Sb 206.836†	413.5	369.68 µg/L	17.623	369.68 ppb	17.623	4.77%
Se 196.026†	457.2	842.27 µg/L	4.302	842.27 ppb	4.302	0.51%
SiO2†	543195.2	98066 µg/L	1817.2	98066 ppb	1817.2	1.85%
Si 251.611†	666739.5	45328 µg/L	835.0	45328 ppb	835.0	1.84%
Sn 189.927†	1375.1	538.02 µg/L	27.146	538.02 ppb	27.146	5.05%
Sr 421.552†	134440.0	799.23 µg/L	1.627	799.23 ppb	1.627	0.20%
Ti 334.940†	1589482.5	3715.3 µg/L	80.41	3715.3 ppb	80.41	2.16%
Tl 190.801†	497.5	546.63 µg/L	17.985	546.63 ppb	17.985	3.29%
U 409.014†	4104.5	351.72 µg/L	10.367	351.72 ppb	10.367	2.95%
V 292.402†	63591.2	739.09 µg/L	24.712	739.09 ppb	24.712	3.34%
Zn 213.857†	39735.2	903.36 µg/L	23.383	903.36 ppb	23.383	2.59%

Sequence No.: 18

Sample ID: 1202047711|955136|5

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 333

Date Collected: 3/16/2010 23:00:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047711|955136|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94830.8	94830.8	98.0 %		23:00:49
1	Al 396.153Radial†	45535.7	46595.0	22243 µg/L	22243 ppb	23:00:49
1	Ca 317.933Radial†	19037.0	19044.6	6930.8 µg/L	6930.8 ppb	23:00:49
1	Fe 238.204 Radial†	2089.3	2120.4	25080 µg/L	25080 ppb	23:01:09
1	K 766.490 Radial†	6461.3	6109.4	2851.1 µg/L	2851.1 ppb	23:00:49
1	Mg 279.077 IEC†	309.3	307.7	4029.0 µg/L	4029.0 ppb	23:01:09
1	Na 589.592 Radial†	1174.2	1017.8	508.01 µg/L	508.01 ppb	23:00:49
1	Sr 421.552†	10087.3	10156.1	60.377 µg/L	60.377 ppb	23:00:49
1	Sc 361.383	2038854.0	2038854.0	97.408 %		23:02:11
1	Y 371.029	1400069.2	1400069.2	97.711 %		23:02:11
1	Ag 328.068†	-724.8	-283.9	-0.0972 µg/L	-0.0972 ppb	23:02:17
1	As 188.979†	1.2	4.5	2.6848 µg/L	2.6848 ppb	23:02:37
1	B 249.677†	509.7	223.9	-2.9012 µg/L	-2.9012 ppb	23:02:17
1	Ba 233.527†	16243.1	16683.8	364.94 µg/L	364.94 ppb	23:02:17
1	Be 313.107†	2097.3	3312.0	1.7869 µg/L	1.7869 ppb	23:02:17
1	Cd 226.502†	-36.2	133.4	0.3496 µg/L	0.3496 ppb	23:02:37
1	Co 228.616†	195.0	152.1	5.6641 µg/L	5.6641 ppb	23:02:37
1	Cr 267.716†	770.0	710.3	15.472 µg/L	15.472 ppb	23:02:37
1	Cu 324.752†	5624.8	1397.8	13.845 µg/L	13.845 ppb	23:02:17
1	Mn 257.610†	129746.0	133885.5	403.60 µg/L	403.60 ppb	23:02:17
1	Mo 202.031†	25.2	20.8	3.0088 µg/L	3.0088 ppb	23:02:37
1	Ni 231.604†	583.5	222.1	12.775 µg/L	12.775 ppb	23:02:37
1	P 214.914†	574.9	317.8	512.64 µg/L	512.64 ppb	23:02:37
1	Pb 220.353†	100.7	73.2	21.296 µg/L	21.296 ppb	23:02:37
1	S 181.975 Axial†	70.2	49.5	157.50 µg/L	157.50 ppb	23:02:37
1	Sb 206.836†	19.3	-2.9	-2.7998 µg/L	-2.7998 ppb	23:02:37
1	Se 196.026†	-5.9	-33.4	44.718 µg/L	44.718 ppb	23:02:37
1	SiO2†	117397.1	117741.3	21257 µg/L	21257 ppb	23:02:17
1	Si 251.611†	141932.3	145285.1	9877.0 µg/L	9877.0 ppb	23:02:17
1	Sn 189.927†	-14.6	-7.6	-2.3685 µg/L	-2.3685 ppb	23:02:37
1	Ti 334.940†	173295.9	178484.6	417.15 µg/L	417.15 ppb	23:02:11
1	Tl 190.801†	-29.6	3.7	11.590 µg/L	11.590 ppb	23:02:37
1	U 409.014†	-267.3	-268.6	-28.297 µg/L	-28.297 ppb	23:02:17
1	V 292.402†	3282.9	3257.9	35.304 µg/L	35.304 ppb	23:02:17
1	Zn 213.857†	3496.5	2580.7	57.927 µg/L	57.927 ppb	23:02:37
2	Sc RADIAL	95383.3	95383.3	98.5 %		23:01:14
2	Al 396.153Radial†	45733.8	46526.7	22210 µg/L	22210 ppb	23:01:14
2	Ca 317.933Radial†	19111.0	19007.2	6917.1 µg/L	6917.1 ppb	23:01:14
2	Fe 238.204 Radial†	2081.7	2100.4	24843 µg/L	24843 ppb	23:01:35
2	K 766.490 Radial†	6485.3	6095.4	2844.6 µg/L	2844.6 ppb	23:01:14
2	Mg 279.077 IEC†	311.1	307.7	4030.4 µg/L	4030.4 ppb	23:01:35
2	Na 589.592 Radial†	1204.0	1041.1	519.62 µg/L	519.62 ppb	23:01:14
2	Sr 421.552†	10156.9	10167.1	60.442 µg/L	60.442 ppb	23:01:14
2	Sc 361.383	2048786.3	2048786.3	97.882 %		23:02:44
2	Y 371.029	1409150.7	1409150.7	98.345 %		23:02:44
2	Ag 328.068†	-788.4	-345.3	-0.6088 µg/L	-0.6088 ppb	23:02:50
2	As 188.979†	-0.4	2.8	0.2774 µg/L	0.2774 ppb	23:03:10
2	B 249.677†	503.8	215.3	-3.1663 µg/L	-3.1663 ppb	23:02:50
2	Ba 233.527†	16162.6	16520.6	361.38 µg/L	361.38 ppb	23:02:50
2	Be 313.107†	2185.6	3391.7	1.8343 µg/L	1.8343 ppb	23:02:50
2	Cd 226.502†	-40.6	129.1	0.2745 µg/L	0.2745 ppb	23:03:10
2	Co 228.616†	186.5	142.5	5.2553 µg/L	5.2553 ppb	23:03:10
2	Cr 267.716†	772.5	708.9	15.443 µg/L	15.443 ppb	23:03:10
2	Cu 324.752†	5627.1	1372.2	13.633 µg/L	13.633 ppb	23:02:50
2	Mn 257.610†	129496.6	132985.0	400.88 µg/L	400.88 ppb	23:02:50
2	Mo 202.031†	23.7	19.1	2.8340 µg/L	2.8340 ppb	23:03:10
2	Ni 231.604†	586.0	221.7	12.753 µg/L	12.753 ppb	23:03:10
2	P 214.914†	581.8	322.0	519.94 µg/L	519.94 ppb	23:03:10
2	Pb 220.353†	92.6	64.4	18.997 µg/L	18.997 ppb	23:03:10

2	S 181.975 Axial†	78.0	57.2	181.99 µg/L	181.99 ppb	23:03:10
2	Sb 206.836†	21.4	-0.9	-1.0075 µg/L	-1.0075 ppb	23:03:10
2	Se 196.026†	-14.6	-42.3	35.591 µg/L	35.591 ppb	23:03:10
2	SiO2†	116997.8	116749.1	21077 µg/L	21077 ppb	23:02:50
2	Si 251.611†	141140.6	143769.8	9774.0 µg/L	9774.0 ppb	23:02:50
2	Sn 189.927†	-9.1	-1.8	-0.1258 µg/L	-0.1258 ppb	23:03:10
2	Ti 334.940†	173583.1	177915.5	415.82 µg/L	415.82 ppb	23:02:44
2	Tl 190.801†	-33.5	-0.1	7.8038 µg/L	7.8038 ppb	23:03:10
2	U 409.014†	-322.4	-323.5	-33.250 µg/L	-33.250 ppb	23:02:50
2	V 292.402†	3293.3	3252.2	35.261 µg/L	35.261 ppb	23:02:50
2	Zn 213.857†	3480.9	2547.3	57.170 µg/L	57.170 ppb	23:03:10
3	Sc RADIAL	95185.5	95185.5	98.3 %		23:01:40
3	Al 396.153Radial†	45406.8	46290.7	22098 µg/L	22098 ppb	23:01:40
3	Ca 317.933Radial†	19096.3	19032.6	6926.4 µg/L	6926.4 ppb	23:01:40
3	Fe 238.204 Radial†	2079.6	2102.7	24870 µg/L	24870 ppb	23:02:01
3	K 766.490 Radial†	6471.1	6094.7	2844.3 µg/L	2844.3 ppb	23:01:40
3	Mg 279.077 IEC†	307.5	304.7	3990.3 µg/L	3990.3 ppb	23:02:01
3	Na 589.592 Radial†	1166.4	1005.5	501.84 µg/L	501.84 ppb	23:01:40
3	Sr 421.552†	10052.1	10082.0	59.936 µg/L	59.936 ppb	23:01:40
3	Sc 361.383	2045630.8	2045630.8	97.732 %		23:03:17
3	Y 371.029	1406230.7	1406230.7	98.141 %		23:03:17
3	Ag 328.068†	-702.8	-259.0	0.0710 µg/L	0.0710 ppb	23:03:22
3	As 188.979†	1.9	5.2	3.6939 µg/L	3.6939 ppb	23:03:43
3	B 249.677†	508.4	220.9	-2.9338 µg/L	-2.9338 ppb	23:03:22
3	Ba 233.527†	15505.4	15873.7	347.22 µg/L	347.22 ppb	23:03:22
3	Be 313.107†	2023.4	3229.2	1.7454 µg/L	1.7454 ppb	23:03:22
3	Cd 226.502†	-52.2	117.2	-0.0130 µg/L	-0.0130 ppb	23:03:43
3	Co 228.616†	178.0	134.1	4.9304 µg/L	4.9304 ppb	23:03:43
3	Cr 267.716†	661.1	596.2	12.989 µg/L	12.989 ppb	23:03:43
3	Cu 324.752†	5593.7	1346.8	13.473 µg/L	13.473 ppb	23:03:22
3	Mn 257.610†	123080.0	126623.6	381.76 µg/L	381.76 ppb	23:03:22
3	Mo 202.031†	24.7	20.1	2.9381 µg/L	2.9381 ppb	23:03:43
3	Ni 231.604†	557.8	193.8	11.188 µg/L	11.188 ppb	23:03:43
3	P 214.914†	550.1	290.5	467.56 µg/L	467.56 ppb	23:03:43
3	Pb 220.353†	82.3	54.1	16.276 µg/L	16.276 ppb	23:03:43
3	S 181.975 Axial†	67.3	46.4	147.51 µg/L	147.51 ppb	23:03:43
3	Sb 206.836†	22.6	0.4	0.1436 µg/L	0.1436 ppb	23:03:43
3	Se 196.026†	-1.2	-28.5	48.614 µg/L	48.614 ppb	23:03:43
3	SiO2†	112706.0	112542.1	20318 µg/L	20318 ppb	23:03:22
3	Si 251.611†	136011.7	138744.4	9432.4 µg/L	9432.4 ppb	23:03:22
3	Sn 189.927†	-8.5	-1.3	0.0933 µg/L	0.0933 ppb	23:03:43
3	Ti 334.940†	166139.9	170573.1	398.66 µg/L	398.66 ppb	23:03:17
3	Tl 190.801†	-31.7	1.7	9.3152 µg/L	9.3152 ppb	23:03:43
3	U 409.014†	-356.9	-359.4	-36.510 µg/L	-36.510 ppb	23:03:22
3	V 292.402†	3093.2	3052.7	32.894 µg/L	32.894 ppb	23:03:22
3	Zn 213.857†	3150.2	2214.5	49.515 µg/L	49.515 ppb	23:03:43

Mean Data: 1202047711|955136|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2044423.7	97.674 %	0.2425			0.25%
Sc RADIAL	95133.2	98.3 %	0.29			0.29%
Y 371.029	1405150.2	98.065 %	0.3236			0.33%
Ag 328.068†	-296.1	-0.2117 µg/L	0.35409	-0.2117 ppb	0.35409	167.29%
Al 396.153Radial†	46470.8	22184 µg/L	76.2	22184 ppb	76.2	0.34%
As 188.979†	4.2	2.2187 µg/L	1.75531	2.2187 ppb	1.75531	79.11%
B 249.677†	220.0	-3.0004 µg/L	0.14458	-3.0004 ppb	0.14458	4.82%
Ba 233.527†	16359.4	357.85 µg/L	9.372	357.85 ppb	9.372	2.62%
Be 313.107†	3311.0	1.7889 µg/L	0.04449	1.7889 ppb	0.04449	2.49%
Ca 317.933Radial†	19028.2	6924.8 µg/L	6.95	6924.8 ppb	6.95	0.10%
Cd 226.502†	126.6	0.2037 µg/L	0.19136	0.2037 ppb	0.19136	93.95%
Co 228.616†	142.9	5.2833 µg/L	0.36763	5.2833 ppb	0.36763	6.96%
Cr 267.716†	671.8	14.635 µg/L	1.4252	14.635 ppb	1.4252	9.74%
Cu 324.752†	1372.3	13.650 µg/L	0.1868	13.650 ppb	0.1868	1.37%
Fe 238.204 Radial†	2107.8	24931 µg/L	129.9	24931 ppb	129.9	0.52%
K 766.490 Radial†	6099.8	2846.7 µg/L	3.85	2846.7 ppb	3.85	0.14%
Mg 279.077 IEC†	306.7	4016.6 µg/L	22.75	4016.6 ppb	22.75	0.57%
Mn 257.610†	131164.7	395.41 µg/L	11.899	395.41 ppb	11.899	3.01%
Mo 202.031†	20.0	2.9270 µg/L	0.08793	2.9270 ppb	0.08793	3.00%
Na 589.592 Radial†	1021.5	509.82 µg/L	9.027	509.82 ppb	9.027	1.77%

Ni 231.604†	212.6	12.239 µg/L	0.9102	12.239 ppb	0.9102	7.44%
P 214.914†	310.1	500.05 µg/L	28.370	500.05 ppb	28.370	5.67%
Pb 220.353†	63.9	18.857 µg/L	2.5128	18.857 ppb	2.5128	13.33%
S 181.975 Axial†	51.0	162.33 µg/L	17.741	162.33 ppb	17.741	10.93%
Sb 206.836†	-1.1	-1.2212 µg/L	1.48332	-1.2212 ppb	1.48332	121.46%
Se 196.026†	-34.7	42.974 µg/L	6.6846	42.974 ppb	6.6846	15.55%
SiO2†	115677.5	20884 µg/L	498.3	20884 ppb	498.3	2.39%
Si 251.611†	142599.8	9694.5 µg/L	232.76	9694.5 ppb	232.76	2.40%
Sn 189.927†	-3.5	-0.8003 µg/L	1.36246	-0.8003 ppb	1.36246	170.24%
Sr 421.552†	10135.1	60.252 µg/L	0.2752	60.252 ppb	0.2752	0.46%
Ti 334.940†	175657.8	410.55 µg/L	10.317	410.55 ppb	10.317	2.51%
Tl 190.801†	1.8	9.5695 µg/L	1.90571	9.5695 ppb	1.90571	19.91%
U 409.014†	-317.2	-32.686 µg/L	4.1359	-32.686 ppb	4.1359	12.65%
V 292.402†	3187.6	34.486 µg/L	1.3791	34.486 ppb	1.3791	4.00%
Zn 213.857†	2447.5	54.871 µg/L	4.6535	54.871 ppb	4.6535	8.48%

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 23:03:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95147.6	95147.6	98.3 %		23:04:30
1	Al 396.153Radial†	10781.8	11087.0	5281.1 µg/L	5281.1 ppb	23:04:30
1	Ca 317.933Radial†	14741.8	14610.7	5317.2 µg/L	5317.2 ppb	23:04:30
1	Fe 238.204 Radial†	462.6	458.7	5436.4 µg/L	5436.4 ppb	23:04:50
1	K 766.490 Radial†	11510.6	11223.8	5237.9 µg/L	5237.9 ppb	23:04:30
1	Mg 279.077 IEC†	409.3	408.3	5386.8 µg/L	5386.8 ppb	23:04:50
1	Na 589.592 Radial†	21153.1	21337.3	10650 µg/L	10650 ppb	23:04:30
1	Sr 421.552†	87319.9	88686.2	527.23 µg/L	527.23 ppb	23:04:30
1	Sc 361.383	2052957.9	2052957.9	98.082 %		23:05:54
1	Y 371.029	1403973.6	1403973.6	97.983 %		23:05:54
1	Ag 328.068†	64811.7	66539.4	538.30 µg/L	538.30 ppb	23:05:59
1	As 188.979†	367.2	377.7	555.84 µg/L	555.84 ppb	23:06:20
1	B 249.677†	11876.2	11809.1	533.97 µg/L	533.97 ppb	23:05:59
1	Ba 233.527†	24254.5	24737.3	541.99 µg/L	541.99 ppb	23:05:59
1	Be 313.107†	900460.2	919229.7	539.89 µg/L	539.89 ppb	23:05:54
1	Cd 226.502†	22277.5	22883.8	543.89 µg/L	543.89 ppb	23:05:59
1	Co 228.616†	12425.1	12620.0	541.56 µg/L	541.56 ppb	23:05:59
1	Cr 267.716†	25035.0	25444.3	553.74 µg/L	553.74 ppb	23:05:59
1	Cu 324.752†	85888.2	83191.3	544.39 µg/L	544.39 ppb	23:05:59
1	Mn 257.610†	180314.7	184528.2	554.55 µg/L	554.55 ppb	23:05:54
1	Mo 202.031†	5530.2	5633.2	557.62 µg/L	557.62 ppb	23:06:20
1	Ni 231.604†	9845.6	9661.3	541.30 µg/L	541.30 ppb	23:05:59
1	P 214.914†	1885.3	1649.8	2687.3 µg/L	2687.3 ppb	23:06:20
1	Pb 220.353†	2091.2	2101.9	551.74 µg/L	551.74 ppb	23:06:20
1	S 181.975 Axial†	351.8	336.1	1069.7 µg/L	1069.7 ppb	23:06:20
1	Sb 206.836†	632.8	622.4	558.00 µg/L	558.00 ppb	23:06:20
1	Se 196.026†	594.8	579.1	557.01 µg/L	557.01 ppb	23:06:20
1	SiO2†	34820.3	32721.5	5907.4 µg/L	5907.4 ppb	23:05:59
1	Si 251.611†	40110.9	40471.3	2751.4 µg/L	2751.4 ppb	23:05:59
1	Sn 189.927†	1397.6	1432.4	558.19 µg/L	558.19 ppb	23:06:20
1	Ti 334.940†	225681.7	230672.6	539.06 µg/L	539.06 ppb	23:05:54
1	Tl 190.801†	519.0	563.2	555.28 µg/L	555.28 ppb	23:06:20
1	U 409.014†	5850.2	5970.4	541.03 µg/L	541.03 ppb	23:05:59
1	V 292.402†	45506.0	46283.7	551.79 µg/L	551.79 ppb	23:05:59
1	Zn 213.857†	24385.8	23853.9	545.38 µg/L	545.38 ppb	23:05:59
2	Sc RADIAL	95295.1	95295.1	98.5 %		23:04:56
2	Al 396.153Radial†	10740.2	11027.8	5252.8 µg/L	5252.8 ppb	23:04:56
2	Ca 317.933Radial†	14712.2	14557.4	5297.8 µg/L	5297.8 ppb	23:04:56
2	Fe 238.204 Radial†	462.6	457.9	5427.6 µg/L	5427.6 ppb	23:05:16
2	K 766.490 Radial†	11529.3	11224.6	5238.3 µg/L	5238.3 ppb	23:04:56
2	Mg 279.077 IEC†	415.4	413.9	5459.9 µg/L	5459.9 ppb	23:05:16
2	Na 589.592 Radial†	21297.3	21450.5	10706 µg/L	10706 ppb	23:04:56
2	Sr 421.552†	87648.6	88882.6	528.40 µg/L	528.40 ppb	23:04:56
2	Sc 361.383	2021882.9	2021882.9	96.597 %		23:06:27
2	Y 371.029	1383329.9	1383329.9	96.543 %		23:06:27
2	Ag 328.068†	65124.1	67878.4	549.13 µg/L	549.13 ppb	23:06:32
2	As 188.979†	358.7	374.5	551.23 µg/L	551.23 ppb	23:06:53
2	B 249.677†	11941.1	12062.4	545.49 µg/L	545.49 ppb	23:06:32
2	Ba 233.527†	24383.0	25250.4	553.23 µg/L	553.23 ppb	23:06:32
2	Be 313.107†	897833.3	930620.4	546.58 µg/L	546.58 ppb	23:06:27
2	Cd 226.502†	22436.0	23396.9	556.10 µg/L	556.10 ppb	23:06:32
2	Co 228.616†	12506.0	12898.4	553.50 µg/L	553.50 ppb	23:06:32
2	Cr 267.716†	25191.6	25998.8	565.81 µg/L	565.81 ppb	23:06:32
2	Cu 324.752†	86251.0	84912.7	555.63 µg/L	555.63 ppb	23:06:32
2	Mn 257.610†	179582.3	186595.5	560.76 µg/L	560.76 ppb	23:06:27
2	Mo 202.031†	5464.2	5651.6	559.44 µg/L	559.44 ppb	23:06:53
2	Ni 231.604†	9916.7	9889.1	554.07 µg/L	554.07 ppb	23:06:32
2	P 214.914†	1870.1	1663.6	2709.1 µg/L	2709.1 ppb	23:06:53
2	Pb 220.353†	2071.9	2114.8	555.07 µg/L	555.07 ppb	23:06:53

2	S 181.975 Axial†	353.9	343.8	1094.1 µg/L	1094.1 ppb	23:06:53
2	Sb 206.836†	629.3	628.8	563.56 µg/L	563.56 ppb	23:06:53
2	Se 196.026†	595.5	589.2	566.43 µg/L	566.43 ppb	23:06:53
2	SiO2†	35153.2	33611.9	6068.1 µg/L	6068.1 ppb	23:06:32
2	Si 251.611†	40459.2	41460.4	2818.6 µg/L	2818.6 ppb	23:06:32
2	Sn 189.927†	1390.5	1447.0	563.87 µg/L	563.87 ppb	23:06:53
2	Ti 334.940†	225313.1	233827.5	546.43 µg/L	546.43 ppb	23:06:27
2	Tl 190.801†	514.0	566.2	558.28 µg/L	558.28 ppb	23:06:53
2	U 409.014†	5866.9	6079.4	550.92 µg/L	550.92 ppb	23:06:32
2	V 292.402†	45802.2	47303.4	563.88 µg/L	563.88 ppb	23:06:32
2	Zn 213.857†	24471.4	24324.6	556.14 µg/L	556.14 ppb	23:06:32
3	Sc RADIAL	95135.2	95135.2	98.3 %		23:05:21
3	Al 396.153Radial†	10801.0	11108.0	5293.0 µg/L	5293.0 ppb	23:05:21
3	Ca 317.933Radial†	14814.8	14686.9	5344.9 µg/L	5344.9 ppb	23:05:21
3	Fe 238.204 Radial†	464.4	460.5	5457.1 µg/L	5457.1 ppb	23:05:42
3	K 766.490 Radial†	11554.1	11269.6	5259.3 µg/L	5259.3 ppb	23:05:21
3	Mg 279.077 IEC†	416.9	416.1	5487.8 µg/L	5487.8 ppb	23:05:42
3	Na 589.592 Radial†	21336.2	21526.4	10744 µg/L	10744 ppb	23:05:21
3	Sr 421.552†	87854.7	89241.9	530.53 µg/L	530.53 ppb	23:05:21
3	Sc 361.383	2038790.8	2038790.8	97.405 %		23:07:00
3	Y 371.029	1393722.7	1393722.7	97.268 %		23:07:00
3	Ag 328.068†	61311.9	63405.6	512.80 µg/L	512.80 ppb	23:07:06
3	As 188.979†	311.5	323.1	475.34 µg/L	475.34 ppb	23:07:26
3	B 249.677†	11123.3	11120.2	502.59 µg/L	502.59 ppb	23:07:06
3	Ba 233.527†	22233.5	22834.3	500.28 µg/L	500.28 ppb	23:07:06
3	Be 313.107†	844374.9	868029.6	509.82 µg/L	509.82 ppb	23:07:00
3	Cd 226.502†	20329.6	21041.8	500.05 µg/L	500.05 ppb	23:07:06
3	Co 228.616†	11270.9	11523.1	494.42 µg/L	494.42 ppb	23:07:06
3	Cr 267.716†	21998.5	22504.3	489.76 µg/L	489.76 ppb	23:07:06
3	Cu 324.752†	78445.8	76159.0	498.46 µg/L	498.46 ppb	23:07:06
3	Mn 257.610†	169802.7	175013.6	525.95 µg/L	525.95 ppb	23:07:00
3	Mo 202.031†	4614.0	4731.8	468.43 µg/L	468.43 ppb	23:07:26
3	Ni 231.604†	8971.7	8833.9	494.95 µg/L	494.95 ppb	23:07:06
3	P 214.914†	1654.7	1426.3	2319.7 µg/L	2319.7 ppb	23:07:26
3	Pb 220.353†	1801.8	1819.6	477.59 µg/L	477.59 ppb	23:07:26
3	S 181.975 Axial†	313.6	299.4	952.90 µg/L	952.90 ppb	23:07:26
3	Sb 206.836†	546.0	537.9	481.83 µg/L	481.83 ppb	23:07:26
3	Se 196.026†	535.0	521.9	503.26 µg/L	503.26 ppb	23:07:26
3	SiO2†	32706.9	30798.6	5560.2 µg/L	5560.2 ppb	23:07:06
3	Si 251.611†	37498.4	38073.4	2588.4 µg/L	2588.4 ppb	23:07:06
3	Sn 189.927†	1152.4	1190.5	464.04 µg/L	464.04 ppb	23:07:26
3	Ti 334.940†	210528.1	216714.3	506.41 µg/L	506.41 ppb	23:07:00
3	Tl 190.801†	466.5	513.1	506.03 µg/L	506.03 ppb	23:07:26
3	U 409.014†	5190.1	5334.2	483.25 µg/L	483.25 ppb	23:07:06
3	V 292.402†	40921.8	41899.7	499.14 µg/L	499.14 ppb	23:07:06
3	Zn 213.857†	22213.1	21796.0	498.27 µg/L	498.27 ppb	23:07:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2037877.2	97.361 %	0.7433			0.76%
Sc RADIAL	95192.6	98.4 %	0.09			0.09%
Y 371.029	1393675.4	97.265 %	0.7204			0.74%
Ag 328.068†	65941.2	533.41 µg/L	18.654	533.41 ppb	18.654	3.50%
QC value within limits for Ag 328.068 Recovery = 106.68%						
Al 396.153Radial†	11074.3	5275.7 µg/L	20.64	5275.7 ppb	20.64	0.39%
QC value within limits for Al 396.153Radial Recovery = 105.51%						
As 188.979†	358.4	527.47 µg/L	45.204	527.47 ppb	45.204	8.57%
QC value within limits for As 188.979 Recovery = 105.49%						
B 249.677†	11663.9	527.35 µg/L	22.200	527.35 ppb	22.200	4.21%
QC value within limits for B 249.677 Recovery = 105.47%						
Ba 233.527†	24274.0	531.83 µg/L	27.900	531.83 ppb	27.900	5.25%
QC value within limits for Ba 233.527 Recovery = 106.37%						
Be 313.107†	905959.9	532.10 µg/L	19.580	532.10 ppb	19.580	3.68%
QC value within limits for Be 313.107 Recovery = 106.42%						
Ca 317.933Radial†	14618.4	5319.9 µg/L	23.69	5319.9 ppb	23.69	0.45%
QC value within limits for Ca 317.933Radial Recovery = 106.40%						
Cd 226.502†	22440.8	533.34 µg/L	29.472	533.34 ppb	29.472	5.53%
QC value within limits for Cd 226.502 Recovery = 106.67%						
Co 228.616†	12347.2	529.83 µg/L	31.240	529.83 ppb	31.240	5.90%

QC value within limits for Co 228.616 Recovery = 105.97%							
Cr 267.716†	24649.2	536.44 µg/L	40.867	536.44 ppb	40.867	7.62%	
QC value within limits for Cr 267.716 Recovery = 107.29%							
Cu 324.752†	81421.0	532.83 µg/L	30.288	532.83 ppb	30.288	5.68%	
QC value within limits for Cu 324.752 Recovery = 106.57%							
Fe 238.204 Radial†	459.0	5440.4 µg/L	15.12	5440.4 ppb	15.12	0.28%	
QC value within limits for Fe 238.204 Radial Recovery = 108.81%							
K 766.490 Radial†	11239.3	5245.2 µg/L	12.23	5245.2 ppb	12.23	0.23%	
QC value within limits for K 766.490 Radial Recovery = 104.90%							
Mg 279.077 IEC†	412.8	5444.8 µg/L	52.13	5444.8 ppb	52.13	0.96%	
QC value within limits for Mg 279.077 IEC Recovery = 108.90%							
Mn 257.610†	182045.7	547.09 µg/L	18.566	547.09 ppb	18.566	3.39%	
QC value within limits for Mn 257.610 Recovery = 109.42%							
Mo 202.031†	5338.9	528.50 µg/L	52.027	528.50 ppb	52.027	9.84%	
QC value within limits for Mo 202.031 Recovery = 105.70%							
Na 589.592 Radial†	21438.0	10700 µg/L	47.5	10700 ppb	47.5	0.44%	
QC value within limits for Na 589.592 Radial Recovery = 107.00%							
Ni 231.604†	9461.4	530.10 µg/L	31.108	530.10 ppb	31.108	5.87%	
QC value within limits for Ni 231.604 Recovery = 106.02%							
P 214.914†	1579.9	2572.0 µg/L	218.79	2572.0 ppb	218.79	8.51%	
QC value within limits for P 214.914 Recovery = 102.88%							
Pb 220.353†	2012.1	528.13 µg/L	43.802	528.13 ppb	43.802	8.29%	
QC value within limits for Pb 220.353 Recovery = 105.63%							
S 181.975 Axial†	326.4	1038.9 µg/L	75.48	1038.9 ppb	75.48	7.27%	
QC value within limits for S 181.975 Axial Recovery = 103.89%							
Sb 206.836†	596.3	534.46 µg/L	45.664	534.46 ppb	45.664	8.54%	
QC value within limits for Sb 206.836 Recovery = 106.89%							
Se 196.026†	563.4	542.23 µg/L	34.080	542.23 ppb	34.080	6.29%	
QC value within limits for Se 196.026 Recovery = 108.45%							
SiO2†	32377.3	5845.3 µg/L	259.59	5845.3 ppb	259.59	4.44%	
QC value within limits for SiO2 Recovery = 109.31%							
Si 251.611†	40001.7	2719.5 µg/L	118.40	2719.5 ppb	118.40	4.35%	
QC value within limits for Si 251.611 Recovery = 108.78%							
Sn 189.927†	1356.6	528.70 µg/L	56.066	528.70 ppb	56.066	10.60%	
QC value within limits for Sn 189.927 Recovery = 105.74%							
Sr 421.552†	88936.9	528.72 µg/L	1.675	528.72 ppb	1.675	0.32%	
QC value within limits for Sr 421.552 Recovery = 105.74%							
Ti 334.940†	227071.5	530.63 µg/L	21.298	530.63 ppb	21.298	4.01%	
QC value within limits for Ti 334.940 Recovery = 106.13%							
Tl 190.801†	547.5	539.86 µg/L	29.341	539.86 ppb	29.341	5.43%	
QC value within limits for Tl 190.801 Recovery = 107.97%							
U 409.014†	5794.7	525.07 µg/L	36.550	525.07 ppb	36.550	6.96%	
QC value within limits for U 409.014 Recovery = 105.01%							
V 292.402†	45162.3	538.27 µg/L	34.420	538.27 ppb	34.420	6.39%	
QC value within limits for V 292.402 Recovery = 107.65%							
Zn 213.857†	23324.8	533.26 µg/L	30.778	533.26 ppb	30.778	5.77%	
QC value within limits for Zn 213.857 Recovery = 106.65%							

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/16/2010 23:07:37
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	92168.3	92168.3	95.2 %		23:08:07
1	Al 396.153Radial†	-111.8	1.9	0.8682 µg/L	0.8682 ppb	23:08:07
1	Ca 317.933Radial†	349.5	-18.3	-6.6619 µg/L	-6.6619 ppb	23:08:27
1	Fe 238.204 Radial†	14.0	2.7	32.438 µg/L	32.438 ppb	23:08:27
1	K 766.490 Radial†	486.6	25.6	11.960 µg/L	11.960 ppb	23:08:07
1	Mg 279.077 IEC†	8.7	1.2	15.272 µg/L	15.272 ppb	23:08:27
1	Na 589.592 Radial†	171.9	-0.1	-0.0376 µg/L	-0.0376 ppb	23:08:07
1	Sr 421.552†	130.4	-2.4	-0.0145 µg/L	-0.0145 ppb	23:08:07
1	Sc 361.383	2023005.3	2023005.3	96.651 %		23:09:29
1	Y 371.029	1386264.2	1386264.2	96.747 %		23:09:29
1	Ag 328.068†	-516.1	-73.7	-0.5912 µg/L	-0.5912 ppb	23:09:35
1	As 188.979†	-0.2	3.0	4.4647 µg/L	4.4647 ppb	23:09:56
1	B 249.677†	292.4	3.2	0.1276 µg/L	0.1276 ppb	23:09:35
1	Ba 233.527†	-9.0	-0.9	-0.0193 µg/L	-0.0193 ppb	23:09:56
1	Be 313.107†	-866.0	262.8	0.1542 µg/L	0.1542 ppb	23:09:35
1	Cd 226.502†	-161.4	3.6	0.0811 µg/L	0.0811 ppb	23:09:56
1	Co 228.616†	49.1	2.7	0.1177 µg/L	0.1177 ppb	23:09:56
1	Cr 267.716†	76.7	-0.9	-0.0199 µg/L	-0.0199 ppb	23:09:35
1	Cu 324.752†	4311.1	83.9	0.5538 µg/L	0.5538 ppb	23:09:35
1	Mn 257.610†	-669.2	-5.4	-0.0153 µg/L	-0.0153 ppb	23:09:35
1	Mo 202.031†	26.6	22.4	2.2166 µg/L	2.2166 ppb	23:09:56
1	Ni 231.604†	365.6	1.3	0.0758 µg/L	0.0758 ppb	23:09:56
1	P 214.914†	271.4	8.5	13.995 µg/L	13.995 ppb	23:09:56
1	Pb 220.353†	27.4	-1.8	-0.4668 µg/L	-0.4668 ppb	23:09:56
1	S 181.975 Axial†	19.3	-2.6	-8.1937 µg/L	-8.1937 ppb	23:09:56
1	Sb 206.836†	25.2	3.3	2.9974 µg/L	2.9974 ppb	23:09:56
1	Se 196.026†	26.7	0.3	0.3456 µg/L	0.3456 ppb	23:09:56
1	SiO2†	2875.4	195.3	35.252 µg/L	35.252 ppb	23:09:35
1	Si 251.611†	606.0	202.9	13.796 µg/L	13.796 ppb	23:09:56
1	Sn 189.927†	0.1	7.5	2.9292 µg/L	2.9292 ppb	23:09:56
1	Ti 334.940†	-328.6	237.3	0.5535 µg/L	0.5535 ppb	23:09:35
1	Tl 190.801†	-35.5	-2.6	-2.5276 µg/L	-2.5276 ppb	23:09:56
1	U 409.014†	11.9	18.2	1.6440 µg/L	1.6440 ppb	23:09:35
1	V 292.402†	89.8	-19.4	-0.2146 µg/L	-0.2146 ppb	23:09:35
1	Zn 213.857†	723.3	-260.5	-6.0008 µg/L	-6.0008 ppb	23:09:56
2	Sc RADIAL	92056.8	92056.8	95.1 %		23:08:33
2	Al 396.153Radial†	-102.7	11.3	5.3661 µg/L	5.3661 ppb	23:08:33
2	Ca 317.933Radial†	339.3	-28.6	-10.395 µg/L	-10.395 ppb	23:08:53
2	Fe 238.204 Radial†	13.8	2.6	30.636 µg/L	30.636 ppb	23:08:53
2	K 766.490 Radial†	435.1	-27.9	-13.000 µg/L	-13.000 ppb	23:08:33
2	Mg 279.077 IEC†	11.8	4.4	58.249 µg/L	58.249 ppb	23:08:53
2	Na 589.592 Radial†	168.9	-3.0	-1.4810 µg/L	-1.4810 ppb	23:08:33
2	Sr 421.552†	121.3	-11.9	-0.0706 µg/L	-0.0706 ppb	23:08:33
2	Sc 361.383	2026853.4	2026853.4	96.835 %		23:10:02
2	Y 371.029	1387781.3	1387781.3	96.853 %		23:10:02
2	Ag 328.068†	-428.5	17.7	0.1460 µg/L	0.1460 ppb	23:10:07
2	As 188.979†	0.3	3.6	5.2640 µg/L	5.2640 ppb	23:10:28
2	B 249.677†	298.8	9.2	0.4013 µg/L	0.4013 ppb	23:10:07
2	Ba 233.527†	-9.0	-0.9	-0.0197 µg/L	-0.0197 ppb	23:10:28
2	Be 313.107†	-957.0	170.6	0.1000 µg/L	0.1000 ppb	23:10:07
2	Cd 226.502†	-170.7	-5.7	-0.1383 µg/L	-0.1383 ppb	23:10:28
2	Co 228.616†	49.6	3.2	0.1369 µg/L	0.1369 ppb	23:10:28
2	Cr 267.716†	89.8	12.5	0.2719 µg/L	0.2719 ppb	23:10:07
2	Cu 324.752†	4310.1	74.3	0.4910 µg/L	0.4910 ppb	23:10:07
2	Mn 257.610†	-689.7	-25.2	-0.0780 µg/L	-0.0780 ppb	23:10:07
2	Mo 202.031†	16.2	11.6	1.1532 µg/L	1.1532 ppb	23:10:28
2	Ni 231.604†	360.6	-4.6	-0.2554 µg/L	-0.2554 ppb	23:10:28
2	P 214.914†	263.7	-0.1	-0.2245 µg/L	-0.2245 ppb	23:10:28
2	Pb 220.353†	23.2	-6.2	-1.6179 µg/L	-1.6179 ppb	23:10:28

2	S 181.975 Axial†	22.6	0.8	2.5960 µg/L	2.5960 ppb	23:10:28
2	Sb 206.836†	25.1	3.2	2.8335 µg/L	2.8335 ppb	23:10:28
2	Se 196.026†	19.0	-7.7	-7.1750 µg/L	-7.1750 ppb	23:10:28
2	SiO2†	2892.1	206.9	37.349 µg/L	37.349 ppb	23:10:07
2	Si 251.611†	621.5	217.7	14.799 µg/L	14.799 ppb	23:10:28
2	Sn 189.927†	-7.2	0.0	0.0124 µg/L	0.0124 ppb	23:10:28
2	Ti 334.940†	-361.1	204.4	0.4731 µg/L	0.4731 ppb	23:10:07
2	Tl 190.801†	-35.2	-2.3	-2.2207 µg/L	-2.2207 ppb	23:10:28
2	U 409.014†	17.2	23.6	2.1404 µg/L	2.1404 ppb	23:10:07
2	V 292.402†	126.9	18.7	0.2287 µg/L	0.2287 ppb	23:10:07
2	Zn 213.857†	723.5	-261.7	-6.0294 µg/L	-6.0294 ppb	23:10:28
3	Sc RADIAL	94969.6	94969.6	98.1 %		23:08:59
3	Al 396.153Radial†	-97.6	19.8	9.4252 µg/L	9.4252 ppb	23:08:59
3	Ca 317.933Radial†	346.8	-31.9	-11.609 µg/L	-11.609 ppb	23:09:19
3	Fe 238.204 Radial†	15.2	3.5	41.894 µg/L	41.894 ppb	23:09:19
3	K 766.490 Radial†	420.7	-56.6	-26.394 µg/L	-26.394 ppb	23:08:59
3	Mg 279.077 IEC†	6.1	-1.8	-23.306 µg/L	-23.306 ppb	23:09:19
3	Na 589.592 Radial†	134.8	-43.2	-21.585 µg/L	-21.585 ppb	23:08:59
3	Sr 421.552†	124.5	-12.5	-0.0743 µg/L	-0.0743 ppb	23:08:59
3	Sc 361.383	2027944.9	2027944.9	96.887 %		23:10:34
3	Y 371.029	1388599.4	1388599.4	96.910 %		23:10:34
3	Ag 328.068†	-432.9	13.4	0.1091 µg/L	0.1091 ppb	23:10:40
3	As 188.979†	1.2	4.5	6.5805 µg/L	6.5805 ppb	23:11:00
3	B 249.677†	322.3	33.3	1.4884 µg/L	1.4884 ppb	23:10:40
3	Ba 233.527†	4.4	13.0	0.2838 µg/L	0.2838 ppb	23:11:00
3	Be 313.107†	-919.8	209.5	0.1229 µg/L	0.1229 ppb	23:10:40
3	Cd 226.502†	-168.5	-3.4	-0.0843 µg/L	-0.0843 ppb	23:11:00
3	Co 228.616†	48.9	2.4	0.1043 µg/L	0.1043 ppb	23:11:00
3	Cr 267.716†	75.1	-2.8	-0.0603 µg/L	-0.0603 ppb	23:10:40
3	Cu 324.752†	4345.2	108.1	0.7140 µg/L	0.7140 ppb	23:10:40
3	Mn 257.610†	-689.4	-24.5	-0.0697 µg/L	-0.0697 ppb	23:10:40
3	Mo 202.031†	26.7	22.5	2.2246 µg/L	2.2246 ppb	23:11:00
3	Ni 231.604†	367.0	1.8	0.1038 µg/L	0.1038 ppb	23:11:00
3	P 214.914†	264.7	0.9	1.3742 µg/L	1.3742 ppb	23:11:00
3	Pb 220.353†	30.4	1.3	0.3414 µg/L	0.3414 ppb	23:11:00
3	S 181.975 Axial†	20.2	-1.7	-5.4814 µg/L	-5.4814 ppb	23:11:00
3	Sb 206.836†	20.1	-2.0	-1.7250 µg/L	-1.7250 ppb	23:11:00
3	Se 196.026†	21.4	-5.2	-4.7729 µg/L	-4.7729 ppb	23:11:00
3	SiO2†	2901.5	215.0	38.806 µg/L	38.806 ppb	23:10:40
3	Si 251.611†	635.0	231.3	15.726 µg/L	15.726 ppb	23:11:00
3	Sn 189.927†	2.0	9.5	3.7155 µg/L	3.7155 ppb	23:11:00
3	Ti 334.940†	-308.1	259.2	0.6078 µg/L	0.6078 ppb	23:10:40
3	Tl 190.801†	-34.2	-1.2	-1.1739 µg/L	-1.1739 ppb	23:11:00
3	U 409.014†	-70.7	-67.2	-6.1040 µg/L	-6.1040 ppb	23:10:40
3	V 292.402†	83.0	-26.7	-0.3095 µg/L	-0.3095 ppb	23:10:40
3	Zn 213.857†	732.5	-252.8	-5.8230 µg/L	-5.8230 ppb	23:11:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025934.5	96.791 %	0.1240			0.13%
Sc RADIAL	93064.9	96.2 %	1.71			1.77%
Y 371.029	1387548.3	96.837 %	0.0827			0.09%
Ag 328.068†	-14.2	-0.1120 µg/L	0.41534	-0.1120 ppb	0.41534	370.71%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.0	5.2198 µg/L	4.28034	5.2198 ppb	4.28034	82.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.7	5.4364 µg/L	1.06840	5.4364 ppb	1.06840	19.65%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	15.2	0.6725 µg/L	0.71979	0.6725 ppb	0.71979	107.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.7	0.0816 µg/L	0.17512	0.0816 ppb	0.17512	214.53%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	214.3	0.1257 µg/L	0.02719	0.1257 ppb	0.02719	21.63%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-26.3	-9.5552 µg/L	2.57804	-9.5552 ppb	2.57804	26.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-1.8	-0.0472 µg/L	0.11434	-0.0472 ppb	0.11434	242.43%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.8	0.1196 µg/L	0.01638	0.1196 ppb	0.01638	13.69%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	2.9	0.0639 µg/L	0.18125 283.76%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	88.8	0.5863 µg/L	0.11499 19.61%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	3.0	34.989 µg/L	6.0476 17.28%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-19.6	-9.1448 µg/L	19.46550 212.86%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.3	16.738 µg/L	40.7976 243.74%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-18.4	-0.0543 µg/L	0.03402 62.62%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	18.8	1.8648 µg/L	0.61627 33.05%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-15.4	-7.7012 µg/L	12.04544 156.41%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-0.5	-0.0253 µg/L	0.19978 790.84%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	3.1	5.0481 µg/L	7.78901 154.30%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-2.2	-0.5811 µg/L	0.98465 169.45%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.2	-3.6930 µg/L	5.61276 151.98%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	1.5	1.3686 µg/L	2.68041 195.84%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-4.2	-3.8674 µg/L	3.84124 99.32%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	205.7	37.136 µg/L	1.7868 4.81%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	217.3	14.774 µg/L	0.9651 6.53%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.7	2.2191 µg/L	1.95105 87.92%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-8.9	-0.0532 µg/L	0.03352 63.04%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	233.6	0.5448 µg/L	0.06778 12.44%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.0	-1.9741 µg/L	0.70975 35.95%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-8.5	-0.7732 µg/L	4.62330 597.94%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-9.1	-0.0984 µg/L	0.28728 291.87%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-258.3	-5.9510 µg/L	0.11182 1.88%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 23:36:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94409.7	94409.7	97.5 %		23:37:15
1	Al 396.153Radial†	10878.1	11271.4	5368.9 µg/L	5368.9 ppb	23:37:15
1	Ca 317.933Radial†	14871.3	14860.7	5408.1 µg/L	5408.1 ppb	23:37:15
1	Fe 238.204 Radial†	468.9	468.8	5556.5 µg/L	5556.5 ppb	23:37:35
1	K 766.490 Radial†	11627.5	11435.1	5336.5 µg/L	5336.5 ppb	23:37:15
1	Mg 279.077 IEC†	410.5	412.8	5445.8 µg/L	5445.8 ppb	23:37:35
1	Na 589.592 Radial†	21414.7	21773.7	10867 µg/L	10867 ppb	23:37:15
1	Sr 421.552†	88248.5	90332.5	537.02 µg/L	537.02 ppb	23:37:15
1	Sc 361.383	2019055.9	2019055.9	96.462 %		23:38:39
1	Y 371.029	1379811.0	1379811.0	96.297 %		23:38:39
1	Ag 328.068†	64696.9	67529.9	546.31 µg/L	546.31 ppb	23:38:44
1	As 188.979†	363.2	379.8	558.96 µg/L	558.96 ppb	23:39:05
1	B 249.677†	11855.7	11991.2	542.18 µg/L	542.18 ppb	23:38:44
1	Ba 233.527†	24218.8	25115.4	550.27 µg/L	550.27 ppb	23:38:44
1	Be 313.107†	895781.8	929795.0	546.10 µg/L	546.10 ppb	23:38:39
1	Cd 226.502†	22243.5	23230.0	552.11 µg/L	552.11 ppb	23:38:44
1	Co 228.616†	12419.5	12827.0	550.45 µg/L	550.45 ppb	23:38:44
1	Cr 267.716†	24857.6	25689.1	559.07 µg/L	559.07 ppb	23:38:44
1	Cu 324.752†	85512.3	84272.0	551.47 µg/L	551.47 ppb	23:38:44
1	Mn 257.610†	179305.7	186569.0	560.69 µg/L	560.69 ppb	23:38:39
1	Mo 202.031†	5568.7	5767.8	570.95 µg/L	570.95 ppb	23:39:05
1	Ni 231.604†	9831.9	9815.6	549.95 µg/L	549.95 ppb	23:38:44
1	P 214.914†	1904.2	1701.6	2772.7 µg/L	2772.7 ppb	23:39:05
1	Pb 220.353†	2094.9	2141.6	562.14 µg/L	562.14 ppb	23:39:05
1	S 181.975 Axial†	358.3	348.9	1110.3 µg/L	1110.3 ppb	23:39:05
1	Sb 206.836†	627.2	627.5	562.70 µg/L	562.70 ppb	23:39:05
1	Se 196.026†	607.1	602.0	578.90 µg/L	578.90 ppb	23:39:05
1	SiO2†	34830.3	33328.0	6016.9 µg/L	6016.9 ppb	23:38:44
1	Si 251.611†	40148.8	41197.3	2800.7 µg/L	2800.7 ppb	23:38:44
1	Sn 189.927†	1410.8	1470.0	572.84 µg/L	572.84 ppb	23:39:05
1	Ti 334.940†	224594.3	233408.9	545.45 µg/L	545.45 ppb	23:38:39
1	Tl 190.801†	519.8	572.9	564.83 µg/L	564.83 ppb	23:39:05
1	U 409.014†	5905.4	6127.8	555.29 µg/L	555.29 ppb	23:38:44
1	V 292.402†	45270.1	46818.2	558.21 µg/L	558.21 ppb	23:38:44
1	Zn 213.857†	24371.7	24256.7	554.59 µg/L	554.59 ppb	23:38:44
2	Sc RADIAL	94462.0	94462.0	97.6 %		23:37:41
2	Al 396.153Radial†	10835.0	11221.2	5345.1 µg/L	5345.1 ppb	23:37:41
2	Ca 317.933Radial†	14788.8	14767.7	5374.3 µg/L	5374.3 ppb	23:37:41
2	Fe 238.204 Radial†	466.8	466.4	5527.7 µg/L	5527.7 ppb	23:38:01
2	K 766.490 Radial†	11624.6	11425.5	5332.1 µg/L	5332.1 ppb	23:37:41
2	Mg 279.077 IEC†	413.5	415.7	5483.7 µg/L	5483.7 ppb	23:38:01
2	Na 589.592 Radial†	21462.5	21810.4	10886 µg/L	10886 ppb	23:37:41
2	Sr 421.552†	88167.9	90199.8	536.23 µg/L	536.23 ppb	23:37:41
2	Sc 361.383	2011452.5	2011452.5	96.099 %		23:39:12
2	Y 371.029	1371054.9	1371054.9	95.686 %		23:39:12
2	Ag 328.068†	64926.4	68022.3	550.29 µg/L	550.29 ppb	23:39:18
2	As 188.979†	362.4	380.4	559.86 µg/L	559.86 ppb	23:39:38
2	B 249.677†	11885.4	12068.6	545.71 µg/L	545.71 ppb	23:39:18
2	Ba 233.527†	24354.6	25351.7	555.45 µg/L	555.45 ppb	23:39:18
2	Be 313.107†	898219.9	935842.4	549.65 µg/L	549.65 ppb	23:39:12
2	Cd 226.502†	22309.1	23385.3	555.81 µg/L	555.81 ppb	23:39:18
2	Co 228.616†	12482.6	12941.2	555.34 µg/L	555.34 ppb	23:39:18
2	Cr 267.716†	24973.1	25906.6	563.80 µg/L	563.80 ppb	23:39:18
2	Cu 324.752†	85999.9	85114.4	556.97 µg/L	556.97 ppb	23:39:18
2	Mn 257.610†	180055.0	188051.4	565.14 µg/L	565.14 ppb	23:39:12
2	Mo 202.031†	5479.7	5697.0	563.94 µg/L	563.94 ppb	23:39:38
2	Ni 231.604†	9879.6	9903.7	554.88 µg/L	554.88 ppb	23:39:18
2	P 214.914†	1889.4	1693.7	2758.9 µg/L	2758.9 ppb	23:39:38
2	Pb 220.353†	2074.1	2128.1	558.59 µg/L	558.59 ppb	23:39:38

2	S 181.975 Axial†	351.6	343.3	1092.6 µg/L	1092.6 ppb	23:39:38
2	Sb 206.836†	617.2	619.6	555.44 µg/L	555.44 ppb	23:39:38
2	Se 196.026†	603.1	600.3	577.14 µg/L	577.14 ppb	23:39:38
2	SiO2†	35103.4	33748.7	6092.8 µg/L	6092.8 ppb	23:39:18
2	Si 251.611†	40493.2	41713.0	2835.8 µg/L	2835.8 ppb	23:39:18
2	Sn 189.927†	1378.4	1441.8	561.88 µg/L	561.88 ppb	23:39:38
2	Ti 334.940†	225530.8	235263.5	549.79 µg/L	549.79 ppb	23:39:12
2	Tl 190.801†	516.5	571.6	563.59 µg/L	563.59 ppb	23:39:38
2	U 409.014†	5850.0	6093.3	552.17 µg/L	552.17 ppb	23:39:18
2	V 292.402†	45501.5	47236.3	563.10 µg/L	563.10 ppb	23:39:18
2	Zn 213.857†	24406.6	24388.6	557.60 µg/L	557.60 ppb	23:39:18
3	Sc RADIAL	94681.4	94681.4	97.8 %		23:38:07
3	Al 396.153Radial†	10888.0	11249.6	5360.5 µg/L	5360.5 ppb	23:38:07
3	Ca 317.933Radial†	14903.9	14850.2	5404.3 µg/L	5404.3 ppb	23:38:07
3	Fe 238.204 Radial†	469.4	467.9	5544.7 µg/L	5544.7 ppb	23:38:27
3	K 766.490 Radial†	11628.0	11401.4	5320.8 µg/L	5320.8 ppb	23:38:07
3	Mg 279.077 IEC†	411.8	413.0	5446.2 µg/L	5446.2 ppb	23:38:27
3	Na 589.592 Radial†	21490.0	21787.7	10874 µg/L	10874 ppb	23:38:07
3	Sr 421.552†	88685.9	90520.0	538.13 µg/L	538.13 ppb	23:38:07
3	Sc 361.383	2010218.4	2010218.4	96.040 %		23:39:45
3	Y 371.029	1372443.7	1372443.7	95.783 %		23:39:45
3	Ag 328.068†	61110.4	64090.4	518.33 µg/L	518.33 ppb	23:39:51
3	As 188.979†	305.7	321.6	473.04 µg/L	473.04 ppb	23:40:11
3	B 249.677†	11103.4	11261.9	508.98 µg/L	508.98 ppb	23:39:51
3	Ba 233.527†	22233.1	23158.3	507.37 µg/L	507.37 ppb	23:39:51
3	Be 313.107†	836853.0	872518.9	512.46 µg/L	512.46 ppb	23:39:45
3	Cd 226.502†	20276.3	21283.0	505.78 µg/L	505.78 ppb	23:39:51
3	Co 228.616†	11246.1	11661.8	500.37 µg/L	500.37 ppb	23:39:51
3	Cr 267.716†	21862.3	22683.6	493.66 µg/L	493.66 ppb	23:39:51
3	Cu 324.752†	78264.7	77115.2	504.73 µg/L	504.73 ppb	23:39:51
3	Mn 257.610†	168270.4	175895.9	528.61 µg/L	528.61 ppb	23:39:45
3	Mo 202.031†	4596.0	4780.4	473.24 µg/L	473.24 ppb	23:40:11
3	Ni 231.604†	8957.2	8949.6	501.43 µg/L	501.43 ppb	23:39:51
3	P 214.914†	1646.5	1442.0	2344.9 µg/L	2344.9 ppb	23:40:11
3	Pb 220.353†	1792.3	1836.1	481.91 µg/L	481.91 ppb	23:40:11
3	S 181.975 Axial†	305.4	295.5	940.28 µg/L	940.28 ppb	23:40:11
3	Sb 206.836†	539.6	539.1	482.98 µg/L	482.98 ppb	23:40:11
3	Se 196.026†	524.6	518.9	500.71 µg/L	500.71 ppb	23:40:11
3	SiO2†	32680.5	31248.3	5641.4 µg/L	5641.4 ppb	23:39:51
3	Si 251.611†	37575.6	38700.9	2631.0 µg/L	2631.0 ppb	23:39:51
3	Sn 189.927†	1136.9	1191.2	464.29 µg/L	464.29 ppb	23:40:11
3	Ti 334.940†	208853.5	218042.7	509.52 µg/L	509.52 ppb	23:39:45
3	Tl 190.801†	464.5	517.8	510.63 µg/L	510.63 ppb	23:40:11
3	U 409.014†	5241.4	5463.4	494.97 µg/L	494.97 ppb	23:39:51
3	V 292.402†	40672.4	42237.2	503.17 µg/L	503.17 ppb	23:39:51
3	Zn 213.857†	22201.7	22108.3	505.42 µg/L	505.42 ppb	23:39:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2013575.6	96.200 %	0.2287			0.24%
Sc RADIAL	94517.7	97.7 %	0.15			0.15%
Y 371.029	1374436.5	95.922 %	0.3284			0.34%
Ag 328.068†	66547.6	538.31 µg/L	17.416	538.31 ppb	17.416	3.24%
QC value within limits for Ag 328.068 Recovery = 107.66%						
Al 396.153Radial†	11247.4	5358.2 µg/L	12.09	5358.2 ppb	12.09	0.23%
QC value within limits for Al 396.153Radial Recovery = 107.16%						
As 188.979†	360.6	530.62 µg/L	49.866	530.62 ppb	49.866	9.40%
QC value within limits for As 188.979 Recovery = 106.12%						
B 249.677†	11773.9	532.29 µg/L	20.262	532.29 ppb	20.262	3.81%
QC value within limits for B 249.677 Recovery = 106.46%						
Ba 233.527†	24541.8	537.70 µg/L	26.390	537.70 ppb	26.390	4.91%
QC value within limits for Ba 233.527 Recovery = 107.54%						
Be 313.107†	912718.8	536.07 µg/L	20.524	536.07 ppb	20.524	3.83%
QC value within limits for Be 313.107 Recovery = 107.21%						
Ca 317.933Radial†	14826.2	5395.6 µg/L	18.54	5395.6 ppb	18.54	0.34%
QC value within limits for Ca 317.933Radial Recovery = 107.91%						
Cd 226.502†	22632.8	537.90 µg/L	27.877	537.90 ppb	27.877	5.18%
QC value within limits for Cd 226.502 Recovery = 107.58%						
Co 228.616†	12476.7	535.39 µg/L	30.421	535.39 ppb	30.421	5.68%

QC value within limits for Co 228.616 Recovery = 107.08%							
Cr 267.716†	24759.8	538.84 µg/L	39.198	538.84 ppb	39.198	7.27%	
QC value within limits for Cr 267.716 Recovery = 107.77%							
Cu 324.752†	82167.2	537.72 µg/L	28.708	537.72 ppb	28.708	5.34%	
QC value within limits for Cu 324.752 Recovery = 107.54%							
Fe 238.204 Radial†	467.7	5542.9 µg/L	14.49	5542.9 ppb	14.49	0.26%	
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 110.86%							
K 766.490 Radial†	11420.7	5329.8 µg/L	8.09	5329.8 ppb	8.09	0.15%	
QC value within limits for K 766.490 Radial Recovery = 106.60%							
Mg 279.077 IEC†	413.8	5458.6 µg/L	21.74	5458.6 ppb	21.74	0.40%	
QC value within limits for Mg 279.077 IEC Recovery = 109.17%							
Mn 257.610†	183505.4	551.48 µg/L	19.930	551.48 ppb	19.930	3.61%	
QC value greater than the upper limit for Mn 257.610 Recovery = 110.30%							
Mo 202.031†	5415.1	536.04 µg/L	54.500	536.04 ppb	54.500	10.17%	
QC value within limits for Mo 202.031 Recovery = 107.21%							
Na 589.592 Radial†	21790.6	10876 µg/L	9.2	10876 ppb	9.2	0.09%	
QC value within limits for Na 589.592 Radial Recovery = 108.76%							
Ni 231.604†	9556.3	535.42 µg/L	29.537	535.42 ppb	29.537	5.52%	
QC value within limits for Ni 231.604 Recovery = 107.08%							
P 214.914†	1612.4	2625.5 µg/L	243.11	2625.5 ppb	243.11	9.26%	
QC value within limits for P 214.914 Recovery = 105.02%							
Pb 220.353†	2035.3	534.21 µg/L	45.335	534.21 ppb	45.335	8.49%	
QC value within limits for Pb 220.353 Recovery = 106.84%							
S 181.975 Axial†	329.2	1047.7 µg/L	93.47	1047.7 ppb	93.47	8.92%	
QC value within limits for S 181.975 Axial Recovery = 104.77%							
Sb 206.836†	595.4	533.71 µg/L	44.083	533.71 ppb	44.083	8.26%	
QC value within limits for Sb 206.836 Recovery = 106.74%							
Se 196.026†	573.7	552.25 µg/L	44.645	552.25 ppb	44.645	8.08%	
QC value greater than the upper limit for Se 196.026 Recovery = 110.45%							
SiO2†	32775.0	5917.1 µg/L	241.69	5917.1 ppb	241.69	4.08%	
QC value greater than the upper limit for SiO2 Recovery = 110.65%							
Si 251.611†	40537.1	2755.9 µg/L	109.52	2755.9 ppb	109.52	3.97%	
QC value greater than the upper limit for Si 251.611 Recovery = 110.23%							
Sn 189.927†	1367.7	533.00 µg/L	59.758	533.00 ppb	59.758	11.21%	
QC value within limits for Sn 189.927 Recovery = 106.60%							
Sr 421.552†	90350.7	537.12 µg/L	0.956	537.12 ppb	0.956	0.18%	
QC value within limits for Sr 421.552 Recovery = 107.42%							
Ti 334.940†	228905.1	534.92 µg/L	22.103	534.92 ppb	22.103	4.13%	
QC value within limits for Ti 334.940 Recovery = 106.98%							
Tl 190.801†	554.1	546.35 µg/L	30.942	546.35 ppb	30.942	5.66%	
QC value within limits for Tl 190.801 Recovery = 109.27%							
U 409.014†	5894.8	534.14 µg/L	33.964	534.14 ppb	33.964	6.36%	
QC value within limits for U 409.014 Recovery = 106.83%							
V 292.402†	45430.6	541.50 µg/L	33.279	541.50 ppb	33.279	6.15%	
QC value within limits for V 292.402 Recovery = 108.30%							
Zn 213.857†	23584.5	539.20 µg/L	29.297	539.20 ppb	29.297	5.43%	
QC value within limits for Zn 213.857 Recovery = 107.84%							
QC Failed. Continue with analysis.							

Sequence No.: 29

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 23:40:21

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	93429.0	93429.0	96.5 %		23:40:51
1	Al 396.153Radial†	-88.2	28.0	13.298 µg/L	13.298 ppb	23:40:51
1	Ca 317.933Radial†	345.3	-27.5	-10.021 µg/L	-10.021 ppb	23:41:12
1	Fe 238.204 Radial†	14.6	3.2	37.821 µg/L	37.821 ppb	23:41:12
1	K 766.490 Radial†	471.3	2.9	1.3435 µg/L	1.3435 ppb	23:40:51
1	Mg 279.077 IEC†	12.0	4.4	57.948 µg/L	57.948 ppb	23:41:12
1	Na 589.592 Radial†	195.7	22.2	11.069 µg/L	11.069 ppb	23:40:51
1	Sr 421.552†	138.3	3.9	0.0229 µg/L	0.0229 ppb	23:40:51
1	Sc 361.383	2005984.7	2005984.7	95.838 %		23:42:13
1	Y 371.029	1374100.5	1374100.5	95.898 %		23:42:13
1	Ag 328.068†	-464.3	-24.3	-0.1912 µg/L	-0.1912 ppb	23:42:19
1	As 188.979†	-3.3	-0.2	-0.3315 µg/L	-0.3315 ppb	23:42:39
1	B 249.677†	289.1	2.3	0.0845 µg/L	0.0845 ppb	23:42:19
1	Ba 233.527†	6.9	15.6	0.3413 µg/L	0.3413 ppb	23:42:39
1	Be 313.107†	-876.6	244.1	0.1433 µg/L	0.1433 ppb	23:42:19
1	Cd 226.502†	-185.7	-23.2	-0.5543 µg/L	-0.5543 ppb	23:42:39
1	Co 228.616†	51.6	5.8	0.2495 µg/L	0.2495 ppb	23:42:39
1	Cr 267.716†	56.1	-21.7	-0.4714 µg/L	-0.4714 ppb	23:42:19
1	Cu 324.752†	4304.7	115.0	0.7582 µg/L	0.7582 ppb	23:42:19
1	Mn 257.610†	-626.8	32.9	0.0973 µg/L	0.0973 ppb	23:42:39
1	Mo 202.031†	28.7	24.8	2.4587 µg/L	2.4587 ppb	23:42:39
1	Ni 231.604†	371.5	10.7	0.6003 µg/L	0.6003 ppb	23:42:39
1	P 214.914†	267.2	6.4	10.477 µg/L	10.477 ppb	23:42:39
1	Pb 220.353†	27.8	-1.1	-0.2810 µg/L	-0.2810 ppb	23:42:39
1	S 181.975 Axial†	23.0	1.4	4.4883 µg/L	4.4883 ppb	23:42:39
1	Sb 206.836†	23.5	1.8	1.6339 µg/L	1.6339 ppb	23:42:39
1	Se 196.026†	25.4	-0.8	-0.7044 µg/L	-0.7044 ppb	23:42:39
1	SiO2†	2928.9	276.3	49.885 µg/L	49.885 ppb	23:42:19
1	Si 251.611†	638.3	242.0	16.450 µg/L	16.450 ppb	23:42:39
1	Sn 189.927†	-6.5	0.7	0.2701 µg/L	0.2701 ppb	23:42:39
1	Ti 334.940†	-366.1	195.2	0.4517 µg/L	0.4517 ppb	23:42:19
1	Tl 190.801†	-32.8	-0.2	-0.1466 µg/L	-0.1466 ppb	23:42:39
1	U 409.014†	-84.0	-81.8	-7.4338 µg/L	-7.4338 ppb	23:42:19
1	V 292.402†	117.9	10.7	0.1320 µg/L	0.1320 ppb	23:42:19
1	Zn 213.857†	727.2	-250.0	-5.7654 µg/L	-5.7654 ppb	23:42:39
2	Sc RADIAL	93358.4	93358.4	96.5 %		23:41:17
2	Al 396.153Radial†	-103.7	11.8	5.5829 µg/L	5.5829 ppb	23:41:17
2	Ca 317.933Radial†	342.8	-29.9	-10.871 µg/L	-10.871 ppb	23:41:37
2	Fe 238.204 Radial†	15.5	4.1	48.857 µg/L	48.857 ppb	23:41:37
2	K 766.490 Radial†	493.9	26.7	12.447 µg/L	12.447 ppb	23:41:17
2	Mg 279.077 IEC†	5.4	-2.4	-31.866 µg/L	-31.866 ppb	23:41:37
2	Na 589.592 Radial†	193.4	19.9	9.9396 µg/L	9.9396 ppb	23:41:17
2	Sr 421.552†	111.0	-24.3	-0.1446 µg/L	-0.1446 ppb	23:41:17
2	Sc 361.383	2013060.2	2013060.2	96.176 %		23:42:46
2	Y 371.029	1379146.7	1379146.7	96.251 %		23:42:46
2	Ag 328.068†	-498.8	-58.4	-0.4654 µg/L	-0.4654 ppb	23:42:51
2	As 188.979†	-2.1	1.0	1.5018 µg/L	1.5018 ppb	23:43:12
2	B 249.677†	293.2	5.5	0.2251 µg/L	0.2251 ppb	23:42:51
2	Ba 233.527†	-3.5	4.8	0.1052 µg/L	0.1052 ppb	23:43:12
2	Be 313.107†	-899.4	223.7	0.1312 µg/L	0.1312 ppb	23:42:51
2	Cd 226.502†	-165.8	-1.8	-0.0492 µg/L	-0.0492 ppb	23:43:12
2	Co 228.616†	44.7	-1.6	-0.0694 µg/L	-0.0694 ppb	23:43:12
2	Cr 267.716†	80.9	3.8	0.0834 µg/L	0.0834 ppb	23:42:51
2	Cu 324.752†	4315.4	110.4	0.7301 µg/L	0.7301 ppb	23:42:51
2	Mn 257.610†	-633.2	28.6	0.0910 µg/L	0.0910 ppb	23:43:12
2	Mo 202.031†	26.7	22.7	2.2439 µg/L	2.2439 ppb	23:43:12
2	Ni 231.604†	360.6	-2.0	-0.1093 µg/L	-0.1093 ppb	23:43:12
2	P 214.914†	269.3	7.6	12.485 µg/L	12.485 ppb	23:43:12
2	Pb 220.353†	23.9	-5.3	-1.3854 µg/L	-1.3854 ppb	23:43:12

2	S 181.975 Axial†	16.6	-5.3	-16.923 µg/L	-16.923 ppb	23:43:12
2	Sb 206.836†	25.5	3.8	3.4169 µg/L	3.4169 ppb	23:43:12
2	Se 196.026†	25.6	-0.7	-0.4962 µg/L	-0.4962 ppb	23:43:12
2	SiO2†	2927.3	264.0	47.662 µg/L	47.662 ppb	23:42:51
2	Si 251.611†	646.9	248.5	16.894 µg/L	16.894 ppb	23:43:12
2	Sn 189.927†	-3.6	3.7	1.4500 µg/L	1.4500 ppb	23:43:12
2	Ti 334.940†	-289.8	275.9	0.6475 µg/L	0.6475 ppb	23:42:51
2	Tl 190.801†	-33.6	-0.8	-0.7631 µg/L	-0.7631 ppb	23:43:12
2	U 409.014†	-51.8	-48.1	-4.3735 µg/L	-4.3735 ppb	23:42:51
2	V 292.402†	103.6	-4.6	-0.0470 µg/L	-0.0470 ppb	23:42:51
2	Zn 213.857†	727.0	-253.0	-5.8259 µg/L	-5.8259 ppb	23:43:12
3	Sc RADIAL	93244.7	93244.7	96.3 %		23:41:43
3	Al 396.153Radial†	-131.5	-17.2	-8.2438 µg/L	-8.2438 ppb	23:41:43
3	Ca 317.933Radial†	347.6	-24.5	-8.9115 µg/L	-8.9115 ppb	23:42:03
3	Fe 238.204 Radial†	14.0	2.6	30.630 µg/L	30.630 ppb	23:42:03
3	K 766.490 Radial†	521.6	56.1	26.174 µg/L	26.174 ppb	23:41:43
3	Mg 279.077 IEC†	8.7	1.0	13.721 µg/L	13.721 ppb	23:42:03
3	Na 589.592 Radial†	142.9	-32.2	-16.088 µg/L	-16.088 ppb	23:41:43
3	Sr 421.552†	156.0	22.5	0.1335 µg/L	0.1335 ppb	23:41:43
3	Sc 361.383	2009060.9	2009060.9	95.985 %		23:43:18
3	Y 371.029	1375609.4	1375609.4	96.004 %		23:43:18
3	Ag 328.068†	-446.2	-4.6	-0.0338 µg/L	-0.0338 ppb	23:43:23
3	As 188.979†	1.2	4.5	6.6464 µg/L	6.6464 ppb	23:43:44
3	B 249.677†	294.4	7.4	0.3192 µg/L	0.3192 ppb	23:43:23
3	Ba 233.527†	-4.6	3.6	0.0786 µg/L	0.0786 ppb	23:43:44
3	Be 313.107†	-860.8	262.0	0.1537 µg/L	0.1537 ppb	23:43:23
3	Cd 226.502†	-180.3	-17.3	-0.4143 µg/L	-0.4143 ppb	23:43:44
3	Co 228.616†	52.0	6.1	0.2626 µg/L	0.2626 ppb	23:43:44
3	Cr 267.716†	90.3	13.8	0.3010 µg/L	0.3010 ppb	23:43:23
3	Cu 324.752†	4226.5	26.7	0.1799 µg/L	0.1799 ppb	23:43:23
3	Mn 257.610†	-650.4	9.4	0.0291 µg/L	0.0291 ppb	23:43:44
3	Mo 202.031†	26.7	22.7	2.2480 µg/L	2.2480 ppb	23:43:44
3	Ni 231.604†	370.9	9.5	0.5351 µg/L	0.5351 ppb	23:43:44
3	P 214.914†	265.7	4.4	7.2545 µg/L	7.2545 ppb	23:43:44
3	Pb 220.353†	32.1	3.2	0.8523 µg/L	0.8523 ppb	23:43:44
3	S 181.975 Axial†	25.7	4.2	13.326 µg/L	13.326 ppb	23:43:44
3	Sb 206.836†	25.5	3.9	3.5077 µg/L	3.5077 ppb	23:43:44
3	Se 196.026†	32.9	6.9	6.6125 µg/L	6.6125 ppb	23:43:44
3	SiO2†	2889.3	230.4	41.598 µg/L	41.598 ppb	23:43:23
3	Si 251.611†	670.9	274.9	18.688 µg/L	18.688 ppb	23:43:44
3	Sn 189.927†	-7.9	-0.8	-0.3053 µg/L	-0.3053 ppb	23:43:44
3	Ti 334.940†	-317.4	246.5	0.5753 µg/L	0.5753 ppb	23:43:23
3	Tl 190.801†	-31.5	1.3	1.2383 µg/L	1.2383 ppb	23:43:44
3	U 409.014†	-0.2	5.6	0.5056 µg/L	0.5056 ppb	23:43:23
3	V 292.402†	120.4	13.1	0.1693 µg/L	0.1693 ppb	23:43:23
3	Zn 213.857†	733.8	-244.3	-5.6307 µg/L	-5.6307 ppb	23:43:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2009368.6	95.999 %		0.1695			0.18%
Sc RADIAL	93344.0	96.4 %		0.10			0.10%
Y 371.029	1376285.5	96.051 %		0.1808			0.19%
Ag 328.068†	-29.1	-0.2301 µg/L		0.21839	-0.2301 ppb	0.21839	94.90%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	7.5	3.5456 µg/L		10.91442	3.5456 ppb	10.91442	307.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.8	2.6056 µg/L		3.61753	2.6056 ppb	3.61753	138.84%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	5.1	0.2096 µg/L		0.11809	0.2096 ppb	0.11809	56.34%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.0	0.1750 µg/L		0.14458	0.1750 ppb	0.14458	82.60%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	243.3	0.1427 µg/L		0.01127	0.1427 ppb	0.01127	7.90%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-27.3	-9.9348 µg/L		0.98283	-9.9348 ppb	0.98283	9.89%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	-14.1	-0.3393 µg/L		0.26079	-0.3393 ppb	0.26079	76.87%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.4	0.1476 µg/L		0.18802	0.1476 ppb	0.18802	127.39%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	-1.3	-0.0290 µg/L	0.39828	-0.0290 ppb
			0.39828	>999.9%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	84.0	0.5561 µg/L	0.32606	0.5561 ppb
			0.32606	58.64%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	3.3	39.103 µg/L	9.1809	39.103 ppb
			9.1809	23.48%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	28.5	13.321 µg/L	12.4381	13.321 ppb
			12.4381	93.37%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	1.0	13.268 µg/L	44.9087	13.268 ppb
			44.9087	338.48%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	23.6	0.0724 µg/L	0.03771	0.0724 ppb
			0.03771	52.05%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	23.4	2.3169 µg/L	0.12286	2.3169 ppb
			0.12286	5.30%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	3.3	1.6402 µg/L	15.36351	1.6402 ppb
			15.36351	936.68%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	6.1	0.3420 µg/L	0.39222	0.3420 ppb
			0.39222	114.67%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	6.1	10.072 µg/L	2.6385	10.072 ppb
			2.6385	26.20%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	-1.1	-0.2714 µg/L	1.11888	-0.2714 ppb
			1.11888	412.32%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	0.1	0.2970 µg/L	15.55408	0.2970 ppb
			15.55408	>999.9%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	3.2	2.8529 µg/L	1.05659	2.8529 ppb
			1.05659	37.04%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	1.8	1.8040 µg/L	4.16560	1.8040 ppb
			4.16560	230.91%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	256.9	46.382 µg/L	4.2892	46.382 ppb
			4.2892	9.25%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	255.1	17.344 µg/L	1.1850	17.344 ppb
			1.1850	6.83%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	1.2	0.4716 µg/L	0.89483	0.4716 ppb
			0.89483	189.75%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	0.7	0.0040 µg/L	0.14004	0.0040 ppb
			0.14004	>999.9%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	239.2	0.5582 µg/L	0.09900	0.5582 ppb
			0.09900	17.74%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	0.1	0.1095 µg/L	1.02502	0.1095 ppb
			1.02502	936.03%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	-41.4	-3.7672 µg/L	4.00426	-3.7672 ppb
			4.00426	106.29%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	6.4	0.0847 µg/L	0.11562	0.0847 ppb
			0.11562	136.44%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	-249.1	-5.7407 µg/L	0.09995	-5.7407 ppb
			0.09995	1.74%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

User canceled analysis.

=====
Analysis Begun

Start Time: 3/16/2010 23:48:05

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb

=====
Sequence No.: 28

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/16/2010 23:48:08

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

User canceled analysis.

=====
Analysis Begun

Start Time: 3/16/2010 23:49:10

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb

=====
Sequence No.: 28

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/16/2010 23:49:10

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	93848.4	93848.4	97.0 %		23:49:41
1	Al 396.153Radial†	10872.0	11331.9	5397.9 µg/L	5397.9 ppb	23:49:41
1	Ca 317.933Radial†	14761.2	14838.4	5400.0 µg/L	5400.0 ppb	23:49:41
1	Fe 238.204 Radial†	454.2	456.5	5410.7 µg/L	5410.7 ppb	23:50:01
1	K 766.490 Radial†	11671.7	11551.9	5391.1 µg/L	5391.1 ppb	23:49:41
1	Mg 279.077 IEC†	404.7	409.3	5400.1 µg/L	5400.1 ppb	23:50:01
1	Na 589.592 Radial†	20733.6	21202.5	10582 µg/L	10582 ppb	23:49:41
1	Sr 421.552†	86710.4	89287.2	530.80 µg/L	530.80 ppb	23:49:41
1	Sc 361.383	2024001.8	2024001.8	96.698 %		23:51:05
1	Y 371.029	1382578.4	1382578.4	96.490 %		23:51:05
1	Ag 328.068†	64512.0	67174.9	543.43 µg/L	543.43 ppb	23:51:11
1	As 188.979†	361.7	377.3	555.26 µg/L	555.26 ppb	23:51:31
1	B 249.677†	11828.9	11933.4	539.63 µg/L	539.63 ppb	23:51:11
1	Ba 233.527†	24230.3	25066.0	549.19 µg/L	549.19 ppb	23:51:11
1	Be 313.107†	894267.5	925959.8	543.85 µg/L	543.85 ppb	23:51:05
1	Cd 226.502†	22185.6	23113.7	549.36 µg/L	549.36 ppb	23:51:11
1	Co 228.616†	12423.1	12799.2	549.25 µg/L	549.25 ppb	23:51:11
1	Cr 267.716†	24867.9	25636.8	557.93 µg/L	557.93 ppb	23:51:11
1	Cu 324.752†	85557.4	84102.0	550.33 µg/L	550.33 ppb	23:51:11
1	Mn 257.610†	179060.5	185861.3	558.55 µg/L	558.55 ppb	23:51:05
1	Mo 202.031†	5538.4	5722.4	566.44 µg/L	566.44 ppb	23:51:31
1	Ni 231.604†	9799.7	9757.4	546.68 µg/L	546.68 ppb	23:51:11
1	P 214.914†	1901.8	1694.3	2760.8 µg/L	2760.8 ppb	23:51:31
1	Pb 220.353†	2090.9	2132.1	559.68 µg/L	559.68 ppb	23:51:31
1	S 181.975 Axial†	350.9	340.4	1083.3 µg/L	1083.3 ppb	23:51:31
1	Sb 206.836†	629.4	628.2	563.24 µg/L	563.24 ppb	23:51:31

1	Se 196.026†	592.4	585.3	562.80 µg/L	562.80 ppb	23:51:31
1	SiO2†	34414.2	32809.4	5923.3 µg/L	5923.3 ppb	23:51:11
1	Si 251.611†	39741.9	40674.7	2765.2 µg/L	2765.2 ppb	23:51:11
1	Sn 189.927†	1408.5	1464.1	570.54 µg/L	570.54 ppb	23:51:31
1	Ti 334.940†	224409.2	232648.6	543.68 µg/L	543.68 ppb	23:51:05
1	Tl 190.801†	509.1	560.6	552.77 µg/L	552.77 ppb	23:51:31
1	U 409.014†	5811.3	6015.5	545.12 µg/L	545.12 ppb	23:51:11
1	V 292.402†	45263.5	46696.6	556.75 µg/L	556.75 ppb	23:51:11
1	Zn 213.857†	24395.0	24219.1	553.75 µg/L	553.75 ppb	23:51:11
2	Sc RADIAL	93615.1	93615.1	96.7 %		23:50:07
2	Al 396.153Radial†	10826.7	11313.0	5389.0 µg/L	5389.0 ppb	23:50:07
2	Ca 317.933Radial†	14692.5	14805.2	5387.9 µg/L	5387.9 ppb	23:50:07
2	Fe 238.204 Radial†	454.5	457.9	5427.6 µg/L	5427.6 ppb	23:50:27
2	K 766.490 Radial†	11537.6	11443.4	5340.4 µg/L	5340.4 ppb	23:50:07
2	Mg 279.077 IEC†	401.9	407.6	5376.9 µg/L	5376.9 ppb	23:50:27
2	Na 589.592 Radial†	20737.0	21259.3	10611 µg/L	10611 ppb	23:50:07
2	Sr 421.552†	86477.2	89269.0	530.69 µg/L	530.69 ppb	23:50:07
2	Sc 361.383	2019887.9	2019887.9	96.502 %		23:51:38
2	Y 371.029	1377487.8	1377487.8	96.135 %		23:51:38
2	Ag 328.068†	64555.7	67356.0	544.91 µg/L	544.91 ppb	23:51:44
2	As 188.979†	366.1	382.7	563.22 µg/L	563.22 ppb	23:52:04
2	B 249.677†	11856.0	11986.5	542.03 µg/L	542.03 ppb	23:51:44
2	Ba 233.527†	24203.4	25089.2	549.70 µg/L	549.70 ppb	23:51:44
2	Be 313.107†	891228.2	924693.8	543.10 µg/L	543.10 ppb	23:51:38
2	Cd 226.502†	22221.0	23197.1	551.34 µg/L	551.34 ppb	23:51:44
2	Co 228.616†	12427.9	12830.3	550.59 µg/L	550.59 ppb	23:51:44
2	Cr 267.716†	24825.5	25645.2	558.11 µg/L	558.11 ppb	23:51:44
2	Cu 324.752†	85495.4	84217.9	551.10 µg/L	551.10 ppb	23:51:44
2	Mn 257.610†	178379.4	185532.6	557.57 µg/L	557.57 ppb	23:51:38
2	Mo 202.031†	5474.6	5667.9	561.06 µg/L	561.06 ppb	23:52:04
2	Ni 231.604†	9815.8	9794.7	548.77 µg/L	548.77 ppb	23:51:44
2	P 214.914†	1878.6	1674.3	2727.3 µg/L	2727.3 ppb	23:52:04
2	Pb 220.353†	2069.7	2114.5	555.03 µg/L	555.03 ppb	23:52:04
2	S 181.975 Axial†	352.1	342.3	1089.5 µg/L	1089.5 ppb	23:52:04
2	Sb 206.836†	635.1	635.4	569.57 µg/L	569.57 ppb	23:52:04
2	Se 196.026†	594.5	588.8	566.07 µg/L	566.07 ppb	23:52:04
2	SiO2†	34523.2	32994.9	5956.8 µg/L	5956.8 ppb	23:51:44
2	Si 251.611†	39838.9	40859.0	2777.7 µg/L	2777.7 ppb	23:51:44
2	Sn 189.927†	1386.4	1444.1	562.76 µg/L	562.76 ppb	23:52:04
2	Ti 334.940†	223562.1	232243.4	542.73 µg/L	542.73 ppb	23:51:38
2	Tl 190.801†	515.3	568.1	560.05 µg/L	560.05 ppb	23:52:04
2	U 409.014†	5796.7	6012.6	544.86 µg/L	544.86 ppb	23:51:44
2	V 292.402†	45359.3	46891.2	559.00 µg/L	559.00 ppb	23:51:44
2	Zn 213.857†	24417.0	24293.2	555.45 µg/L	555.45 ppb	23:51:44
3	Sc RADIAL	94082.5	94082.5	97.2 %		23:50:33
3	Al 396.153Radial†	10866.9	11298.8	5384.1 µg/L	5384.1 ppb	23:50:33
3	Ca 317.933Radial†	14791.1	14831.2	5397.4 µg/L	5397.4 ppb	23:50:33
3	Fe 238.204 Radial†	452.0	453.1	5369.4 µg/L	5369.4 ppb	23:50:53
3	K 766.490 Radial†	11676.7	11527.2	5379.5 µg/L	5379.5 ppb	23:50:33
3	Mg 279.077 IEC†	405.5	409.1	5395.8 µg/L	5395.8 ppb	23:50:53
3	Na 589.592 Radial†	20831.0	21249.5	10606 µg/L	10606 ppb	23:50:33
3	Sr 421.552†	86920.5	89280.9	530.76 µg/L	530.76 ppb	23:50:33
3	Sc 361.383	2030161.9	2030161.9	96.993 %		23:52:11
3	Y 371.029	1383575.9	1383575.9	96.560 %		23:52:11
3	Ag 328.068†	60582.8	62921.5	508.88 µg/L	508.88 ppb	23:52:17
3	As 188.979†	307.2	319.9	470.67 µg/L	470.67 ppb	23:52:38
3	B 249.677†	11089.6	11134.1	503.26 µg/L	503.26 ppb	23:52:17
3	Ba 233.527†	22084.1	22777.3	499.02 µg/L	499.02 ppb	23:52:17
3	Be 313.107†	835409.2	862470.5	506.56 µg/L	506.56 ppb	23:52:11
3	Cd 226.502†	20143.6	20938.7	497.61 µg/L	497.61 ppb	23:52:17
3	Co 228.616†	11183.9	11482.6	492.69 µg/L	492.69 ppb	23:52:17
3	Cr 267.716†	21726.6	22320.0	485.75 µg/L	485.75 ppb	23:52:17
3	Cu 324.752†	77730.8	75764.3	495.87 µg/L	495.87 ppb	23:52:17
3	Mn 257.610†	167934.6	173828.5	522.39 µg/L	522.39 ppb	23:52:11
3	Mo 202.031†	4597.2	4734.6	468.70 µg/L	468.70 ppb	23:52:38
3	Ni 231.604†	8897.7	8796.7	492.86 µg/L	492.86 ppb	23:52:17
3	P 214.914†	1638.0	1416.4	2303.6 µg/L	2303.6 ppb	23:52:38
3	Pb 220.353†	1807.1	1832.9	481.10 µg/L	481.10 ppb	23:52:38
3	S 181.975 Axial†	309.8	296.9	944.85 µg/L	944.85 ppb	23:52:38
3	Sb 206.836†	544.5	538.7	482.60 µg/L	482.60 ppb	23:52:38
3	Se 196.026†	535.7	525.0	505.97 µg/L	505.97 ppb	23:52:38

3	SiO2†	32098.7	30314.2	5472.8 µg/L	5472.8 ppb	23:52:17
3	Si 251.611†	36785.6	37502.1	2549.5 µg/L	2549.5 ppb	23:52:17
3	Sn 189.927†	1140.4	1183.1	461.17 µg/L	461.17 ppb	23:52:38
3	Ti 334.940†	208436.4	215476.3	503.53 µg/L	503.53 ppb	23:52:11
3	Tl 190.801†	458.4	506.7	499.75 µg/L	499.75 ppb	23:52:38
3	U 409.014†	5151.9	5317.5	481.75 µg/L	481.75 ppb	23:52:17
3	V 292.402†	40418.1	41559.0	495.12 µg/L	495.12 ppb	23:52:17
3	Zn 213.857†	22019.9	21693.8	495.94 µg/L	495.94 ppb	23:52:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2024683.9	96.731 %	0.2470			0.26%
Sc RADIAL	93848.7	97.0 %	0.24			0.25%
Y 371.029	1381214.0	96.395 %	0.2279			0.24%
Ag 328.068†	65817.5	532.41 µg/L	20.389	532.41 ppb	20.389	3.83%
QC value within limits for Ag 328.068 Recovery = 106.48%						
Al 396.153Radial†	11314.6	5390.3 µg/L	7.00	5390.3 ppb	7.00	0.13%
QC value within limits for Al 396.153Radial Recovery = 107.81%						
As 188.979†	360.0	529.72 µg/L	51.291	529.72 ppb	51.291	9.68%
QC value within limits for As 188.979 Recovery = 105.94%						
B 249.677†	11684.7	528.31 µg/L	21.724	528.31 ppb	21.724	4.11%
QC value within limits for B 249.677 Recovery = 105.66%						
Ba 233.527†	24310.8	532.64 µg/L	29.111	532.64 ppb	29.111	5.47%
QC value within limits for Ba 233.527 Recovery = 106.53%						
Be 313.107†	904374.7	531.17 µg/L	21.317	531.17 ppb	21.317	4.01%
QC value within limits for Be 313.107 Recovery = 106.23%						
Ca 317.933Radial†	14824.9	5395.1 µg/L	6.35	5395.1 ppb	6.35	0.12%
QC value within limits for Ca 317.933Radial Recovery = 107.90%						
Cd 226.502†	22416.5	532.77 µg/L	30.466	532.77 ppb	30.466	5.72%
QC value within limits for Cd 226.502 Recovery = 106.55%						
Co 228.616†	12370.7	530.84 µg/L	33.051	530.84 ppb	33.051	6.23%
QC value within limits for Co 228.616 Recovery = 106.17%						
Cr 267.716†	24534.0	533.93 µg/L	41.724	533.93 ppb	41.724	7.81%
QC value within limits for Cr 267.716 Recovery = 106.79%						
Cu 324.752†	81361.4	532.43 µg/L	31.668	532.43 ppb	31.668	5.95%
QC value within limits for Cu 324.752 Recovery = 106.49%						
Fe 238.204 Radial†	455.8	5402.6 µg/L	29.92	5402.6 ppb	29.92	0.55%
QC value within limits for Fe 238.204 Radial Recovery = 108.05%						
K 766.490 Radial†	11507.5	5370.3 µg/L	26.55	5370.3 ppb	26.55	0.49%
QC value within limits for K 766.490 Radial Recovery = 107.41%						
Mg 279.077 IEC†	408.7	5390.9 µg/L	12.34	5390.9 ppb	12.34	0.23%
QC value within limits for Mg 279.077 IEC Recovery = 107.82%						
Mn 257.610†	181740.8	546.17 µg/L	20.602	546.17 ppb	20.602	3.77%
QC value within limits for Mn 257.610 Recovery = 109.23%						
Mo 202.031†	5375.0	532.07 µg/L	54.941	532.07 ppb	54.941	10.33%
QC value within limits for Mo 202.031 Recovery = 106.41%						
Na 589.592 Radial†	21237.1	10600 µg/L	15.2	10600 ppb	15.2	0.14%
QC value within limits for Na 589.592 Radial Recovery = 106.00%						
Ni 231.604†	9449.6	529.44 µg/L	31.693	529.44 ppb	31.693	5.99%
QC value within limits for Ni 231.604 Recovery = 105.89%						
P 214.914†	1595.0	2597.2 µg/L	254.85	2597.2 ppb	254.85	9.81%
QC value within limits for P 214.914 Recovery = 103.89%						
Pb 220.353†	2026.5	531.94 µg/L	44.086	531.94 ppb	44.086	8.29%
QC value within limits for Pb 220.353 Recovery = 106.39%						
S 181.975 Axial†	326.5	1039.2 µg/L	81.77	1039.2 ppb	81.77	7.87%
QC value within limits for S 181.975 Axial Recovery = 103.92%						
Sb 206.836†	600.7	538.47 µg/L	48.489	538.47 ppb	48.489	9.00%
QC value within limits for Sb 206.836 Recovery = 107.69%						
Se 196.026†	566.4	544.95 µg/L	33.795	544.95 ppb	33.795	6.20%
QC value within limits for Se 196.026 Recovery = 108.99%						
SiO2†	32039.5	5784.3 µg/L	270.27	5784.3 ppb	270.27	4.67%
QC value within limits for SiO2 Recovery = 108.17%						
Si 251.611†	39678.6	2697.5 µg/L	128.30	2697.5 ppb	128.30	4.76%
QC value within limits for Si 251.611 Recovery = 107.90%						
Sn 189.927†	1363.8	531.49 µg/L	61.022	531.49 ppb	61.022	11.48%
QC value within limits for Sn 189.927 Recovery = 106.30%						
Sr 421.552†	89279.1	530.75 µg/L	0.055	530.75 ppb	0.055	0.01%
QC value within limits for Sr 421.552 Recovery = 106.15%						
Ti 334.940†	226789.4	529.98 µg/L	22.915	529.98 ppb	22.915	4.32%

QC value within limits for Ti 334.940 Recovery = 106.00%
Tl 190.801† 545.1 537.52 µg/L 32.910 537.52 ppb 32.910 6.12%
QC value within limits for Tl 190.801 Recovery = 107.50%
U 409.014† 5781.9 523.91 µg/L 36.512 523.91 ppb 36.512 6.97%
QC value within limits for U 409.014 Recovery = 104.78%
V 292.402† 45048.9 536.96 µg/L 36.247 536.96 ppb 36.247 6.75%
QC value within limits for V 292.402 Recovery = 107.39%
Zn 213.857† 23402.0 535.05 µg/L 33.879 535.05 ppb 33.879 6.33%
QC value within limits for Zn 213.857 Recovery = 107.01%
All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 23:52:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	92222.5	92222.5	95.3 %		23:53:18
1	Al 396.153Radial†	-104.4	9.7	4.5893 µg/L	4.5893 ppb	23:53:18
1	Ca 317.933Radial†	356.0	-11.7	-4.2441 µg/L	-4.2441 ppb	23:53:38
1	Fe 238.204 Radial†	15.7	4.5	53.228 µg/L	53.228 ppb	23:53:38
1	K 766.490 Radial†	454.5	-8.3	-3.8845 µg/L	-3.8845 ppb	23:53:18
1	Mg 279.077 IEC†	6.5	-1.2	-15.949 µg/L	-15.949 ppb	23:53:38
1	Na 589.592 Radial†	175.7	3.8	1.8877 µg/L	1.8877 ppb	23:53:18
1	Sr 421.552†	142.9	10.5	0.0624 µg/L	0.0624 ppb	23:53:18
1	Sc 361.383	2006002.8	2006002.8	95.838 %		23:54:40
1	Y 371.029	1373039.2	1373039.2	95.824 %		23:54:40
1	Ag 328.068†	-492.5	-53.6	-0.4266 µg/L	-0.4266 ppb	23:54:46
1	As 188.979†	-4.3	-1.2	-1.8144 µg/L	-1.8144 ppb	23:55:07
1	B 249.677†	344.7	60.3	2.7086 µg/L	2.7086 ppb	23:54:46
1	Ba 233.527†	-6.7	1.5	0.0317 µg/L	0.0317 ppb	23:55:07
1	Be 313.107†	-973.3	143.3	0.0840 µg/L	0.0840 ppb	23:54:46
1	Cd 226.502†	-169.0	-5.8	-0.1433 µg/L	-0.1433 ppb	23:55:07
1	Co 228.616†	38.6	-7.8	-0.3334 µg/L	-0.3334 ppb	23:55:07
1	Cr 267.716†	12.0	-67.7	-1.4722 µg/L	-1.4722 ppb	23:54:46
1	Cu 324.752†	4328.8	140.1	0.9251 µg/L	0.9251 ppb	23:54:46
1	Mn 257.610†	-681.8	-24.4	-0.0691 µg/L	-0.0691 ppb	23:55:07
1	Mo 202.031†	27.0	23.0	2.2807 µg/L	2.2807 ppb	23:55:07
1	Ni 231.604†	352.7	-8.9	-0.5002 µg/L	-0.5002 ppb	23:55:07
1	P 214.914†	258.4	-2.8	-4.7042 µg/L	-4.7042 ppb	23:55:07
1	Pb 220.353†	28.2	-0.8	-0.1916 µg/L	-0.1916 ppb	23:55:07
1	S 181.975 Axial†	18.2	-3.5	-11.209 µg/L	-11.209 ppb	23:55:07
1	Sb 206.836†	27.9	6.4	5.7766 µg/L	5.7766 ppb	23:55:07
1	Se 196.026†	24.2	-2.1	-1.7549 µg/L	-1.7549 ppb	23:55:07
1	SiO2†	2896.0	242.1	43.699 µg/L	43.699 ppb	23:54:46
1	Si 251.611†	543.4	142.9	9.7124 µg/L	9.7124 ppb	23:55:07
1	Sn 189.927†	-1.6	5.8	2.2587 µg/L	2.2587 ppb	23:55:07
1	Ti 334.940†	-350.6	211.4	0.4955 µg/L	0.4955 ppb	23:54:46
1	Tl 190.801†	-27.0	6.0	5.8406 µg/L	5.8406 ppb	23:55:07
1	U 409.014†	-41.7	-37.7	-3.4335 µg/L	-3.4335 ppb	23:54:46
1	V 292.402†	107.3	-0.3	0.0000 µg/L	0.0000 ppb	23:54:46
1	Zn 213.857†	723.3	-254.2	-5.8531 µg/L	-5.8531 ppb	23:55:07
2	Sc RADIAL	94179.2	94179.2	97.3 %		23:53:44
2	Al 396.153Radial†	-120.1	-4.1	-2.0085 µg/L	-2.0085 ppb	23:53:44
2	Ca 317.933Radial†	345.7	-30.0	-10.916 µg/L	-10.916 ppb	23:54:04
2	Fe 238.204 Radial†	12.9	1.3	15.633 µg/L	15.633 ppb	23:54:04
2	K 766.490 Radial†	489.5	17.7	8.2491 µg/L	8.2491 ppb	23:53:44
2	Mg 279.077 IEC†	11.3	3.6	47.199 µg/L	47.199 ppb	23:54:04
2	Na 589.592 Radial†	188.1	12.7	6.3595 µg/L	6.3595 ppb	23:53:44
2	Sr 421.552†	135.1	-0.6	-0.0033 µg/L	-0.0033 ppb	23:53:44
2	Sc 361.383	2016493.2	2016493.2	96.340 %		23:55:13
2	Y 371.029	1380433.7	1380433.7	96.340 %		23:55:13
2	Ag 328.068†	-456.6	-13.7	-0.1094 µg/L	-0.1094 ppb	23:55:18
2	As 188.979†	2.4	5.8	8.5486 µg/L	8.5486 ppb	23:55:39
2	B 249.677†	291.1	2.8	0.1192 µg/L	0.1192 ppb	23:55:18
2	Ba 233.527†	-6.4	1.8	0.0398 µg/L	0.0398 ppb	23:55:39
2	Be 313.107†	-991.8	129.3	0.0758 µg/L	0.0758 ppb	23:55:18
2	Cd 226.502†	-162.0	2.4	0.0560 µg/L	0.0560 ppb	23:55:39
2	Co 228.616†	43.2	-3.2	-0.1374 µg/L	-0.1374 ppb	23:55:39
2	Cr 267.716†	47.6	-30.8	-0.6698 µg/L	-0.6698 ppb	23:55:18
2	Cu 324.752†	4333.6	121.5	0.7967 µg/L	0.7967 ppb	23:55:18
2	Mn 257.610†	-670.8	-9.3	-0.0303 µg/L	-0.0303 ppb	23:55:39
2	Mo 202.031†	24.3	20.1	1.9868 µg/L	1.9868 ppb	23:55:39
2	Ni 231.604†	377.7	15.2	0.8512 µg/L	0.8512 ppb	23:55:39
2	P 214.914†	265.1	2.8	4.5215 µg/L	4.5215 ppb	23:55:39
2	Pb 220.353†	26.4	-2.8	-0.7289 µg/L	-0.7289 ppb	23:55:39

2	S 181.975 Axial†	20.0	-1.7	-5.5179 µg/L	-5.5179 ppb	23:55:39
2	Sb 206.836†	26.3	4.6	4.1645 µg/L	4.1645 ppb	23:55:39
2	Se 196.026†	23.4	-3.0	-2.8489 µg/L	-2.8489 ppb	23:55:39
2	SiO2†	2864.5	193.5	34.942 µg/L	34.942 ppb	23:55:18
2	Si 251.611†	554.8	151.8	10.322 µg/L	10.322 ppb	23:55:39
2	Sn 189.927†	-1.4	6.0	2.3468 µg/L	2.3468 ppb	23:55:39
2	Ti 334.940†	-291.0	275.2	0.6395 µg/L	0.6395 ppb	23:55:18
2	Tl 190.801†	-32.3	0.6	0.6170 µg/L	0.6170 ppb	23:55:39
2	U 409.014†	-27.6	-22.9	-2.0797 µg/L	-2.0797 ppb	23:55:18
2	V 292.402†	103.1	-5.3	-0.0525 µg/L	-0.0525 ppb	23:55:18
2	Zn 213.857†	745.3	-235.2	-5.4248 µg/L	-5.4248 ppb	23:55:39
3	Sc RADIAL	94855.6	94855.6	98.0 %		23:54:10
3	Al 396.153Radial†	-113.8	3.2	1.4735 µg/L	1.4735 ppb	23:54:10
3	Ca 317.933Radial†	355.0	-23.0	-8.3778 µg/L	-8.3778 ppb	23:54:30
3	Fe 238.204 Radial†	11.8	0.1	0.9453 µg/L	0.9453 ppb	23:54:30
3	K 766.490 Radial†	588.0	114.7	53.522 µg/L	53.522 ppb	23:54:10
3	Mg 279.077 IEC†	8.4	0.6	8.2423 µg/L	8.2423 ppb	23:54:30
3	Na 589.592 Radial†	156.1	-21.3	-10.627 µg/L	-10.627 ppb	23:54:10
3	Sr 421.552†	122.8	-14.2	-0.0842 µg/L	-0.0842 ppb	23:54:10
3	Sc 361.383	2009878.4	2009878.4	96.024 %		23:55:45
3	Y 371.029	1375162.5	1375162.5	95.973 %		23:55:45
3	Ag 328.068†	-521.9	-83.3	-0.6695 µg/L	-0.6695 ppb	23:55:50
3	As 188.979†	-2.4	0.8	1.1725 µg/L	1.1725 ppb	23:56:11
3	B 249.677†	312.3	25.9	1.1765 µg/L	1.1765 ppb	23:55:50
3	Ba 233.527†	-7.4	0.7	0.0156 µg/L	0.0156 ppb	23:56:11
3	Be 313.107†	-919.5	201.3	0.1180 µg/L	0.1180 ppb	23:55:50
3	Cd 226.502†	-168.6	-5.0	-0.1191 µg/L	-0.1191 ppb	23:56:11
3	Co 228.616†	46.6	0.5	0.0219 µg/L	0.0219 ppb	23:56:11
3	Cr 267.716†	92.4	16.0	0.3483 µg/L	0.3483 ppb	23:55:50
3	Cu 324.752†	4323.9	126.3	0.8251 µg/L	0.8251 ppb	23:55:50
3	Mn 257.610†	-655.4	4.4	0.0127 µg/L	0.0127 ppb	23:56:11
3	Mo 202.031†	23.8	19.7	1.9464 µg/L	1.9464 ppb	23:56:11
3	Ni 231.604†	366.3	4.6	0.2572 µg/L	0.2572 ppb	23:56:11
3	P 214.914†	259.8	-1.8	-3.1174 µg/L	-3.1174 ppb	23:56:11
3	Pb 220.353†	18.9	-10.5	-2.7332 µg/L	-2.7332 ppb	23:56:11
3	S 181.975 Axial†	17.6	-4.2	-13.254 µg/L	-13.254 ppb	23:56:11
3	Sb 206.836†	28.9	7.4	6.6254 µg/L	6.6254 ppb	23:56:11
3	Se 196.026†	28.7	2.6	2.4407 µg/L	2.4407 ppb	23:56:11
3	SiO2†	2855.9	194.4	35.104 µg/L	35.104 ppb	23:55:50
3	Si 251.611†	562.9	162.1	11.021 µg/L	11.021 ppb	23:56:11
3	Sn 189.927†	-7.4	-0.3	-0.1205 µg/L	-0.1205 ppb	23:56:11
3	Ti 334.940†	-298.3	266.5	0.6225 µg/L	0.6225 ppb	23:55:50
3	Tl 190.801†	-25.5	7.6	7.4080 µg/L	7.4080 ppb	23:56:11
3	U 409.014†	-58.3	-54.9	-4.9835 µg/L	-4.9835 ppb	23:55:50
3	V 292.402†	97.7	-10.6	-0.1141 µg/L	-0.1141 ppb	23:55:50
3	Zn 213.857†	732.4	-246.2	-5.6704 µg/L	-5.6704 ppb	23:56:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2010791.5	96.067 %	0.2534			0.26%
Sc RADIAL	93752.4	96.9 %	1.41			1.46%
Y 371.029	1376211.8	96.046 %	0.2657			0.28%
Ag 328.068†	-50.2	-0.4018 µg/L	0.28085	-0.4018 ppb	0.28085	69.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.9	1.3514 µg/L	3.30062	1.3514 ppb	3.30062	244.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.8	2.6356 µg/L	5.33416	2.6356 ppb	5.33416	202.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	29.7	1.3348 µg/L	1.30196	1.3348 ppb	1.30196	97.54%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.3	0.0290 µg/L	0.01233	0.0290 ppb	0.01233	42.45%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	158.0	0.0926 µg/L	0.02240	0.0926 ppb	0.02240	24.19%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-21.6	-7.8461 µg/L	3.36770	-7.8461 ppb	3.36770	42.92%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.8	-0.0688 µg/L	0.10878	-0.0688 ppb	0.10878	158.12%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.5	-0.1496 µg/L	0.17800	-0.1496 ppb	0.17800	118.97%

Cr	267.716†	-27.5	-0.5979 µg/L	0.91237	-0.5979 ppb	0.91237	152.60%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	129.3	0.8489 µg/L	0.06743	0.8489 ppb	0.06743	7.94%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	2.0	23.269 µg/L	26.9645	23.269 ppb	26.9645	115.88%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	41.3	19.295 µg/L	30.2553	19.295 ppb	30.2553	156.80%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.0	13.164 µg/L	31.8604	13.164 ppb	31.8604	242.03%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-9.8	-0.0289 µg/L	0.04093	-0.0289 ppb	0.04093	141.51%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	20.9	2.0713 µg/L	0.18249	2.0713 ppb	0.18249	8.81%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-1.6	-0.7933 µg/L	8.80492	-0.7933 ppb	8.80492	>999.9%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	3.6	0.2028 µg/L	0.67733	0.2028 ppb	0.67733	334.07%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-0.6	-1.1001 µg/L	4.93261	-1.1001 ppb	4.93261	448.40%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-4.7	-1.2179 µg/L	1.33953	-1.2179 ppb	1.33953	109.99%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-3.1	-9.9938 µg/L	4.00884	-9.9938 ppb	4.00884	40.11%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	6.1	5.5222 µg/L	1.25004	5.5222 ppb	1.25004	22.64%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-0.8	-0.7210 µg/L	2.79224	-0.7210 ppb	2.79224	387.25%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		210.0	37.915 µg/L	5.0099	37.915 ppb	5.0099	13.21%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	152.3	10.352 µg/L	0.6550	10.352 ppb	0.6550	6.33%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	3.8	1.4950 µg/L	1.39976	1.4950 ppb	1.39976	93.63%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-1.4	-0.0084 µg/L	0.07344	-0.0084 ppb	0.07344	878.99%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	251.0	0.5859 µg/L	0.07867	0.5859 ppb	0.07867	13.43%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	4.7	4.6218 µg/L	3.55577	4.6218 ppb	3.55577	76.93%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-38.5	-3.4989 µg/L	1.45298	-3.4989 ppb	1.45298	41.53%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-5.4	-0.0555 µg/L	0.05712	-0.0555 ppb	0.05712	102.86%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-245.2	-5.6494 µg/L	0.21494	-5.6494 ppb	0.21494	3.80%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: 247347001|955136|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 341
 Date Collected: 3/16/2010 23:56:21
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247347001|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94772.2	94772.2	97.9 %		23:56:54
1	Al 396.153Radial†	20996.0	21562.0	10293 µg/L	10293 ppb	23:56:54
1	Ca 317.933Radial†	13590.3	13494.1	4910.8 µg/L	4910.8 ppb	23:56:54
1	Fe 238.204 Radial†	6888.2	7022.7	83063 µg/L	83063 ppb	23:57:14
1	K 766.490 Radial†	11780.8	11546.1	5388.4 µg/L	5388.4 ppb	23:56:54
1	Mg 279.077 IEC†	202.4	198.7	2530.5 µg/L	2530.5 ppb	23:57:14
1	Na 589.592 Radial†	8087.6	8079.1	4032.3 µg/L	4032.3 ppb	23:56:54
1	Sr 421.552†	2646.5	2563.4	15.239 µg/L	15.239 ppb	23:56:54
1	Sc 361.383	2032313.9	2032313.9	97.095 %		23:58:19
1	Y 371.029	1482007.4	1482007.4	103.43 %		23:58:19
1	Ag 328.068†	-1208.2	-784.1	0.3060 µg/L	0.3060 ppb	23:58:24
1	As 188.979†	5.4	8.9	2.2180 µg/L	2.2180 ppb	23:58:45
1	B 249.677†	592.1	310.5	-29.239 µg/L	-29.239 ppb	23:58:24
1	Ba 233.527†	5073.0	5233.1	114.51 µg/L	114.51 ppb	23:58:24
1	Be 313.107†	8815.3	10237.8	4.4416 µg/L	4.4416 ppb	23:58:24
1	Cd 226.502†	295.0	474.4	1.8957 µg/L	1.8957 ppb	23:58:45
1	Co 228.616†	367.1	330.1	5.5691 µg/L	5.5691 ppb	23:58:45
1	Cr 267.716†	461.8	395.4	8.6191 µg/L	8.6191 ppb	23:58:45
1	Cu 324.752†	5191.6	970.2	21.953 µg/L	21.953 ppb	23:58:24
1	Mn 257.610†	870314.0	897035.5	2700.7 µg/L	2700.7 ppb	23:58:19
1	Mo 202.031†	107.3	105.4	13.585 µg/L	13.585 ppb	23:58:45
1	Ni 231.604†	469.9	107.0	7.0657 µg/L	7.0657 ppb	23:58:45
1	P 214.914†	712.2	461.1	700.36 µg/L	700.36 ppb	23:58:45
1	Pb 220.353†	237.1	214.0	58.477 µg/L	58.477 ppb	23:58:45
1	S 181.975 Axial†	23.6	1.7	5.4849 µg/L	5.4849 ppb	23:58:45
1	Sb 206.836†	11.0	-11.4	-10.132 µg/L	-10.132 ppb	23:58:45
1	Se 196.026†	-52.6	-81.5	185.12 µg/L	185.12 ppb	23:58:45
1	SiO2†	331133.8	338259.6	61068 µg/L	61068 ppb	23:58:19
1	Si 251.611†	403881.2	415538.8	28250 µg/L	28250 ppb	23:58:19
1	Sn 189.927†	-30.9	-24.4	-9.4164 µg/L	-9.4164 ppb	23:58:45
1	Ti 334.940†	1714543.9	1766409.9	4130.4 µg/L	4130.4 ppb	23:58:19
1	Tl 190.801†	-79.3	-47.6	11.231 µg/L	11.231 ppb	23:58:45
1	U 409.014†	-1766.3	-1813.4	-176.50 µg/L	-176.50 ppb	23:58:19
1	V 292.402†	2785.3	2756.3	21.928 µg/L	21.928 ppb	23:58:24
1	Zn 213.857†	25459.3	25212.1	576.35 µg/L	576.35 ppb	23:58:24
2	Sc RADIAL	94937.0	94937.0	98.1 %		23:57:20
2	Al 396.153Radial†	21038.3	21567.9	10296 µg/L	10296 ppb	23:57:20
2	Ca 317.933Radial†	13548.9	13427.8	4886.7 µg/L	4886.7 ppb	23:57:20
2	Fe 238.204 Radial†	6937.2	7060.5	83509 µg/L	83509 ppb	23:57:40
2	K 766.490 Radial†	11701.5	11444.3	5340.9 µg/L	5340.9 ppb	23:57:20
2	Mg 279.077 IEC†	199.0	194.9	2480.4 µg/L	2480.4 ppb	23:57:40
2	Na 589.592 Radial†	8198.2	8177.5	4081.4 µg/L	4081.4 ppb	23:57:20
2	Sr 421.552†	2683.7	2596.6	15.436 µg/L	15.436 ppb	23:57:20
2	Sc 361.383	2012653.5	2012653.5	96.156 %		23:58:53
2	Y 371.029	1464336.2	1464336.2	102.20 %		23:58:53
2	Ag 328.068†	-1262.6	-852.8	-0.2057 µg/L	-0.2057 ppb	23:58:59
2	As 188.979†	7.7	11.3	5.7214 µg/L	5.7214 ppb	23:59:19
2	B 249.677†	586.5	310.5	-29.468 µg/L	-29.468 ppb	23:58:59
2	Ba 233.527†	5039.9	5249.8	114.87 µg/L	114.87 ppb	23:58:59
2	Be 313.107†	8801.5	10312.2	4.4821 µg/L	4.4821 ppb	23:58:59
2	Cd 226.502†	310.3	493.3	2.2944 µg/L	2.2944 ppb	23:59:19
2	Co 228.616†	360.6	326.9	5.4181 µg/L	5.4181 ppb	23:59:19
2	Cr 267.716†	463.2	401.5	8.7535 µg/L	8.7535 ppb	23:59:19
2	Cu 324.752†	5164.4	994.2	22.194 µg/L	22.194 ppb	23:58:59
2	Mn 257.610†	863313.9	898511.4	2705.2 µg/L	2705.2 ppb	23:58:53
2	Mo 202.031†	106.7	105.9	13.649 µg/L	13.649 ppb	23:59:19
2	Ni 231.604†	465.5	107.2	7.0830 µg/L	7.0830 ppb	23:59:19
2	P 214.914†	709.8	465.8	707.69 µg/L	707.69 ppb	23:59:19
2	Pb 220.353†	236.2	215.5	58.869 µg/L	58.869 ppb	23:59:19

2	S 181.975 Axial†	19.7	-2.0	-6.5170 µg/L	-6.5170 ppb	23:59:19
2	Sb 206.836†	5.6	-16.9	-15.081 µg/L	-15.081 ppb	23:59:19
2	Se 196.026†	-53.7	-83.1	185.06 µg/L	185.06 ppb	23:59:19
2	SiO2†	328518.3	338870.9	61178 µg/L	61178 ppb	23:58:53
2	Si 251.611†	400266.6	415843.0	28271 µg/L	28271 ppb	23:58:53
2	Sn 189.927†	-23.6	-17.1	-6.5613 µg/L	-6.5613 ppb	23:59:19
2	Ti 334.940†	1701338.7	1769926.2	4138.6 µg/L	4138.6 ppb	23:58:53
2	Tl 190.801†	-83.6	-52.8	6.3189 µg/L	6.3189 ppb	23:59:19
2	U 409.014†	-1715.3	-1778.1	-173.35 µg/L	-173.35 ppb	23:58:53
2	V 292.402†	2828.2	2828.9	22.732 µg/L	22.732 ppb	23:58:59
2	Zn 213.857†	25509.4	25520.2	583.42 µg/L	583.42 ppb	23:58:59
3	Sc RADIAL	95287.1	95287.1	98.4 %		23:57:46
3	Al 396.153Radial†	21196.8	21650.1	10335 µg/L	10335 ppb	23:57:46
3	Ca 317.933Radial†	13698.4	13528.9	4923.5 µg/L	4923.5 ppb	23:57:46
3	Fe 238.204 Radial†	6968.1	7065.9	83574 µg/L	83574 ppb	23:58:06
3	K 766.490 Radial†	11824.1	11525.0	5378.5 µg/L	5378.5 ppb	23:57:46
3	Mg 279.077 IEC†	198.8	194.0	2467.8 µg/L	2467.8 ppb	23:58:06
3	Na 589.592 Radial†	8266.3	8216.0	4100.6 µg/L	4100.6 ppb	23:57:46
3	Sr 421.552†	2728.2	2631.8	15.646 µg/L	15.646 ppb	23:57:46
3	Sc 361.383	2032366.4	2032366.4	97.098 %		23:59:27
3	Y 371.029	1477471.1	1477471.1	103.11 %		23:59:27
3	Ag 328.068†	-1282.8	-860.9	-0.2765 µg/L	-0.2765 ppb	23:59:33
3	As 188.979†	2.5	5.8	-2.3211 µg/L	-2.3211 ppb	23:59:53
3	B 249.677†	600.5	319.1	-29.114 µg/L	-29.114 ppb	23:59:33
3	Ba 233.527†	4790.8	4942.4	108.15 µg/L	108.15 ppb	23:59:33
3	Be 313.107†	8122.9	9524.5	4.0863 µg/L	4.0863 ppb	23:59:33
3	Cd 226.502†	254.2	432.4	0.8406 µg/L	0.8406 ppb	23:59:53
3	Co 228.616†	342.1	304.3	4.8104 µg/L	4.8104 ppb	23:59:53
3	Cr 267.716†	417.7	349.9	7.6305 µg/L	7.6305 ppb	23:59:53
3	Cu 324.752†	5156.5	933.9	21.812 µg/L	21.812 ppb	23:59:33
3	Mn 257.610†	840650.9	866462.7	2608.9 µg/L	2608.9 ppb	23:59:27
3	Mo 202.031†	90.8	88.4	11.924 µg/L	11.924 ppb	23:59:53
3	Ni 231.604†	467.0	104.1	6.9079 µg/L	6.9079 ppb	23:59:53
3	P 214.914†	666.0	413.5	620.95 µg/L	620.95 ppb	23:59:53
3	Pb 220.353†	219.4	195.8	53.695 µg/L	53.695 ppb	23:59:53
3	S 181.975 Axial†	24.7	2.9	9.2339 µg/L	9.2339 ppb	23:59:53
3	Sb 206.836†	13.1	-9.2	-8.2661 µg/L	-8.2661 ppb	23:59:53
3	Se 196.026†	-46.7	-75.4	192.54 µg/L	192.54 ppb	23:59:53
3	SiO2†	322078.9	328925.2	59383 µg/L	59383 ppb	23:59:27
3	Si 251.611†	392550.5	403858.7	27456 µg/L	27456 ppb	23:59:27
3	Sn 189.927†	-17.2	-10.3	-3.9041 µg/L	-3.9041 ppb	23:59:53
3	Ti 334.940†	1644972.0	1694713.1	3962.8 µg/L	3962.8 ppb	23:59:27
3	Tl 190.801†	-78.0	-46.2	10.862 µg/L	10.862 ppb	23:59:53
3	U 409.014†	-1677.6	-1721.9	-168.27 µg/L	-168.27 ppb	23:59:27
3	V 292.402†	2722.4	2691.5	21.091 µg/L	21.091 ppb	23:59:33
3	Zn 213.857†	24180.1	23893.9	545.98 µg/L	545.98 ppb	23:59:33

Mean Data: 247347001|955136|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025777.9	96.783 %	%	0.5430			0.56%
Sc RADIAL	94998.8	98.2 %	%	0.27			0.28%
Y 371.029	1474604.9	102.91 %	%	0.641			0.62%
Ag 328.068†	-832.6	-0.0587 µg/L	µg/L	0.31784	-0.0587 ppb	0.31784	541.09%
Al 396.153Radial†	21593.3	10308 µg/L	µg/L	23.5	10308 ppb	23.5	0.23%
As 188.979†	8.7	1.8728 µg/L	µg/L	4.03237	1.8728 ppb	4.03237	215.32%
B 249.677†	313.4	-29.274 µg/L	µg/L	0.1792	-29.274 ppb	0.1792	0.61%
Ba 233.527†	5141.8	112.51 µg/L	µg/L	3.782	112.51 ppb	3.782	3.36%
Be 313.107†	10024.9	4.3367 µg/L	µg/L	0.21775	4.3367 ppb	0.21775	5.02%
Ca 317.933Radial†	13483.6	4907.0 µg/L	µg/L	18.70	4907.0 ppb	18.70	0.38%
Cd 226.502†	466.7	1.6769 µg/L	µg/L	0.75118	1.6769 ppb	0.75118	44.79%
Co 228.616†	320.4	5.2659 µg/L	µg/L	0.40158	5.2659 ppb	0.40158	7.63%
Cr 267.716†	382.3	8.3343 µg/L	µg/L	0.61323	8.3343 ppb	0.61323	7.36%
Cu 324.752†	966.1	21.986 µg/L	µg/L	0.1931	21.986 ppb	0.1931	0.88%
Fe 238.204 Radial†	7049.7	83382 µg/L	µg/L	278.3	83382 ppb	278.3	0.33%
K 766.490 Radial†	11505.1	5369.2 µg/L	µg/L	25.07	5369.2 ppb	25.07	0.47%
Mg 279.077 IEC†	195.9	2492.9 µg/L	µg/L	33.15	2492.9 ppb	33.15	1.33%
Mn 257.610†	887336.5	2671.6 µg/L	µg/L	54.37	2671.6 ppb	54.37	2.03%
Mo 202.031†	99.9	13.053 µg/L	µg/L	0.9778	13.053 ppb	0.9778	7.49%
Na 589.592 Radial†	8157.5	4071.5 µg/L	µg/L	35.23	4071.5 ppb	35.23	0.87%

Ni 231.604†	106.1	7.0189 µg/L	0.09647	7.0189 ppb	0.09647	1.37%
P 214.914†	446.8	676.33 µg/L	48.102	676.33 ppb	48.102	7.11%
Pb 220.353†	208.5	57.014 µg/L	2.8805	57.014 ppb	2.8805	5.05%
S 181.975 Axial†	0.9	2.7339 µg/L	8.22793	2.7339 ppb	8.22793	300.96%
Sb 206.836†	-12.5	-11.160 µg/L	3.5216	-11.160 ppb	3.5216	31.56%
Se 196.026†	-80.0	187.57 µg/L	4.303	187.57 ppb	4.303	2.29%
SiO2†	335351.9	60543 µg/L	1006.3	60543 ppb	1006.3	1.66%
Si 251.611†	411746.8	27992 µg/L	464.5	27992 ppb	464.5	1.66%
Sn 189.927†	-17.3	-6.6272 µg/L	2.75675	-6.6272 ppb	2.75675	41.60%
Sr 421.552†	2597.2	15.440 µg/L	0.2034	15.440 ppb	0.2034	1.32%
Ti 334.940†	1743683.1	4077.3 µg/L	99.25	4077.3 ppb	99.25	2.43%
Tl 190.801†	-48.9	9.4706 µg/L	2.73576	9.4706 ppb	2.73576	28.89%
U 409.014†	-1771.1	-172.71 µg/L	4.153	-172.71 ppb	4.153	2.40%
V 292.402†	2758.9	21.917 µg/L	0.8207	21.917 ppb	0.8207	3.74%
Zn 213.857†	24875.4	568.58 µg/L	19.894	568.58 ppb	19.894	3.50%

Sequence No.: 31
 Sample ID: 247347002|955136|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 342
 Date Collected: 3/17/2010 00:00:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247347002|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95281.6	95281.6	98.4 %		00:00:33
1	Al 396.153Radial†	12749.5	13070.4	6239.2 µg/L	6239.2 ppb	00:00:33
1	Ca 317.933Radial†	8818.5	8572.6	3119.8 µg/L	3119.8 ppb	00:00:33
1	Fe 238.204 Radial†	5236.4	5307.3	62773 µg/L	62773 ppb	00:00:53
1	K 766.490 Radial†	8055.3	7697.3	3592.2 µg/L	3592.2 ppb	00:00:33
1	Mg 279.077 IEC†	91.4	84.8	1050.9 µg/L	1050.9 ppb	00:00:53
1	Na 589.592 Radial†	5258.8	5161.3	2576.0 µg/L	2576.0 ppb	00:00:33
1	Sr 421.552†	1342.5	1224.3	7.2782 µg/L	7.2782 ppb	00:00:33
1	Sc 361.383	2023831.9	2023831.9	96.690 %		00:01:58
1	Y 371.029	1453605.0	1453605.0	101.45 %		00:01:58
1	Ag 328.068†	-1152.4	-731.7	-0.8841 µg/L	-0.8841 ppb	00:02:03
1	As 188.979†	5.0	8.4	4.2823 µg/L	4.2823 ppb	00:02:24
1	B 249.677†	513.5	231.8	-22.227 µg/L	-22.227 ppb	00:02:03
1	Ba 233.527†	2273.5	2359.7	51.652 µg/L	51.652 ppb	00:02:24
1	Be 313.107†	6243.1	7615.6	3.2249 µg/L	3.2249 ppb	00:02:03
1	Cd 226.502†	190.9	368.1	1.6594 µg/L	1.6594 ppb	00:02:24
1	Co 228.616†	285.6	247.3	3.7901 µg/L	3.7901 ppb	00:02:24
1	Cr 267.716†	342.0	273.5	5.9638 µg/L	5.9638 ppb	00:02:24
1	Cu 324.752†	4853.4	642.9	16.000 µg/L	16.000 ppb	00:02:03
1	Mn 257.610†	569486.4	589667.1	1775.9 µg/L	1775.9 ppb	00:01:58
1	Mo 202.031†	111.0	109.6	13.234 µg/L	13.234 ppb	00:02:24
1	Ni 231.604†	428.9	66.7	4.5430 µg/L	4.5430 ppb	00:02:24
1	P 214.914†	552.4	298.9	446.60 µg/L	446.60 ppb	00:02:24
1	Pb 220.353†	141.0	115.7	32.012 µg/L	32.012 ppb	00:02:24
1	S 181.975 Axial†	21.9	0.1	0.4457 µg/L	0.4457 ppb	00:02:24
1	Sb 206.836†	12.6	-9.7	-8.6257 µg/L	-8.6257 ppb	00:02:24
1	Se 196.026†	-35.1	-63.6	138.72 µg/L	138.72 ppb	00:02:24
1	SiO2†	249504.1	255265.0	46084 µg/L	46084 ppb	00:01:58
1	Si 251.611†	303794.6	313769.5	21331 µg/L	21331 ppb	00:01:58
1	Sn 189.927†	-22.6	-15.9	-6.1921 µg/L	-6.1921 ppb	00:02:24
1	Ti 334.940†	1355711.6	1402695.4	3280.0 µg/L	3280.0 ppb	00:01:58
1	Tl 190.801†	-66.1	-34.2	10.566 µg/L	10.566 ppb	00:02:24
1	U 409.014†	-1397.1	-1439.1	-139.58 µg/L	-139.58 ppb	00:01:58
1	V 292.402†	2141.1	2102.1	16.812 µg/L	16.812 ppb	00:02:03
1	Zn 213.857†	19530.0	19189.7	438.75 µg/L	438.75 ppb	00:02:03
2	Sc RADIAL	94807.5	94807.5	98.0 %		00:00:59
2	Al 396.153Radial†	12690.5	13075.0	6241.4 µg/L	6241.4 ppb	00:00:59
2	Ca 317.933Radial†	8774.4	8572.4	3119.7 µg/L	3119.7 ppb	00:00:59
2	Fe 238.204 Radial†	5236.0	5333.4	63082 µg/L	63082 ppb	00:01:19
2	K 766.490 Radial†	8113.5	7797.6	3639.0 µg/L	3639.0 ppb	00:00:59
2	Mg 279.077 IEC†	98.4	92.5	1152.0 µg/L	1152.0 ppb	00:01:19
2	Na 589.592 Radial†	5231.8	5160.5	2575.6 µg/L	2575.6 ppb	00:00:59
2	Sr 421.552†	1296.8	1184.4	7.0413 µg/L	7.0413 ppb	00:00:59
2	Sc 361.383	2023694.2	2023694.2	96.684 %		00:02:32
2	Y 371.029	1452226.3	1452226.3	101.35 %		00:02:32
2	Ag 328.068†	-1060.7	-636.8	-0.0934 µg/L	-0.0934 ppb	00:02:37
2	As 188.979†	4.9	8.4	4.1603 µg/L	4.1603 ppb	00:02:58
2	B 249.677†	547.6	267.0	-20.788 µg/L	-20.788 ppb	00:02:37
2	Ba 233.527†	2263.9	2349.9	51.439 µg/L	51.439 ppb	00:02:58
2	Be 313.107†	6206.6	7578.3	3.2036 µg/L	3.2036 ppb	00:02:37
2	Cd 226.502†	185.7	362.6	1.4950 µg/L	1.4950 ppb	00:02:58
2	Co 228.616†	274.4	235.8	3.2966 µg/L	3.2966 ppb	00:02:58
2	Cr 267.716†	363.4	295.7	6.4468 µg/L	6.4468 ppb	00:02:58
2	Cu 324.752†	4870.4	660.8	16.175 µg/L	16.175 ppb	00:02:37
2	Mn 257.610†	569536.8	589759.3	1776.1 µg/L	1776.1 ppb	00:02:32
2	Mo 202.031†	107.9	106.5	12.933 µg/L	12.933 ppb	00:02:58
2	Ni 231.604†	420.1	57.6	4.0383 µg/L	4.0383 ppb	00:02:58
2	P 214.914†	549.6	296.0	441.54 µg/L	441.54 ppb	00:02:58
2	Pb 220.353†	137.3	111.9	31.015 µg/L	31.015 ppb	00:02:58

2	S 181.975 Axial†	16.2	-5.8	-18.382 µg/L	-18.382 ppb	00:02:58
2	Sb 206.836†	14.1	-8.2	-7.2367 µg/L	-7.2367 ppb	00:02:58
2	Se 196.026†	-36.3	-64.9	138.42 µg/L	138.42 ppb	00:02:58
2	SiO2†	249204.6	254972.8	46032 µg/L	46032 ppb	00:02:32
2	Si 251.611†	303347.4	313328.4	21301 µg/L	21301 ppb	00:02:32
2	Sn 189.927†	-19.4	-12.7	-4.9253 µg/L	-4.9253 ppb	00:02:58
2	Ti 334.940†	1354990.2	1402044.6	3278.5 µg/L	3278.5 ppb	00:02:32
2	Tl 190.801†	-70.4	-38.7	6.2447 µg/L	6.2447 ppb	00:02:58
2	U 409.014†	-1417.5	-1460.3	-141.55 µg/L	-141.55 ppb	00:02:32
2	V 292.402†	2207.3	2170.7	17.579 µg/L	17.579 ppb	00:02:37
2	Zn 213.857†	19550.9	19212.6	439.26 µg/L	439.26 ppb	00:02:37
3	Sc RADIAL	95804.0	95804.0	99.0 %		00:01:25
3	Al 396.153Radial†	12759.8	13010.2	6210.5 µg/L	6210.5 ppb	00:01:25
3	Ca 317.933Radial†	8818.3	8523.6	3101.9 µg/L	3101.9 ppb	00:01:25
3	Fe 238.204 Radial†	5221.0	5262.7	62245 µg/L	62245 ppb	00:01:45
3	K 766.490 Radial†	8133.9	7732.2	3608.5 µg/L	3608.5 ppb	00:01:25
3	Mg 279.077 IEC†	90.0	82.9	1026.3 µg/L	1026.3 ppb	00:01:45
3	Na 589.592 Radial†	5231.6	5104.8	2547.8 µg/L	2547.8 ppb	00:01:25
3	Sr 421.552†	1314.5	1188.6	7.0659 µg/L	7.0659 ppb	00:01:25
3	Sc 361.383	2036337.8	2036337.8	97.288 %		00:03:05
3	Y 371.029	1460940.2	1460940.2	101.96 %		00:03:05
3	Ag 328.068†	-1102.8	-673.4	-0.4630 µg/L	-0.4630 ppb	00:03:11
3	As 188.979†	2.4	5.7	0.3030 µg/L	0.3030 ppb	00:03:32
3	B 249.677†	523.7	239.0	-21.627 µg/L	-21.627 ppb	00:03:11
3	Ba 233.527†	2071.6	2137.8	46.796 µg/L	46.796 ppb	00:03:32
3	Be 313.107†	5724.2	7042.7	2.9389 µg/L	2.9389 ppb	00:03:11
3	Cd 226.502†	148.4	323.1	0.6495 µg/L	0.6495 ppb	00:03:32
3	Co 228.616†	267.3	226.7	3.1812 µg/L	3.1812 ppb	00:03:32
3	Cr 267.716†	308.5	236.9	5.1670 µg/L	5.1670 ppb	00:03:32
3	Cu 324.752†	4918.9	679.4	16.140 µg/L	16.140 ppb	00:03:11
3	Mn 257.610†	551793.1	567863.4	1710.3 µg/L	1710.3 ppb	00:03:05
3	Mo 202.031†	98.0	95.6	11.823 µg/L	11.823 ppb	00:03:32
3	Ni 231.604†	412.0	46.5	3.4074 µg/L	3.4074 ppb	00:03:32
3	P 214.914†	524.9	267.2	394.33 µg/L	394.33 ppb	00:03:32
3	Pb 220.353†	140.4	114.2	31.597 µg/L	31.597 ppb	00:03:32
3	S 181.975 Axial†	16.5	-5.6	-17.900 µg/L	-17.900 ppb	00:03:32
3	Sb 206.836†	14.1	-8.2	-7.2847 µg/L	-7.2847 ppb	00:03:32
3	Se 196.026†	-27.8	-55.9	144.27 µg/L	144.27 ppb	00:03:32
3	SiO2†	244462.1	248497.6	44863 µg/L	44863 ppb	00:03:05
3	Si 251.611†	297706.7	305582.3	20775 µg/L	20775 ppb	00:03:05
3	Sn 189.927†	-17.2	-10.2	-3.9790 µg/L	-3.9790 ppb	00:03:32
3	Ti 334.940†	1308778.8	1345843.2	3147.1 µg/L	3147.1 ppb	00:03:05
3	Tl 190.801†	-67.9	-35.7	7.6458 µg/L	7.6458 ppb	00:03:32
3	U 409.014†	-1357.0	-1389.0	-134.96 µg/L	-134.96 ppb	00:03:05
3	V 292.402†	2071.1	2016.5	15.861 µg/L	15.861 ppb	00:03:11
3	Zn 213.857†	18625.5	18135.9	414.52 µg/L	414.52 ppb	00:03:11

Mean Data: 247347002|955136|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2027954.7	96.887 %	0.3469			0.36%
Sc RADIAL	95297.7	98.5 %	0.51			0.52%
Y 371.029	1455590.5	101.59 %	0.327			0.32%
Ag 328.068†	-680.6	-0.4802 µg/L	0.39563	-0.4802 ppb	0.39563	82.39%
Al 396.153Radial†	13051.8	6230.3 µg/L	17.25	6230.3 ppb	17.25	0.28%
As 188.979†	7.5	2.9152 µg/L	2.26306	2.9152 ppb	2.26306	77.63%
B 249.677†	245.9	-21.547 µg/L	0.7232	-21.547 ppb	0.7232	3.36%
Ba 233.527†	2282.5	49.962 µg/L	2.7441	49.962 ppb	2.7441	5.49%
Be 313.107†	7412.2	3.1225 µg/L	0.15932	3.1225 ppb	0.15932	5.10%
Ca 317.933Radial†	8556.2	3113.8 µg/L	10.28	3113.8 ppb	10.28	0.33%
Cd 226.502†	351.3	1.2680 µg/L	0.54184	1.2680 ppb	0.54184	42.73%
Co 228.616†	236.6	3.4226 µg/L	0.32338	3.4226 ppb	0.32338	9.45%
Cr 267.716†	268.7	5.8592 µg/L	0.64625	5.8592 ppb	0.64625	11.03%
Cu 324.752†	661.0	16.105 µg/L	0.0925	16.105 ppb	0.0925	0.57%
Fe 238.204 Radial†	5301.1	62700 µg/L	423.1	62700 ppb	423.1	0.67%
K 766.490 Radial†	7742.4	3613.2 µg/L	23.78	3613.2 ppb	23.78	0.66%
Mg 279.077 IEC†	86.7	1076.4 µg/L	66.60	1076.4 ppb	66.60	6.19%
Mn 257.610†	582429.9	1754.1 µg/L	37.93	1754.1 ppb	37.93	2.16%
Mo 202.031†	103.9	12.663 µg/L	0.7428	12.663 ppb	0.7428	5.87%
Na 589.592 Radial†	5142.2	2566.5 µg/L	16.17	2566.5 ppb	16.17	0.63%

Ni 231.604†	56.9	3.9962 µg/L	0.56896	3.9962 ppb	0.56896	14.24%
P 214.914†	287.4	427.49 µg/L	28.829	427.49 ppb	28.829	6.74%
Pb 220.353†	113.9	31.541 µg/L	0.5008	31.541 ppb	0.5008	1.59%
S 181.975 Axial†	-3.8	-11.945 µg/L	10.7338	-11.945 ppb	10.7338	89.86%
Sb 206.836†	-8.7	-7.7157 µg/L	0.78847	-7.7157 ppb	0.78847	10.22%
Se 196.026†	-61.5	140.47 µg/L	3.299	140.47 ppb	3.299	2.35%
SiO2†	252911.8	45660 µg/L	690.7	45660 ppb	690.7	1.51%
Si 251.611†	310893.4	21136 µg/L	313.1	21136 ppb	313.1	1.48%
Sn 189.927†	-13.0	-5.0321 µg/L	1.11044	-5.0321 ppb	1.11044	22.07%
Sr 421.552†	1199.1	7.1285 µg/L	0.13023	7.1285 ppb	0.13023	1.83%
Ti 334.940†	1383527.7	3235.2 µg/L	76.32	3235.2 ppb	76.32	2.36%
Tl 190.801†	-36.2	8.1521 µg/L	2.20461	8.1521 ppb	2.20461	27.04%
U 409.014†	-1429.4	-138.70 µg/L	3.382	-138.70 ppb	3.382	2.44%
V 292.402†	2096.4	16.751 µg/L	0.8607	16.751 ppb	0.8607	5.14%
Zn 213.857†	18846.1	430.85 µg/L	14.139	430.85 ppb	14.139	3.28%

Sequence No.: 32
 Sample ID: 247347003|955136|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 343
 Date Collected: 3/17/2010 00:03:42
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247347003|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94278.2	94278.2	97.4 %		00:04:12
1	Al 396.153Radial†	23175.8	23912.1	11415 µg/L	11415 ppb	00:04:12
1	Ca 317.933Radial†	10873.9	10778.2	3922.4 µg/L	3922.4 ppb	00:04:12
1	Fe 238.204 Radial†	5328.4	5458.3	64559 µg/L	64559 ppb	00:04:32
1	K 766.490 Radial†	12154.5	11992.8	5596.8 µg/L	5596.8 ppb	00:04:12
1	Mg 279.077 IEC†	124.3	119.6	1507.5 µg/L	1507.5 ppb	00:04:32
1	Na 589.592 Radial†	10032.7	10119.3	5050.6 µg/L	5050.6 ppb	00:04:12
1	Sr 421.552†	1966.3	1879.2	11.172 µg/L	11.172 ppb	00:04:12
1	Sc 361.383	2029618.7	2029618.7	96.967 %		00:05:38
1	Y 371.029	1478769.2	1478769.2	103.20 %		00:05:38
1	Ag 328.068†	-1107.2	-681.6	-0.3249 µg/L	-0.3249 ppb	00:05:43
1	As 188.979†	4.7	8.1	3.4597 µg/L	3.4597 ppb	00:06:04
1	B 249.677†	540.6	258.2	-21.918 µg/L	-21.918 ppb	00:05:43
1	Ba 233.527†	3783.3	3910.1	85.564 µg/L	85.564 ppb	00:06:04
1	Be 313.107†	7249.3	8634.9	3.8117 µg/L	3.8117 ppb	00:05:43
1	Cd 226.502†	186.7	363.1	1.3470 µg/L	1.3470 ppb	00:06:04
1	Co 228.616†	297.9	259.1	4.2297 µg/L	4.2297 ppb	00:06:04
1	Cr 267.716†	1520.1	1487.4	32.368 µg/L	32.368 ppb	00:06:04
1	Cu 324.752†	4883.1	659.2	16.443 µg/L	16.443 ppb	00:05:43
1	Mn 257.610†	662273.6	683677.5	2058.5 µg/L	2058.5 ppb	00:05:38
1	Mo 202.031†	96.9	94.8	11.833 µg/L	11.833 ppb	00:06:04
1	Ni 231.604†	557.1	197.6	11.910 µg/L	11.910 ppb	00:06:04
1	P 214.914†	565.7	311.0	466.76 µg/L	466.76 ppb	00:06:04
1	Pb 220.353†	167.8	142.9	39.589 µg/L	39.589 ppb	00:06:04
1	S 181.975 Axial†	19.4	-2.6	-8.2207 µg/L	-8.2207 ppb	00:06:04
1	Sb 206.836†	13.6	-8.7	-8.0633 µg/L	-8.0633 ppb	00:06:04
1	Se 196.026†	-36.8	-65.3	142.35 µg/L	142.35 ppb	00:06:04
1	SiO2†	385437.8	394715.2	71260 µg/L	71260 ppb	00:05:38
1	Si 251.611†	470243.7	484529.6	32940 µg/L	32940 ppb	00:05:38
1	Sn 189.927†	2.0	9.5	3.7791 µg/L	3.7791 ppb	00:06:04
1	Ti 334.940†	1372785.8	1416306.0	3311.8 µg/L	3311.8 ppb	00:05:38
1	Tl 190.801†	-71.8	-39.9	6.6532 µg/L	6.6532 ppb	00:06:04
1	U 409.014†	-1689.0	-1736.0	-166.84 µg/L	-166.84 ppb	00:05:38
1	V 292.402†	2391.3	2353.8	19.573 µg/L	19.573 ppb	00:05:43
1	Zn 213.857†	17085.2	16610.8	379.23 µg/L	379.23 ppb	00:05:43
2	Sc RADIAL	94314.1	94314.1	97.4 %		00:04:38
2	Al 396.153Radial†	23203.5	23931.5	11424 µg/L	11424 ppb	00:04:38
2	Ca 317.933Radial†	10884.0	10784.3	3924.6 µg/L	3924.6 ppb	00:04:38
2	Fe 238.204 Radial†	5375.9	5505.0	65111 µg/L	65111 ppb	00:04:58
2	K 766.490 Radial†	12260.6	12096.9	5645.4 µg/L	5645.4 ppb	00:04:38
2	Mg 279.077 IEC†	125.3	120.6	1519.6 µg/L	1519.6 ppb	00:04:58
2	Na 589.592 Radial†	10012.4	10094.5	5038.2 µg/L	5038.2 ppb	00:04:38
2	Sr 421.552†	1972.3	1884.6	11.204 µg/L	11.204 ppb	00:04:38
2	Sc 361.383	2041101.4	2041101.4	97.515 %		00:06:11
2	Y 371.029	1489873.7	1489873.7	103.98 %		00:06:11
2	Ag 328.068†	-1120.6	-689.0	-0.3439 µg/L	-0.3439 ppb	00:06:17
2	As 188.979†	0.5	3.7	-3.0432 µg/L	-3.0432 ppb	00:06:37
2	B 249.677†	535.6	249.9	-22.585 µg/L	-22.585 ppb	00:06:17
2	Ba 233.527†	3765.6	3870.0	84.687 µg/L	84.687 ppb	00:06:37
2	Be 313.107†	7287.7	8632.2	3.8072 µg/L	3.8072 ppb	00:06:17
2	Cd 226.502†	180.9	356.1	1.1179 µg/L	1.1179 ppb	00:06:37
2	Co 228.616†	286.1	245.3	3.6184 µg/L	3.6184 ppb	00:06:37
2	Cr 267.716†	1497.0	1454.9	31.660 µg/L	31.660 ppb	00:06:37
2	Cu 324.752†	4939.8	689.0	16.741 µg/L	16.741 ppb	00:06:17
2	Mn 257.610†	666777.1	684453.4	2060.8 µg/L	2060.8 ppb	00:06:11
2	Mo 202.031†	100.0	97.4	12.113 µg/L	12.113 ppb	00:06:37
2	Ni 231.604†	557.8	195.1	11.777 µg/L	11.777 ppb	00:06:37
2	P 214.914†	564.1	306.1	458.21 µg/L	458.21 ppb	00:06:37
2	Pb 220.353†	162.4	136.4	37.889 µg/L	37.889 ppb	00:06:37

2	S 181.975 Axial†	20.8	-1.2	-3.6945 µg/L	-3.6945 ppb	00:06:37
2	Sb 206.836†	9.2	-13.3	-12.131 µg/L	-12.131 ppb	00:06:37
2	Se 196.026†	-43.1	-71.6	138.24 µg/L	138.24 ppb	00:06:37
2	SiO2†	388526.5	395646.4	71428 µg/L	71428 ppb	00:06:11
2	Si 251.611†	474049.4	485704.0	33020 µg/L	33020 ppb	00:06:11
2	Sn 189.927†	-0.3	7.1	2.8436 µg/L	2.8436 ppb	00:06:37
2	Ti 334.940†	1383730.5	1419565.0	3319.4 µg/L	3319.4 ppb	00:06:11
2	Tl 190.801†	-68.4	-36.1	10.563 µg/L	10.563 ppb	00:06:37
2	U 409.014†	-1714.0	-1751.8	-168.35 µg/L	-168.35 ppb	00:06:11
2	V 292.402†	2378.3	2326.6	19.181 µg/L	19.181 ppb	00:06:17
2	Zn 213.857†	16914.9	16337.1	372.90 µg/L	372.90 ppb	00:06:17
3	Sc RADIAL	94683.0	94683.0	97.8 %		00:05:04
3	Al 396.153Radial†	23333.1	23971.2	11443 µg/L	11443 ppb	00:05:04
3	Ca 317.933Radial†	10994.7	10853.9	3950.0 µg/L	3950.0 ppb	00:05:04
3	Fe 238.204 Radial†	5337.8	5444.5	64396 µg/L	64396 ppb	00:05:24
3	K 766.490 Radial†	12268.7	12056.2	5626.4 µg/L	5626.4 ppb	00:05:04
3	Mg 279.077 IEC†	121.7	116.5	1466.4 µg/L	1466.4 ppb	00:05:24
3	Na 589.592 Radial†	10093.3	10137.2	5059.5 µg/L	5059.5 ppb	00:05:04
3	Sr 421.552†	2022.7	1928.3	11.463 µg/L	11.463 ppb	00:05:04
3	Sc 361.383	2036774.5	2036774.5	97.309 %		00:06:45
3	Y 371.029	1480422.0	1480422.0	103.32 %		00:06:45
3	Ag 328.068†	-1042.8	-611.4	0.2160 µg/L	0.2160 ppb	00:06:51
3	As 188.979†	4.6	8.0	3.3653 µg/L	3.3653 ppb	00:07:11
3	B 249.677†	553.5	269.5	-21.327 µg/L	-21.327 ppb	00:06:51
3	Ba 233.527†	3459.6	3563.7	77.985 µg/L	77.985 ppb	00:07:11
3	Be 313.107†	6825.9	8173.6	3.5888 µg/L	3.5888 ppb	00:06:51
3	Cd 226.502†	129.3	303.5	-0.0528 µg/L	-0.0528 ppb	00:07:11
3	Co 228.616†	272.4	231.9	3.3214 µg/L	3.3214 ppb	00:07:11
3	Cr 267.716†	1339.2	1296.0	28.203 µg/L	28.203 ppb	00:07:11
3	Cu 324.752†	4869.6	627.6	16.206 µg/L	16.206 ppb	00:06:51
3	Mn 257.610†	642721.5	661185.1	1990.9 µg/L	1990.9 ppb	00:06:45
3	Mo 202.031†	84.7	82.0	10.557 µg/L	10.557 ppb	00:07:11
3	Ni 231.604†	548.7	187.0	11.312 µg/L	11.312 ppb	00:07:11
3	P 214.914†	541.9	284.5	423.01 µg/L	423.01 ppb	00:07:11
3	Pb 220.353†	151.6	125.7	35.062 µg/L	35.062 ppb	00:07:11
3	S 181.975 Axial†	18.1	-4.0	-12.571 µg/L	-12.571 ppb	00:07:11
3	Sb 206.836†	17.2	-5.1	-4.7615 µg/L	-4.7615 ppb	00:07:11
3	Se 196.026†	-34.0	-62.3	144.69 µg/L	144.69 ppb	00:07:11
3	SiO2†	377841.9	385512.6	69599 µg/L	69599 ppb	00:06:45
3	Si 251.611†	460634.7	472951.1	32153 µg/L	32153 ppb	00:06:45
3	Sn 189.927†	0.2	7.7	3.0656 µg/L	3.0656 ppb	00:07:11
3	Ti 334.940†	1324999.1	1362223.7	3185.3 µg/L	3185.3 ppb	00:06:45
3	Tl 190.801†	-69.6	-37.4	7.7182 µg/L	7.7182 ppb	00:07:11
3	U 409.014†	-1634.7	-1674.1	-161.20 µg/L	-161.20 ppb	00:06:45
3	V 292.402†	2276.4	2227.1	18.085 µg/L	18.085 ppb	00:06:51
3	Zn 213.857†	16229.2	15669.2	357.57 µg/L	357.57 ppb	00:06:51

Mean Data: 247347003|955136|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035831.5	97.264 %	0.2771			0.28%
Sc RADIAL	94425.1	97.6 %	0.23			0.24%
Y 371.029	1483021.6	103.50 %	0.418			0.40%
Ag 328.068†	-660.7	-0.1509 µg/L	0.31791	-0.1509 ppb	0.31791	210.64%
Al 396.153Radial†	23938.3	11427 µg/L	14.4	11427 ppb	14.4	0.13%
As 188.979†	6.6	1.2606 µg/L	3.72748	1.2606 ppb	3.72748	295.69%
B 249.677†	259.2	-21.943 µg/L	0.6294	-21.943 ppb	0.6294	2.87%
Ba 233.527†	3781.3	82.745 µg/L	4.1457	82.745 ppb	4.1457	5.01%
Be 313.107†	8480.2	3.7359 µg/L	0.12741	3.7359 ppb	0.12741	3.41%
Ca 317.933Radial†	10805.5	3932.3 µg/L	15.31	3932.3 ppb	15.31	0.39%
Cd 226.502†	340.9	0.8041 µg/L	0.75085	0.8041 ppb	0.75085	93.38%
Co 228.616†	245.4	3.7232 µg/L	0.46311	3.7232 ppb	0.46311	12.44%
Cr 267.716†	1412.8	30.744 µg/L	2.2285	30.744 ppb	2.2285	7.25%
Cu 324.752†	658.6	16.463 µg/L	0.2682	16.463 ppb	0.2682	1.63%
Fe 238.204 Radial†	5469.2	64689 µg/L	374.8	64689 ppb	374.8	0.58%
K 766.490 Radial†	12048.6	5622.9 µg/L	24.48	5622.9 ppb	24.48	0.44%
Mg 279.077 IEC†	118.9	1497.8 µg/L	27.91	1497.8 ppb	27.91	1.86%
Mn 257.610†	676438.7	2036.7 µg/L	39.73	2036.7 ppb	39.73	1.95%
Mo 202.031†	91.4	11.501 µg/L	0.8297	11.501 ppb	0.8297	7.21%
Na 589.592 Radial†	10117.0	5049.4 µg/L	10.69	5049.4 ppb	10.69	0.21%

Ni 231.604†	193.2	11.666 µg/L	0.3139	11.666 ppb	0.3139	2.69%
P 214.914†	300.5	449.33 µg/L	23.187	449.33 ppb	23.187	5.16%
Pb 220.353†	135.0	37.513 µg/L	2.2870	37.513 ppb	2.2870	6.10%
S 181.975 Axial†	-2.6	-8.1621 µg/L	4.43861	-8.1621 ppb	4.43861	54.38%
Sb 206.836†	-9.0	-8.3186 µg/L	3.69130	-8.3186 ppb	3.69130	44.37%
Se 196.026†	-66.4	141.76 µg/L	3.269	141.76 ppb	3.269	2.31%
SiO2†	391958.1	70762 µg/L	1011.2	70762 ppb	1011.2	1.43%
Si 251.611†	481061.6	32704 µg/L	479.2	32704 ppb	479.2	1.47%
Sn 189.927†	8.1	3.2294 µg/L	0.48877	3.2294 ppb	0.48877	15.13%
Sr 421.552†	1897.4	11.280 µg/L	0.1600	11.280 ppb	0.1600	1.42%
Ti 334.940†	1399364.9	3272.2 µg/L	75.31	3272.2 ppb	75.31	2.30%
Tl 190.801†	-37.8	8.3113 µg/L	2.02105	8.3113 ppb	2.02105	24.32%
U 409.014†	-1720.6	-165.46 µg/L	3.770	-165.46 ppb	3.770	2.28%
V 292.402†	2302.5	18.946 µg/L	0.7710	18.946 ppb	0.7710	4.07%
Zn 213.857†	16205.7	369.90 µg/L	11.140	369.90 ppb	11.140	3.01%

Sequence No.: 33
 Sample ID: 247347004|955136|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 344
 Date Collected: 3/17/2010 00:07:22
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247347004|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96061.9	96061.9	99.2 %		00:07:52
1	Al 396.153Radial†	24148.6	24450.5	11672 µg/L	11672 ppb	00:07:52
1	Ca 317.933Radial†	19728.1	19492.0	7093.5 µg/L	7093.5 ppb	00:07:52
1	Fe 238.204 Radial†	7860.1	7907.6	93529 µg/L	93529 ppb	00:08:12
1	K 766.490 Radial†	12955.9	12568.6	5865.5 µg/L	5865.5 ppb	00:07:52
1	Mg 279.077 IEC†	233.3	227.1	2893.6 µg/L	2893.6 ppb	00:08:12
1	Na 589.592 Radial†	10981.2	10883.7	5432.1 µg/L	5432.1 ppb	00:07:52
1	Sr 421.552†	3624.4	3512.4	20.881 µg/L	20.881 ppb	00:07:52
1	Sc 361.383	2019219.5	2019219.5	96.470 %		00:09:18
1	Y 371.029	1471605.8	1471605.8	102.70 %		00:09:18
1	Ag 328.068†	-1350.4	-939.6	-0.0798 µg/L	-0.0798 ppb	00:09:23
1	As 188.979†	5.2	8.7	0.3506 µg/L	0.3506 ppb	00:09:44
1	B 249.677†	658.2	383.0	-31.381 µg/L	-31.381 ppb	00:09:23
1	Ba 233.527†	4996.3	5187.6	113.53 µg/L	113.53 ppb	00:09:23
1	Be 313.107†	9608.5	11118.9	4.9657 µg/L	4.9657 ppb	00:09:23
1	Cd 226.502†	343.5	526.7	1.9596 µg/L	1.9596 ppb	00:09:44
1	Co 228.616†	382.7	348.7	6.4059 µg/L	6.4059 ppb	00:09:44
1	Cr 267.716†	1269.9	1236.2	26.912 µg/L	26.912 ppb	00:09:44
1	Cu 324.752†	5022.4	829.5	23.001 µg/L	23.001 ppb	00:09:23
1	Mn 257.610†	972593.4	1008870.2	3037.5 µg/L	3037.5 ppb	00:09:18
1	Mo 202.031†	128.1	127.7	16.191 µg/L	16.191 ppb	00:09:44
1	Ni 231.604†	512.8	154.7	9.8752 µg/L	9.8752 ppb	00:09:44
1	P 214.914†	1184.3	955.2	1512.8 µg/L	1512.8 ppb	00:09:44
1	Pb 220.353†	275.6	255.5	69.636 µg/L	69.636 ppb	00:09:44
1	S 181.975 Axial†	17.9	-4.0	-12.701 µg/L	-12.701 ppb	00:09:44
1	Sb 206.836†	11.8	-10.5	-9.5818 µg/L	-9.5818 ppb	00:09:44
1	Se 196.026†	-48.9	-78.1	221.15 µg/L	221.15 ppb	00:09:44
1	SiO2†	393111.6	404716.9	73066 µg/L	73066 ppb	00:09:18
1	Si 251.611†	479666.3	496794.6	33774 µg/L	33774 ppb	00:09:18
1	Sn 189.927†	-18.4	-11.6	-4.2607 µg/L	-4.2607 ppb	00:09:44
1	Ti 334.940†	1696496.6	1759153.4	4113.4 µg/L	4113.4 ppb	00:09:18
1	Tl 190.801†	-79.8	-48.7	12.441 µg/L	12.441 ppb	00:09:44
1	U 409.014†	-1829.1	-1890.2	-185.06 µg/L	-185.06 ppb	00:09:18
1	V 292.402†	3481.3	3496.4	29.386 µg/L	29.386 ppb	00:09:23
1	Zn 213.857†	23600.7	23455.5	535.38 µg/L	535.38 ppb	00:09:23
2	Sc RADIAL	97095.0	97095.0	100 %		00:08:18
2	Al 396.153Radial†	24436.7	24478.9	11685 µg/L	11685 ppb	00:08:18
2	Ca 317.933Radial†	19991.6	19543.2	7112.2 µg/L	7112.2 ppb	00:08:18
2	Fe 238.204 Radial†	7847.9	7811.2	92388 µg/L	92388 ppb	00:08:38
2	K 766.490 Radial†	13217.8	12690.7	5922.5 µg/L	5922.5 ppb	00:08:18
2	Mg 279.077 IEC†	236.5	227.8	2903.8 µg/L	2903.8 ppb	00:08:38
2	Na 589.592 Radial†	11066.4	10850.9	5415.7 µg/L	5415.7 ppb	00:08:18
2	Sr 421.552†	3622.8	3471.9	20.640 µg/L	20.640 ppb	00:08:18
2	Sc 361.383	2017311.5	2017311.5	96.379 %		00:09:52
2	Y 371.029	1469790.7	1469790.7	102.58 %		00:09:52
2	Ag 328.068†	-1329.2	-918.9	0.0055 µg/L	0.0055 ppb	00:09:57
2	As 188.979†	5.1	8.6	0.4001 µg/L	0.4001 ppb	00:10:18
2	B 249.677†	648.5	373.5	-31.216 µg/L	-31.216 ppb	00:09:57
2	Ba 233.527†	5039.6	5237.4	114.62 µg/L	114.62 ppb	00:09:57
2	Be 313.107†	9713.3	11237.0	5.0328 µg/L	5.0328 ppb	00:09:57
2	Cd 226.502†	330.1	513.1	1.7649 µg/L	1.7649 ppb	00:10:18
2	Co 228.616†	372.9	338.9	5.9721 µg/L	5.9721 ppb	00:10:18
2	Cr 267.716†	1232.6	1198.7	26.097 µg/L	26.097 ppb	00:10:18
2	Cu 324.752†	4971.8	781.9	22.476 µg/L	22.476 ppb	00:09:57
2	Mn 257.610†	974612.5	1011918.8	3046.5 µg/L	3046.5 ppb	00:09:52
2	Mo 202.031†	127.2	126.8	16.060 µg/L	16.060 ppb	00:10:18
2	Ni 231.604†	502.4	144.4	9.2827 µg/L	9.2827 ppb	00:10:18
2	P 214.914†	1176.1	947.9	1501.5 µg/L	1501.5 ppb	00:10:18
2	Pb 220.353†	274.3	254.5	69.355 µg/L	69.355 ppb	00:10:18

2	S 181.975 Axial†	22.0	0.3	0.9389 µg/L	0.9389 ppb	00:10:18
2	Sb 206.836†	12.3	-9.9	-9.0609 µg/L	-9.0609 ppb	00:10:18
2	Se 196.026†	-60.7	-90.3	205.98 µg/L	205.98 ppb	00:10:18
2	SiO2†	393332.7	405331.7	73177 µg/L	73177 ppb	00:09:52
2	Si 251.611†	479647.8	497245.6	33805 µg/L	33805 ppb	00:09:52
2	Sn 189.927†	-20.0	-13.4	-4.9284 µg/L	-4.9284 ppb	00:10:18
2	Ti 334.940†	1697421.5	1761776.3	4119.6 µg/L	4119.6 ppb	00:09:52
2	Tl 190.801†	-85.5	-54.6	6.5415 µg/L	6.5415 ppb	00:10:18
2	U 409.014†	-1813.0	-1875.4	-183.56 µg/L	-183.56 ppb	00:09:52
2	V 292.402†	3566.1	3587.8	30.609 µg/L	30.609 ppb	00:09:57
2	Zn 213.857†	23616.5	23495.0	536.34 µg/L	536.34 ppb	00:09:57
3	Sc RADIAL	96364.4	96364.4	99.6 %		00:08:44
3	Al 396.153Radial†	24265.8	24491.9	11691 µg/L	11691 ppb	00:08:44
3	Ca 317.933Radial†	19806.1	19507.9	7099.4 µg/L	7099.4 ppb	00:08:44
3	Fe 238.204 Radial†	7852.9	7875.5	93149 µg/L	93149 ppb	00:09:04
3	K 766.490 Radial†	13050.0	12622.1	5890.5 µg/L	5890.5 ppb	00:08:44
3	Mg 279.077 IEC†	237.7	230.7	2941.7 µg/L	2941.7 ppb	00:09:04
3	Na 589.592 Radial†	11070.6	10938.8	5459.6 µg/L	5459.6 ppb	00:08:44
3	Sr 421.552†	3649.5	3526.1	20.962 µg/L	20.962 ppb	00:08:44
3	Sc 361.383	2025778.1	2025778.1	96.783 %		00:10:26
3	Y 371.029	1471892.3	1471892.3	102.72 %		00:10:26
3	Ag 328.068†	-1316.6	-900.2	0.1902 µg/L	0.1902 ppb	00:10:31
3	As 188.979†	2.9	6.3	-3.1489 µg/L	-3.1489 ppb	00:10:52
3	B 249.677†	648.3	370.5	-31.755 µg/L	-31.755 ppb	00:10:31
3	Ba 233.527†	4760.4	4927.0	107.82 µg/L	107.82 ppb	00:10:31
3	Be 313.107†	9051.5	10511.2	4.6735 µg/L	4.6735 ppb	00:10:31
3	Cd 226.502†	282.4	462.4	0.4734 µg/L	0.4734 ppb	00:10:52
3	Co 228.616†	345.2	308.6	5.0398 µg/L	5.0398 ppb	00:10:52
3	Cr 267.716†	1130.9	1088.2	23.693 µg/L	23.693 ppb	00:10:52
3	Cu 324.752†	4944.4	732.1	22.294 µg/L	22.294 ppb	00:10:31
3	Mn 257.610†	942446.3	974457.1	2934.0 µg/L	2934.0 ppb	00:10:26
3	Mo 202.031†	123.7	122.7	15.681 µg/L	15.681 ppb	00:10:52
3	Ni 231.604†	510.2	150.2	9.6220 µg/L	9.6220 ppb	00:10:52
3	P 214.914†	1105.2	869.5	1370.9 µg/L	1370.9 ppb	00:10:52
3	Pb 220.353†	260.4	238.9	65.284 µg/L	65.284 ppb	00:10:52
3	S 181.975 Axial†	14.5	-7.6	-24.191 µg/L	-24.191 ppb	00:10:52
3	Sb 206.836†	10.8	-11.6	-10.483 µg/L	-10.483 ppb	00:10:52
3	Se 196.026†	-48.7	-77.6	220.33 µg/L	220.33 ppb	00:10:52
3	SiO2†	383993.1	393976.1	71127 µg/L	71127 ppb	00:10:26
3	Si 251.611†	468647.3	483799.6	32891 µg/L	32891 ppb	00:10:26
3	Sn 189.927†	-14.4	-7.5	-2.6397 µg/L	-2.6397 ppb	00:10:52
3	Ti 334.940†	1631588.5	1686394.5	3943.3 µg/L	3943.3 ppb	00:10:26
3	Tl 190.801†	-73.4	-41.7	17.287 µg/L	17.287 ppb	00:10:52
3	U 409.014†	-1766.8	-1819.7	-178.61 µg/L	-178.61 ppb	00:10:26
3	V 292.402†	3280.2	3276.9	26.838 µg/L	26.838 ppb	00:10:31
3	Zn 213.857†	22511.7	22251.1	507.66 µg/L	507.66 ppb	00:10:31

Mean Data: 247347004|955136|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2020769.7	96.544 %		0.2122			0.22%
Sc RADIAL	96507.1	99.7 %		0.55			0.55%
Y 371.029	1471096.3	102.67 %		0.080			0.08%
Ag 328.068†	-919.6	0.0387 µg/L		0.13804	0.0387 ppb	0.13804	357.07%
Al 396.153Radial†	24473.7	11683 µg/L		10.1	11683 ppb	10.1	0.09%
As 188.979†	7.8	-0.7994 µg/L		2.03486	-0.7994 ppb	2.03486	254.55%
B 249.677†	375.6	-31.451 µg/L		0.2760	-31.451 ppb	0.2760	0.88%
Ba 233.527†	5117.3	111.99 µg/L		3.649	111.99 ppb	3.649	3.26%
Be 313.107†	10955.7	4.8907 µg/L		0.19105	4.8907 ppb	0.19105	3.91%
Ca 317.933Radial†	19514.4	7101.7 µg/L		9.54	7101.7 ppb	9.54	0.13%
Cd 226.502†	500.7	1.3993 µg/L		0.80775	1.3993 ppb	0.80775	57.73%
Co 228.616†	332.1	5.8059 µg/L		0.69805	5.8059 ppb	0.69805	12.02%
Cr 267.716†	1174.4	25.567 µg/L		1.6737	25.567 ppb	1.6737	6.55%
Cu 324.752†	781.2	22.590 µg/L		0.3672	22.590 ppb	0.3672	1.63%
Fe 238.204 Radial†	7864.8	93022 µg/L		580.8	93022 ppb	580.8	0.62%
K 766.490 Radial†	12627.1	5892.8 µg/L		28.58	5892.8 ppb	28.58	0.49%
Mg 279.077 IEC†	228.5	2913.0 µg/L		25.35	2913.0 ppb	25.35	0.87%
Mn 257.610†	998415.4	3006.0 µg/L		62.52	3006.0 ppb	62.52	2.08%
Mo 202.031†	125.7	15.978 µg/L		0.2648	15.978 ppb	0.2648	1.66%
Na 589.592 Radial†	10891.1	5435.8 µg/L		22.17	5435.8 ppb	22.17	0.41%

Ni 231.604†	149.8	9.5933 µg/L	0.29732	9.5933 ppb	0.29732	3.10%
P 214.914†	924.2	1461.8 µg/L	78.85	1461.8 ppb	78.85	5.39%
Pb 220.353†	249.6	68.092 µg/L	2.4353	68.092 ppb	2.4353	3.58%
S 181.975 Axial†	-3.8	-11.984 µg/L	12.5805	-11.984 ppb	12.5805	104.97%
Sb 206.836†	-10.7	-9.7084 µg/L	0.71928	-9.7084 ppb	0.71928	7.41%
Se 196.026†	-82.0	215.82 µg/L	8.533	215.82 ppb	8.533	3.95%
SiO2†	401341.5	72456 µg/L	1152.9	72456 ppb	1152.9	1.59%
Si 251.611†	492613.2	33490 µg/L	519.1	33490 ppb	519.1	1.55%
Sn 189.927†	-10.8	-3.9429 µg/L	1.17699	-3.9429 ppb	1.17699	29.85%
Sr 421.552†	3503.5	20.828 µg/L	0.1675	20.828 ppb	0.1675	0.80%
Ti 334.940†	1735774.7	4058.8 µg/L	100.05	4058.8 ppb	100.05	2.46%
Tl 190.801†	-48.3	12.090 µg/L	5.3815	12.090 ppb	5.3815	44.51%
U 409.014†	-1861.8	-182.41 µg/L	3.378	-182.41 ppb	3.378	1.85%
V 292.402†	3453.7	28.944 µg/L	1.9236	28.944 ppb	1.9236	6.65%
Zn 213.857†	23067.2	526.46 µg/L	16.286	526.46 ppb	16.286	3.09%

Sequence No.: 34
 Sample ID: 247347005|955136|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 345
 Date Collected: 3/17/2010 00:11:01
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247347005|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94873.8	94873.8	98.0 %		00:11:32
1	Al 396.153Radial†	22170.2	22736.9	10854 µg/L	10854 ppb	00:11:32
1	Ca 317.933Radial†	10129.6	9948.7	3620.5 µg/L	3620.5 ppb	00:11:32
1	Fe 238.204 Radial†	5959.3	6067.6	71765 µg/L	71765 ppb	00:11:52
1	K 766.490 Radial†	12235.7	11997.3	5598.9 µg/L	5598.9 ppb	00:11:32
1	Mg 279.077 IEC†	132.9	127.6	1605.4 µg/L	1605.4 ppb	00:11:52
1	Na 589.592 Radial†	9256.4	9262.6	4623.0 µg/L	4623.0 ppb	00:11:32
1	Sr 421.552†	2670.6	2585.1	15.368 µg/L	15.368 ppb	00:11:32
1	Sc 361.383	2011029.3	2011029.3	96.079 %		00:12:57
1	Y 371.029	1476466.7	1476466.7	103.04 %		00:12:57
1	Ag 328.068†	-1157.8	-744.9	-0.2388 µg/L	-0.2388 ppb	00:13:03
1	As 188.979†	6.0	9.5	4.7570 µg/L	4.7570 ppb	00:13:23
1	B 249.677†	523.2	245.2	-26.280 µg/L	-26.280 ppb	00:13:03
1	Ba 233.527†	5720.0	5961.9	130.45 µg/L	130.45 ppb	00:13:03
1	Be 313.107†	6670.7	8101.8	3.2137 µg/L	3.2137 ppb	00:13:03
1	Cd 226.502†	214.8	394.1	1.2680 µg/L	1.2680 ppb	00:13:23
1	Co 228.616†	355.1	321.5	5.3488 µg/L	5.3488 ppb	00:13:23
1	Cr 267.716†	1220.7	1190.3	25.910 µg/L	25.910 ppb	00:13:23
1	Cu 324.752†	4479.1	285.2	15.355 µg/L	15.355 ppb	00:13:03
1	Mn 257.610†	843916.3	879047.2	2646.1 µg/L	2646.1 ppb	00:12:57
1	Mo 202.031†	102.6	101.7	12.787 µg/L	12.787 ppb	00:13:23
1	Ni 231.604†	506.0	149.7	9.3137 µg/L	9.3137 ppb	00:13:23
1	P 214.914†	691.1	446.9	686.66 µg/L	686.66 ppb	00:13:23
1	Pb 220.353†	151.3	127.3	35.605 µg/L	35.605 ppb	00:13:23
1	S 181.975 Axial†	15.5	-6.4	-20.409 µg/L	-20.409 ppb	00:13:23
1	Sb 206.836†	9.1	-13.3	-12.004 µg/L	-12.004 ppb	00:13:23
1	Se 196.026†	-46.5	-75.7	155.49 µg/L	155.49 ppb	00:13:23
1	SiO2†	353210.6	364846.9	65868 µg/L	65868 ppb	00:12:57
1	Si 251.611†	430922.6	448086.4	30463 µg/L	30463 ppb	00:12:57
1	Sn 189.927†	-11.7	-4.7	-1.8066 µg/L	-1.8066 ppb	00:13:23
1	Ti 334.940†	1667275.6	1735901.8	4059.1 µg/L	4059.1 ppb	00:12:57
1	Tl 190.801†	-74.9	-43.9	12.697 µg/L	12.697 ppb	00:13:23
1	U 409.014†	-1991.2	-2066.7	-197.85 µg/L	-197.85 ppb	00:12:57
1	V 292.402†	2862.2	2866.7	24.675 µg/L	24.675 ppb	00:13:03
1	Zn 213.857†	19210.5	18985.7	433.58 µg/L	433.58 ppb	00:13:03
2	Sc RADIAL	94825.9	94825.9	98.0 %		00:11:58
2	Al 396.153Radial†	22215.2	22794.2	10881 µg/L	10881 ppb	00:11:58
2	Ca 317.933Radial†	10101.3	9925.1	3612.0 µg/L	3612.0 ppb	00:11:58
2	Fe 238.204 Radial†	5971.2	6082.8	71946 µg/L	71946 ppb	00:12:18
2	K 766.490 Radial†	12210.9	11978.2	5590.0 µg/L	5590.0 ppb	00:11:58
2	Mg 279.077 IEC†	128.9	123.5	1551.5 µg/L	1551.5 ppb	00:12:18
2	Na 589.592 Radial†	9340.3	9353.0	4668.1 µg/L	4668.1 ppb	00:11:58
2	Sr 421.552†	2618.5	2533.3	15.060 µg/L	15.060 ppb	00:11:58
2	Sc 361.383	2024476.6	2024476.6	96.721 %		00:13:31
2	Y 371.029	1484425.9	1484425.9	103.60 %		00:13:31
2	Ag 328.068†	-1176.7	-756.4	-0.3142 µg/L	-0.3142 ppb	00:13:37
2	As 188.979†	7.8	11.3	7.3943 µg/L	7.3943 ppb	00:13:57
2	B 249.677†	538.1	257.0	-25.838 µg/L	-25.838 ppb	00:13:37
2	Ba 233.527†	5682.7	5883.8	128.74 µg/L	128.74 ppb	00:13:37
2	Be 313.107†	6665.8	8050.6	3.1853 µg/L	3.1853 ppb	00:13:37
2	Cd 226.502†	240.5	419.3	1.8440 µg/L	1.8440 ppb	00:13:57
2	Co 228.616†	344.4	308.0	4.7806 µg/L	4.7806 ppb	00:13:57
2	Cr 267.716†	1200.7	1161.2	25.276 µg/L	25.276 ppb	00:13:57
2	Cu 324.752†	4416.4	189.5	14.763 µg/L	14.763 ppb	00:13:37
2	Mn 257.610†	851029.1	880566.8	2650.7 µg/L	2650.7 ppb	00:13:31
2	Mo 202.031†	97.9	96.1	12.242 µg/L	12.242 ppb	00:13:57
2	Ni 231.604†	504.8	145.0	9.0506 µg/L	9.0506 ppb	00:13:57
2	P 214.914†	686.4	437.3	670.67 µg/L	670.67 ppb	00:13:57
2	Pb 220.353†	149.5	124.4	34.848 µg/L	34.848 ppb	00:13:57

2	S 181.975 Axial†	7.3	-15.0	-47.792 µg/L	-47.792 ppb	00:13:57
2	Sb 206.836†	15.3	-6.9	-6.3829 µg/L	-6.3829 ppb	00:13:57
2	Se 196.026†	-45.8	-74.6	157.08 µg/L	157.08 ppb	00:13:57
2	SiO2†	355244.6	364508.0	65807 µg/L	65807 ppb	00:13:31
2	Si 251.611†	433187.9	447449.3	30419 µg/L	30419 ppb	00:13:31
2	Sn 189.927†	-9.0	-1.8	-0.7019 µg/L	-0.7019 ppb	00:13:57
2	Ti 334.940†	1676595.1	1734010.6	4054.7 µg/L	4054.7 ppb	00:13:31
2	Tl 190.801†	-85.1	-53.9	2.9657 µg/L	2.9657 ppb	00:13:57
2	U 409.014†	-1956.9	-2017.4	-193.40 µg/L	-193.40 ppb	00:13:31
2	V 292.402†	2920.1	2906.7	25.123 µg/L	25.123 ppb	00:13:37
2	Zn 213.857†	19278.7	18923.4	432.14 µg/L	432.14 ppb	00:13:37
3	Sc RADIAL	95414.1	95414.1	98.6 %		00:12:24
3	Al 396.153Radial†	22347.9	22789.1	10879 µg/L	10879 ppb	00:12:24
3	Ca 317.933Radial†	10190.3	9951.8	3621.7 µg/L	3621.7 ppb	00:12:24
3	Fe 238.204 Radial†	5994.6	6069.0	71783 µg/L	71783 ppb	00:12:44
3	K 766.490 Radial†	12350.0	12042.5	5620.0 µg/L	5620.0 ppb	00:12:24
3	Mg 279.077 IEC†	133.3	127.3	1600.9 µg/L	1600.9 ppb	00:12:44
3	Na 589.592 Radial†	9345.6	9299.6	4641.5 µg/L	4641.5 ppb	00:12:24
3	Sr 421.552†	2667.4	2566.4	15.257 µg/L	15.257 ppb	00:12:24
3	Sc 361.383	2028712.2	2028712.2	96.923 %		00:14:05
3	Y 371.029	1482183.9	1482183.9	103.44 %		00:14:05
3	Ag 328.068†	-1162.4	-739.1	-0.2064 µg/L	-0.2064 ppb	00:14:10
3	As 188.979†	4.4	7.8	2.1521 µg/L	2.1521 ppb	00:14:31
3	B 249.677†	558.0	276.4	-24.877 µg/L	-24.877 ppb	00:14:10
3	Ba 233.527†	5417.9	5598.2	122.49 µg/L	122.49 ppb	00:14:10
3	Be 313.107†	6104.6	7457.2	2.8963 µg/L	2.8963 ppb	00:14:10
3	Cd 226.502†	186.2	362.7	0.5170 µg/L	0.5170 ppb	00:14:31
3	Co 228.616†	324.1	286.3	4.1745 µg/L	4.1745 ppb	00:14:31
3	Cr 267.716†	1096.9	1051.5	22.888 µg/L	22.888 ppb	00:14:31
3	Cu 324.752†	4476.7	242.2	15.077 µg/L	15.077 ppb	00:14:10
3	Mn 257.610†	823464.2	850289.9	2559.6 µg/L	2559.6 ppb	00:14:05
3	Mo 202.031†	91.1	88.8	11.517 µg/L	11.517 ppb	00:14:31
3	Ni 231.604†	497.2	136.1	8.5534 µg/L	8.5534 ppb	00:14:31
3	P 214.914†	655.4	403.8	615.13 µg/L	615.13 ppb	00:14:31
3	Pb 220.353†	135.4	109.5	30.941 µg/L	30.941 ppb	00:14:31
3	S 181.975 Axial†	16.1	-5.9	-18.860 µg/L	-18.860 ppb	00:14:31
3	Sb 206.836†	10.2	-12.2	-11.031 µg/L	-11.031 ppb	00:14:31
3	Se 196.026†	-36.3	-64.8	165.75 µg/L	165.75 ppb	00:14:31
3	SiO2†	347412.2	355660.1	64209 µg/L	64209 ppb	00:14:05
3	Si 251.611†	423911.9	436943.9	29705 µg/L	29705 ppb	00:14:05
3	Sn 189.927†	-13.4	-6.4	-2.4751 µg/L	-2.4751 ppb	00:14:31
3	Ti 334.940†	1615182.9	1667030.0	3898.1 µg/L	3898.1 ppb	00:14:05
3	Tl 190.801†	-80.7	-49.2	5.8196 µg/L	5.8196 ppb	00:14:31
3	U 409.014†	-1958.1	-2014.5	-193.11 µg/L	-193.11 ppb	00:14:05
3	V 292.402†	2697.3	2670.6	22.346 µg/L	22.346 ppb	00:14:10
3	Zn 213.857†	18332.1	17905.2	408.70 µg/L	408.70 ppb	00:14:10

Mean Data: 247347005|955136|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2021406.0	96.574 %	0.4411			0.46%
Sc RADIAL	95038.0	98.2 %	0.34			0.34%
Y 371.029	1481025.5	103.36 %	0.286			0.28%
Ag 328.068†	-746.8	-0.2531 µg/L	0.05532	-0.2531 ppb	0.05532	21.85%
Al 396.153Radial†	22773.4	10871 µg/L	15.1	10871 ppb	15.1	0.14%
As 188.979†	9.5	4.7678 µg/L	2.62108	4.7678 ppb	2.62108	54.97%
B 249.677†	259.5	-25.665 µg/L	0.7173	-25.665 ppb	0.7173	2.79%
Ba 233.527†	5814.7	127.23 µg/L	4.189	127.23 ppb	4.189	3.29%
Be 313.107†	7869.9	3.0985 µg/L	0.17562	3.0985 ppb	0.17562	5.67%
Ca 317.933Radial†	9941.8	3618.1 µg/L	5.31	3618.1 ppb	5.31	0.15%
Cd 226.502†	392.0	1.2096 µg/L	0.66544	1.2096 ppb	0.66544	55.01%
Co 228.616†	305.3	4.7680 µg/L	0.58727	4.7680 ppb	0.58727	12.32%
Cr 267.716†	1134.3	24.691 µg/L	1.5935	24.691 ppb	1.5935	6.45%
Cu 324.752†	238.9	15.065 µg/L	0.2958	15.065 ppb	0.2958	1.96%
Fe 238.204 Radial†	6073.1	71831 µg/L	99.8	71831 ppb	99.8	0.14%
K 766.490 Radial†	12006.0	5603.0 µg/L	15.40	5603.0 ppb	15.40	0.27%
Mg 279.077 IEC†	126.1	1585.9 µg/L	29.88	1585.9 ppb	29.88	1.88%
Mn 257.610†	869968.0	2618.8 µg/L	51.27	2618.8 ppb	51.27	1.96%
Mo 202.031†	95.5	12.182 µg/L	0.6374	12.182 ppb	0.6374	5.23%
Na 589.592 Radial†	9305.1	4644.2 µg/L	22.69	4644.2 ppb	22.69	0.49%

Ni 231.604†	143.6	8.9726 µg/L	0.38614	8.9726 ppb	0.38614	4.30%
P 214.914†	429.3	657.49 µg/L	37.541	657.49 ppb	37.541	5.71%
Pb 220.353†	120.4	33.798 µg/L	2.5033	33.798 ppb	2.5033	7.41%
S 181.975 Axial†	-9.1	-29.020 µg/L	16.2753	-29.020 ppb	16.2753	56.08%
Sb 206.836†	-10.8	-9.8060 µg/L	3.00415	-9.8060 ppb	3.00415	30.64%
Se 196.026†	-71.7	159.44 µg/L	5.525	159.44 ppb	5.525	3.47%
SiO2†	361671.7	65295 µg/L	940.4	65295 ppb	940.4	1.44%
Si 251.611†	444159.9	30196 µg/L	425.4	30196 ppb	425.4	1.41%
Sn 189.927†	-4.3	-1.6612 µg/L	0.89549	-1.6612 ppb	0.89549	53.91%
Sr 421.552†	2561.6	15.228 µg/L	0.1559	15.228 ppb	0.1559	1.02%
Ti 334.940†	1712314.1	4004.0 µg/L	91.73	4004.0 ppb	91.73	2.29%
Tl 190.801†	-49.0	7.1606 µg/L	5.00213	7.1606 ppb	5.00213	69.86%
U 409.014†	-2032.9	-194.79 µg/L	2.657	-194.79 ppb	2.657	1.36%
V 292.402†	2814.7	24.048 µg/L	1.4911	24.048 ppb	1.4911	6.20%
Zn 213.857†	18604.7	424.81 µg/L	13.965	424.81 ppb	13.965	3.29%

Sequence No.: 35

Sample ID: 247347006|955136|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 346

Date Collected: 3/17/2010 00:14:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247347006|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96036.6	96036.6	99.2 %		00:15:11
1	Al 396.153Radial†	34276.6	34664.2	16548 µg/L	16548 ppb	00:15:11
1	Ca 317.933Radial†	42365.1	42311.5	15398 µg/L	15398 ppb	00:15:11
1	Fe 238.204 Radial†	6117.3	6153.2	72779 µg/L	72779 ppb	00:15:31
1	K 766.490 Radial†	11357.7	10961.3	5115.4 µg/L	5115.4 ppb	00:15:11
1	Mg 279.077 IEC†	364.8	359.6	4663.3 µg/L	4663.3 ppb	00:15:31
1	Na 589.592 Radial†	7290.5	7166.9	3577.0 µg/L	3577.0 ppb	00:15:11
1	Sr 421.552†	16733.9	16725.5	99.431 µg/L	99.431 ppb	00:15:11
1	Sc 361.383	2018786.5	2018786.5	96.449 %		00:16:36
1	Y 371.029	1449572.4	1449572.4	101.17 %		00:16:36
1	Ag 328.068†	-1152.2	-734.4	0.0019 µg/L	0.0019 ppb	00:16:42
1	As 188.979†	10.1	13.7	9.4454 µg/L	9.4454 ppb	00:17:02
1	B 249.677†	567.8	289.3	-24.800 µg/L	-24.800 ppb	00:16:42
1	Ba 233.527†	12788.0	13267.2	290.24 µg/L	290.24 ppb	00:16:42
1	Be 313.107†	7261.6	8687.8	4.0169 µg/L	4.0169 ppb	00:16:42
1	Cd 226.502†	228.1	407.1	1.4687 µg/L	1.4687 ppb	00:17:02
1	Co 228.616†	309.8	273.1	5.7826 µg/L	5.7826 ppb	00:17:02
1	Cr 267.716†	1328.6	1297.2	28.243 µg/L	28.243 ppb	00:17:02
1	Cu 324.752†	4720.4	517.5	17.062 µg/L	17.062 ppb	00:16:42
1	Mn 257.610†	802202.4	832422.5	2505.8 µg/L	2505.8 ppb	00:16:36
1	Mo 202.031†	62.0	59.1	8.6156 µg/L	8.6156 ppb	00:17:02
1	Ni 231.604†	624.1	270.1	16.083 µg/L	16.083 ppb	00:17:02
1	P 214.914†	624.7	375.3	568.42 µg/L	568.42 ppb	00:17:02
1	Pb 220.353†	126.6	101.0	29.153 µg/L	29.153 ppb	00:17:02
1	S 181.975 Axial†	44.0	23.1	73.466 µg/L	73.466 ppb	00:17:02
1	Sb 206.836†	10.8	-11.6	-10.780 µg/L	-10.780 ppb	00:17:02
1	Se 196.026†	-40.5	-69.4	161.21 µg/L	161.21 ppb	00:17:02
1	SiO2†	376336.2	387411.3	69942 µg/L	69942 ppb	00:16:36
1	Si 251.611†	458906.3	475376.9	32318 µg/L	32318 ppb	00:16:36
1	Sn 189.927†	-22.8	-16.2	-5.1295 µg/L	-5.1295 ppb	00:17:02
1	Ti 334.940†	1176889.8	1220794.4	2854.6 µg/L	2854.6 ppb	00:16:36
1	Tl 190.801†	-62.2	-30.4	12.450 µg/L	12.450 ppb	00:17:02
1	U 409.014†	-1916.2	-1981.0	-190.92 µg/L	-190.92 ppb	00:16:36
1	V 292.402†	3853.9	3883.5	36.531 µg/L	36.531 ppb	00:16:42
1	Zn 213.857†	16394.2	15988.9	364.33 µg/L	364.33 ppb	00:16:42
2	Sc RADIAL	95384.1	95384.1	98.5 %		00:15:36
2	Al 396.153Radial†	34218.3	34841.3	16632 µg/L	16632 ppb	00:15:36
2	Ca 317.933Radial†	42205.8	42441.8	15445 µg/L	15445 ppb	00:15:36
2	Fe 238.204 Radial†	6121.9	6200.1	73333 µg/L	73333 ppb	00:15:57
2	K 766.490 Radial†	11335.0	11016.6	5141.2 µg/L	5141.2 ppb	00:15:36
2	Mg 279.077 IEC†	368.8	366.2	4749.1 µg/L	4749.1 ppb	00:15:57
2	Na 589.592 Radial†	7229.0	7154.8	3571.0 µg/L	3571.0 ppb	00:15:36
2	Sr 421.552†	16683.0	16789.2	99.810 µg/L	99.810 ppb	00:15:36
2	Sc 361.383	2022252.4	2022252.4	96.615 %		00:17:10
2	Y 371.029	1449287.3	1449287.3	101.15 %		00:17:10
2	Ag 328.068†	-1083.2	-660.9	0.6368 µg/L	0.6368 ppb	00:17:15
2	As 188.979†	11.0	14.7	10.732 µg/L	10.732 ppb	00:17:36
2	B 249.677†	629.2	351.9	-22.250 µg/L	-22.250 ppb	00:17:15
2	Ba 233.527†	12841.8	13300.2	290.96 µg/L	290.96 ppb	00:17:15
2	Be 313.107†	7220.6	8632.5	3.9846 µg/L	3.9846 ppb	00:17:15
2	Cd 226.502†	229.0	407.6	1.4178 µg/L	1.4178 ppb	00:17:36
2	Co 228.616†	316.5	279.6	6.0589 µg/L	6.0589 ppb	00:17:36
2	Cr 267.716†	1324.9	1291.1	28.109 µg/L	28.109 ppb	00:17:36
2	Cu 324.752†	4726.1	515.0	17.151 µg/L	17.151 ppb	00:17:15
2	Mn 257.610†	802314.4	831113.0	2501.9 µg/L	2501.9 ppb	00:17:10
2	Mo 202.031†	62.4	59.5	8.6719 µg/L	8.6719 ppb	00:17:36
2	Ni 231.604†	618.4	263.2	15.698 µg/L	15.698 ppb	00:17:36
2	P 214.914†	606.7	355.6	535.24 µg/L	535.24 ppb	00:17:36
2	Pb 220.353†	140.4	115.2	32.874 µg/L	32.874 ppb	00:17:36

2	S 181.975 Axial†	44.5	23.5	74.755 µg/L	74.755 ppb	00:17:36
2	Sb 206.836†	18.1	-4.0	-4.0183 µg/L	-4.0183 ppb	00:17:36
2	Se 196.026†	-37.2	-65.8	166.21 µg/L	166.21 ppb	00:17:36
2	SiO2†	376669.2	387087.3	69883 µg/L	69883 ppb	00:17:10
2	Si 251.611†	459791.8	475478.0	32325 µg/L	32325 ppb	00:17:10
2	Sn 189.927†	-16.1	-9.2	-2.4162 µg/L	-2.4162 ppb	00:17:36
2	Ti 334.940†	1178674.5	1220550.3	2854.0 µg/L	2854.0 ppb	00:17:10
2	Tl 190.801†	-55.8	-23.7	19.079 µg/L	19.079 ppb	00:17:36
2	U 409.014†	-1894.2	-1954.8	-188.62 µg/L	-188.62 ppb	00:17:10
2	V 292.402†	3883.7	3907.5	36.747 µg/L	36.747 ppb	00:17:15
2	Zn 213.857†	16486.4	16055.2	365.82 µg/L	365.82 ppb	00:17:15
3	Sc RADIAL	96101.0	96101.0	99.3 %		00:16:02
3	Al 396.153Radial†	34334.0	34698.9	16564 µg/L	16564 ppb	00:16:02
3	Ca 317.933Radial†	42381.5	42299.4	15394 µg/L	15394 ppb	00:16:02
3	Fe 238.204 Radial†	6134.6	6166.5	72935 µg/L	72935 ppb	00:16:23
3	K 766.490 Radial†	11397.5	10993.6	5130.5 µg/L	5130.5 ppb	00:16:02
3	Mg 279.077 IEC†	365.5	360.1	4669.6 µg/L	4669.6 ppb	00:16:23
3	Na 589.592 Radial†	7332.3	7204.2	3595.6 µg/L	3595.6 ppb	00:16:02
3	Sr 421.552†	16808.7	16789.5	99.812 µg/L	99.812 ppb	00:16:02
3	Sc 361.383	2016553.0	2016553.0	96.343 %		00:17:44
3	Y 371.029	1442411.0	1442411.0	100.67 %		00:17:44
3	Ag 328.068†	-1104.0	-685.7	0.3954 µg/L	0.3954 ppb	00:17:49
3	As 188.979†	10.2	13.8	9.5548 µg/L	9.5548 ppb	00:18:10
3	B 249.677†	572.8	295.2	-24.619 µg/L	-24.619 ppb	00:17:49
3	Ba 233.527†	12345.0	12822.1	280.50 µg/L	280.50 ppb	00:17:49
3	Be 313.107†	6848.6	8267.5	3.8108 µg/L	3.8108 ppb	00:17:49
3	Cd 226.502†	192.5	370.4	0.5771 µg/L	0.5771 ppb	00:18:10
3	Co 228.616†	294.2	257.3	5.3227 µg/L	5.3227 ppb	00:18:10
3	Cr 267.716†	1194.3	1159.3	25.243 µg/L	25.243 ppb	00:18:10
3	Cu 324.752†	4711.1	513.2	17.064 µg/L	17.064 ppb	00:17:49
3	Mn 257.610†	774498.9	804588.6	2422.2 µg/L	2422.2 ppb	00:17:44
3	Mo 202.031†	50.2	47.0	7.4221 µg/L	7.4221 ppb	00:18:10
3	Ni 231.604†	595.7	241.4	14.474 µg/L	14.474 ppb	00:18:10
3	P 214.914†	591.7	341.7	512.55 µg/L	512.55 ppb	00:18:10
3	Pb 220.353†	129.3	104.1	29.941 µg/L	29.941 ppb	00:18:10
3	S 181.975 Axial†	48.5	27.8	88.338 µg/L	88.338 ppb	00:18:10
3	Sb 206.836†	14.8	-7.4	-7.0179 µg/L	-7.0179 ppb	00:18:10
3	Se 196.026†	-37.8	-66.6	164.33 µg/L	164.33 ppb	00:18:10
3	SiO2†	366702.6	377844.2	68214 µg/L	68214 ppb	00:17:44
3	Si 251.611†	447240.0	463794.7	31531 µg/L	31531 ppb	00:17:44
3	Sn 189.927†	-12.3	-5.4	-0.9111 µg/L	-0.9111 ppb	00:18:10
3	Ti 334.940†	1131390.9	1174919.7	2747.3 µg/L	2747.3 ppb	00:17:44
3	Tl 190.801†	-66.6	-35.0	6.7350 µg/L	6.7350 ppb	00:18:10
3	U 409.014†	-1802.4	-1865.0	-180.42 µg/L	-180.42 ppb	00:17:44
3	V 292.402†	3726.5	3755.7	34.997 µg/L	34.997 ppb	00:17:49
3	Zn 213.857†	15864.6	15458.1	352.11 µg/L	352.11 ppb	00:17:49

Mean Data: 247347006|955136|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2019197.3	96.469 %		0.1372			0.14%
Sc RADIAL	95840.6	99.0 %		0.41			0.41%
Y 371.029	1447090.2	100.99 %		0.283			0.28%
Ag 328.068†	-693.7	0.3447 µg/L		0.32047	0.3447 ppb	0.32047	92.97%
Al 396.153Radial†	34734.8	16581 µg/L		44.8	16581 ppb	44.8	0.27%
As 188.979†	14.1	9.9108 µg/L		0.71352	9.9108 ppb	0.71352	7.20%
B 249.677†	312.2	-23.890 µg/L		1.4226	-23.890 ppb	1.4226	5.96%
Ba 233.527†	13129.8	287.23 µg/L		5.841	287.23 ppb	5.841	2.03%
Be 313.107†	8529.2	3.9375 µg/L		0.11085	3.9375 ppb	0.11085	2.82%
Ca 317.933Radial†	42350.9	15412 µg/L		28.7	15412 ppb	28.7	0.19%
Cd 226.502†	395.1	1.1545 µg/L		0.50074	1.1545 ppb	0.50074	43.37%
Co 228.616†	270.0	5.7214 µg/L		0.37190	5.7214 ppb	0.37190	6.50%
Cr 267.716†	1249.2	27.198 µg/L		1.6947	27.198 ppb	1.6947	6.23%
Cu 324.752†	515.3	17.092 µg/L		0.0504	17.092 ppb	0.0504	0.30%
Fe 238.204 Radial†	6173.3	73016 µg/L		285.9	73016 ppb	285.9	0.39%
K 766.490 Radial†	10990.5	5129.1 µg/L		12.95	5129.1 ppb	12.95	0.25%
Mg 279.077 IEC†	362.0	4694.0 µg/L		47.82	4694.0 ppb	47.82	1.02%
Mn 257.610†	822708.0	2476.6 µg/L		47.20	2476.6 ppb	47.20	1.91%
Mo 202.031†	55.2	8.2365 µg/L		0.70586	8.2365 ppb	0.70586	8.57%
Na 589.592 Radial†	7175.3	3581.2 µg/L		12.84	3581.2 ppb	12.84	0.36%

Ni 231.604†	258.2	15.419 µg/L	0.8401	15.419 ppb	0.8401	5.45%
P 214.914†	357.5	538.74 µg/L	28.099	538.74 ppb	28.099	5.22%
Pb 220.353†	106.8	30.656 µg/L	1.9606	30.656 ppb	1.9606	6.40%
S 181.975 Axial†	24.8	78.853 µg/L	8.2391	78.853 ppb	8.2391	10.45%
Sb 206.836†	-7.6	-7.2721 µg/L	3.38811	-7.2721 ppb	3.38811	46.59%
Se 196.026†	-67.2	163.92 µg/L	2.527	163.92 ppb	2.527	1.54%
SiO2†	384114.3	69346 µg/L	980.8	69346 ppb	980.8	1.41%
Si 251.611†	471549.8	32058 µg/L	456.6	32058 ppb	456.6	1.42%
Sn 189.927†	-10.3	-2.8189 µg/L	2.13782	-2.8189 ppb	2.13782	75.84%
Sr 421.552†	16768.1	99.684 µg/L	0.2193	99.684 ppb	0.2193	0.22%
Ti 334.940†	1205421.5	2818.6 µg/L	61.77	2818.6 ppb	61.77	2.19%
Tl 190.801†	-29.7	12.755 µg/L	6.1774	12.755 ppb	6.1774	48.43%
U 409.014†	-1933.6	-186.65 µg/L	5.524	-186.65 ppb	5.524	2.96%
V 292.402†	3848.9	36.092 µg/L	0.9538	36.092 ppb	0.9538	2.64%
Zn 213.857†	15834.0	360.75 µg/L	7.526	360.75 ppb	7.526	2.09%

Sequence No.: 36
 Sample ID: 247347007|955136|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 347
 Date Collected: 3/17/2010 00:18:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247347007|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94635.4	94635.4	97.8 %		00:18:50
1	Al 396.153Radial†	19622.6	20188.3	9637.1 µg/L	9637.1 ppb	00:18:50
1	Ca 317.933Radial†	7467.3	7251.9	2639.1 µg/L	2639.1 ppb	00:18:50
1	Fe 238.204 Radial†	5065.9	5169.2	61139 µg/L	61139 ppb	00:18:50
1	K 766.490 Radial†	11207.3	10976.9	5122.7 µg/L	5122.7 ppb	00:18:50
1	Mg 279.077 IEC†	92.5	86.6	1076.2 µg/L	1076.2 ppb	00:19:10
1	Na 589.592 Radial†	8595.1	8610.1	4297.3 µg/L	4297.3 ppb	00:18:50
1	Sr 421.552†	2137.7	2046.9	12.169 µg/L	12.169 ppb	00:18:50
1	Sc 361.383	2022055.6	2022055.6	96.605 %		00:20:15
1	Y 371.029	1474597.8	1474597.8	102.91 %		00:20:15
1	Ag 328.068†	-1099.9	-678.3	-0.5752 µg/L	-0.5752 ppb	00:20:20
1	As 188.979†	5.8	9.2	5.7809 µg/L	5.7809 ppb	00:20:41
1	B 249.677†	516.9	235.7	-21.168 µg/L	-21.168 ppb	00:20:20
1	Ba 233.527†	3772.4	3913.4	85.632 µg/L	85.632 ppb	00:20:41
1	Be 313.107†	9073.7	10551.4	5.0074 µg/L	5.0074 ppb	00:20:20
1	Cd 226.502†	157.6	333.7	1.0297 µg/L	1.0297 ppb	00:20:41
1	Co 228.616†	271.6	233.1	3.4916 µg/L	3.4916 ppb	00:20:41
1	Cr 267.716†	1113.4	1072.3	23.338 µg/L	23.338 ppb	00:20:41
1	Cu 324.752†	4724.8	514.1	14.852 µg/L	14.852 ppb	00:20:20
1	Mn 257.610†	632403.4	655312.3	1973.1 µg/L	1973.1 ppb	00:20:15
1	Mo 202.031†	76.6	74.1	9.6581 µg/L	9.6581 ppb	00:20:41
1	Ni 231.604†	458.9	98.1	6.2841 µg/L	6.2841 ppb	00:20:41
1	P 214.914†	662.0	412.9	638.43 µg/L	638.43 ppb	00:20:41
1	Pb 220.353†	134.1	108.6	30.408 µg/L	30.408 ppb	00:20:41
1	S 181.975 Axial†	11.1	-11.0	-35.155 µg/L	-35.155 ppb	00:20:41
1	Sb 206.836†	15.4	-6.8	-6.2118 µg/L	-6.2118 ppb	00:20:41
1	Se 196.026†	-32.3	-60.7	136.24 µg/L	136.24 ppb	00:20:41
1	SiO2†	340095.6	349266.5	63055 µg/L	63055 ppb	00:20:15
1	Si 251.611†	414863.6	429017.3	29166 µg/L	29166 ppb	00:20:15
1	Sn 189.927†	9.1	16.9	6.5376 µg/L	6.5376 ppb	00:20:41
1	Ti 334.940†	1292167.2	1338149.8	3129.1 µg/L	3129.1 ppb	00:20:15
1	Tl 190.801†	-65.2	-33.4	10.800 µg/L	10.800 ppb	00:20:41
1	U 409.014†	-1632.3	-1683.9	-161.55 µg/L	-161.55 ppb	00:20:15
1	V 292.402†	2212.2	2177.6	17.897 µg/L	17.897 ppb	00:20:20
1	Zn 213.857†	16603.3	16177.8	369.48 µg/L	369.48 ppb	00:20:20
2	Sc RADIAL	94027.3	94027.3	97.1 %		00:19:15
2	Al 396.153Radial†	19472.6	20163.7	9625.4 µg/L	9625.4 ppb	00:19:15
2	Ca 317.933Radial†	7372.6	7203.8	2621.6 µg/L	2621.6 ppb	00:19:15
2	Fe 238.204 Radial†	5043.0	5179.1	61257 µg/L	61257 ppb	00:19:15
2	K 766.490 Radial†	11113.7	10954.7	5112.3 µg/L	5112.3 ppb	00:19:15
2	Mg 279.077 IEC†	91.3	86.0	1068.0 µg/L	1068.0 ppb	00:19:36
2	Na 589.592 Radial†	8507.8	8577.0	4280.8 µg/L	4280.8 ppb	00:19:15
2	Sr 421.552†	2127.8	2050.9	12.192 µg/L	12.192 ppb	00:19:15
2	Sc 361.383	2017477.2	2017477.2	96.387 %		00:20:49
2	Y 371.029	1468973.8	1468973.8	102.52 %		00:20:49
2	Ag 328.068†	-1101.4	-682.4	-0.5968 µg/L	-0.5968 ppb	00:20:54
2	As 188.979†	4.3	7.7	3.5079 µg/L	3.5079 ppb	00:21:15
2	B 249.677†	523.6	243.9	-20.860 µg/L	-20.860 ppb	00:20:54
2	Ba 233.527†	3750.3	3899.3	85.326 µg/L	85.326 ppb	00:21:15
2	Be 313.107†	9041.0	10538.7	4.9977 µg/L	4.9977 ppb	00:20:54
2	Cd 226.502†	150.9	327.2	0.8613 µg/L	0.8613 ppb	00:21:15
2	Co 228.616†	259.8	221.4	2.9772 µg/L	2.9772 ppb	00:21:15
2	Cr 267.716†	1112.2	1073.6	23.367 µg/L	23.367 ppb	00:21:15
2	Cu 324.752†	4671.2	469.6	14.584 µg/L	14.584 ppb	00:20:54
2	Mn 257.610†	632171.1	656556.9	1976.8 µg/L	1976.8 ppb	00:20:49
2	Mo 202.031†	70.5	68.0	9.0537 µg/L	9.0537 ppb	00:21:15
2	Ni 231.604†	465.0	105.5	6.7025 µg/L	6.7025 ppb	00:21:15
2	P 214.914†	665.6	418.1	647.07 µg/L	647.07 ppb	00:21:15
2	Pb 220.353†	145.0	120.2	33.446 µg/L	33.446 ppb	00:21:15

2	S 181.975 Axial†	21.2	-0.6	-1.7584 µg/L	-1.7584 ppb	00:21:15
2	Sb 206.836†	17.7	-4.3	-4.0681 µg/L	-4.0681 ppb	00:21:15
2	Se 196.026†	-36.7	-65.4	132.28 µg/L	132.28 ppb	00:21:15
2	SiO2†	339774.5	349732.2	63139 µg/L	63139 ppb	00:20:49
2	Si 251.611†	414220.5	429324.7	29187 µg/L	29187 ppb	00:20:49
2	Sn 189.927†	16.2	24.2	9.4018 µg/L	9.4018 ppb	00:21:15
2	Ti 334.940†	1291666.2	1340665.5	3134.9 µg/L	3134.9 ppb	00:20:49
2	Tl 190.801†	-61.8	-30.0	14.243 µg/L	14.243 ppb	00:21:15
2	U 409.014†	-1626.6	-1681.7	-161.37 µg/L	-161.37 ppb	00:20:49
2	V 292.402†	2239.1	2210.8	18.269 µg/L	18.269 ppb	00:20:54
2	Zn 213.857†	16583.2	16196.0	369.89 µg/L	369.89 ppb	00:20:54
3	Sc RADIAL	93771.9	93771.9	96.9 %		00:19:41
3	Al 396.153Radial†	19539.0	20286.9	9684.2 µg/L	9684.2 ppb	00:19:41
3	Ca 317.933Radial†	7341.5	7192.4	2617.5 µg/L	2617.5 ppb	00:19:41
3	Fe 238.204 Radial†	5022.8	5172.4	61178 µg/L	61178 ppb	00:19:41
3	K 766.490 Radial†	11177.8	11052.0	5157.8 µg/L	5157.8 ppb	00:19:41
3	Mg 279.077 IEC†	91.3	86.3	1072.0 µg/L	1072.0 ppb	00:20:02
3	Na 589.592 Radial†	8581.5	8676.9	4330.7 µg/L	4330.7 ppb	00:19:41
3	Sr 421.552†	2126.4	2055.4	12.219 µg/L	12.219 ppb	00:19:41
3	Sc 361.383	2019363.3	2019363.3	96.477 %		00:21:23
3	Y 371.029	1469495.9	1469495.9	102.56 %		00:21:23
3	Ag 328.068†	-1082.1	-661.4	-0.4465 µg/L	-0.4465 ppb	00:21:28
3	As 188.979†	6.8	10.2	7.2610 µg/L	7.2610 ppb	00:21:49
3	B 249.677†	478.2	196.3	-22.980 µg/L	-22.980 ppb	00:21:28
3	Ba 233.527†	3492.7	3628.7	79.402 µg/L	79.402 ppb	00:21:49
3	Be 313.107†	8511.3	9980.9	4.7123 µg/L	4.7123 ppb	00:21:28
3	Cd 226.502†	131.9	307.3	0.3953 µg/L	0.3953 ppb	00:21:49
3	Co 228.616†	244.0	204.8	2.4952 µg/L	2.4952 ppb	00:21:49
3	Cr 267.716†	1027.1	984.4	21.425 µg/L	21.425 ppb	00:21:49
3	Cu 324.752†	4677.0	471.1	14.579 µg/L	14.579 ppb	00:21:28
3	Mn 257.610†	613290.0	636373.7	1916.1 µg/L	1916.1 ppb	00:21:23
3	Mo 202.031†	67.9	65.3	8.7849 µg/L	8.7849 ppb	00:21:49
3	Ni 231.604†	447.8	87.3	5.6787 µg/L	5.6787 ppb	00:21:49
3	P 214.914†	640.0	391.0	602.02 µg/L	602.02 ppb	00:21:49
3	Pb 220.353†	132.5	107.2	30.026 µg/L	30.026 ppb	00:21:49
3	S 181.975 Axial†	15.3	-6.7	-21.217 µg/L	-21.217 ppb	00:21:49
3	Sb 206.836†	16.4	-5.7	-5.2667 µg/L	-5.2667 ppb	00:21:49
3	Se 196.026†	-21.7	-49.9	146.59 µg/L	146.59 ppb	00:21:49
3	SiO2†	332537.7	341901.9	61726 µg/L	61726 ppb	00:21:23
3	Si 251.611†	405393.7	419774.1	28538 µg/L	28538 ppb	00:21:23
3	Sn 189.927†	3.6	11.2	4.3235 µg/L	4.3235 ppb	00:21:49
3	Ti 334.940†	1247040.1	1293158.0	3023.8 µg/L	3023.8 ppb	00:21:23
3	Tl 190.801†	-66.4	-34.8	8.3792 µg/L	8.3792 ppb	00:21:49
3	U 409.014†	-1593.4	-1645.7	-158.09 µg/L	-158.09 ppb	00:21:23
3	V 292.402†	2089.5	2053.5	16.420 µg/L	16.420 ppb	00:21:28
3	Zn 213.857†	15834.0	15403.3	351.65 µg/L	351.65 ppb	00:21:28

Mean Data: 247347007|955136|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2019632.0	96.490 %	0.1099			0.11%
Sc RADIAL	94144.9	97.3 %	0.46			0.47%
Y 371.029	1471022.5	102.66 %	0.217			0.21%
Ag 328.068†	-674.1	-0.5395 µg/L	0.08127	-0.5395 ppb	0.08127	15.06%
Al 396.153Radial†	20213.0	9648.9 µg/L	31.12	9648.9 ppb	31.12	0.32%
As 188.979†	9.1	5.5166 µg/L	1.89046	5.5166 ppb	1.89046	34.27%
B 249.677†	225.3	-21.669 µg/L	1.1453	-21.669 ppb	1.1453	5.29%
Ba 233.527†	3813.8	83.453 µg/L	3.5116	83.453 ppb	3.5116	4.21%
Be 313.107†	10357.0	4.9058 µg/L	0.16765	4.9058 ppb	0.16765	3.42%
Ca 317.933Radial†	7216.0	2626.1 µg/L	11.50	2626.1 ppb	11.50	0.44%
Cd 226.502†	322.7	0.7621 µg/L	0.32860	0.7621 ppb	0.32860	43.12%
Co 228.616†	219.8	2.9880 µg/L	0.49828	2.9880 ppb	0.49828	16.68%
Cr 267.716†	1043.4	22.710 µg/L	1.1124	22.710 ppb	1.1124	4.90%
Cu 324.752†	485.0	14.672 µg/L	0.1566	14.672 ppb	0.1566	1.07%
Fe 238.204 Radial†	5173.6	61191 µg/L	59.8	61191 ppb	59.8	0.10%
K 766.490 Radial†	10994.5	5130.9 µg/L	23.80	5130.9 ppb	23.80	0.46%
Mg 279.077 IEC†	86.3	1072.1 µg/L	4.09	1072.1 ppb	4.09	0.38%
Mn 257.610†	649414.3	1955.3 µg/L	33.99	1955.3 ppb	33.99	1.74%
Mo 202.031†	69.1	9.1655 µg/L	0.44722	9.1655 ppb	0.44722	4.88%
Na 589.592 Radial†	8621.3	4302.9 µg/L	25.41	4302.9 ppb	25.41	0.59%

Ni 231.604†	96.9	6.2218 µg/L	0.51476	6.2218 ppb	0.51476	8.27%
P 214.914†	407.3	629.17 µg/L	23.906	629.17 ppb	23.906	3.80%
Pb 220.353†	112.0	31.293 µg/L	1.8739	31.293 ppb	1.8739	5.99%
S 181.975 Axial†	-6.1	-19.377 µg/L	16.7741	-19.377 ppb	16.7741	86.57%
Sb 206.836†	-5.6	-5.1822 µg/L	1.07435	-5.1822 ppb	1.07435	20.73%
Se 196.026†	-58.7	138.37 µg/L	7.390	138.37 ppb	7.390	5.34%
SiO2†	346966.9	62640 µg/L	793.0	62640 ppb	793.0	1.27%
Si 251.611†	426038.7	28964 µg/L	369.0	28964 ppb	369.0	1.27%
Sn 189.927†	17.4	6.7543 µg/L	2.54607	6.7543 ppb	2.54607	37.70%
Sr 421.552†	2051.1	12.193 µg/L	0.0253	12.193 ppb	0.0253	0.21%
Ti 334.940†	1323991.1	3095.9 µg/L	62.51	3095.9 ppb	62.51	2.02%
Tl 190.801†	-32.7	11.141 µg/L	2.9468	11.141 ppb	2.9468	26.45%
U 409.014†	-1670.5	-160.34 µg/L	1.948	-160.34 ppb	1.948	1.22%
V 292.402†	2147.3	17.529 µg/L	0.9785	17.529 ppb	0.9785	5.58%
Zn 213.857†	15925.7	363.67 µg/L	10.415	363.67 ppb	10.415	2.86%

Sequence No.: 37

Sample ID: 247347008|955136|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 348

Date Collected: 3/17/2010 00:21:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247347008|955136|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94748.4	94748.4	97.9 %		00:22:29
1	Al 396.153Radial†	22150.9	22747.1	10859 µg/L	10859 ppb	00:22:29
1	Ca 317.933Radial†	9689.2	9512.6	3461.8 µg/L	3461.8 ppb	00:22:29
1	Fe 238.204 Radial†	5707.8	5818.8	68823 µg/L	68823 ppb	00:22:49
1	K 766.490 Radial†	12337.0	12117.2	5654.9 µg/L	5654.9 ppb	00:22:29
1	Mg 279.077 IEC†	118.9	113.4	1421.6 µg/L	1421.6 ppb	00:22:49
1	Na 589.592 Radial†	9210.4	9228.2	4605.8 µg/L	4605.8 ppb	00:22:29
1	Sr 421.552†	2673.9	2592.1	15.410 µg/L	15.410 ppb	00:22:29
1	Sc 361.383	2022704.5	2022704.5	96.636 %		00:23:54
1	Y 371.029	1484180.8	1484180.8	103.58 %		00:23:54
1	Ag 328.068†	-1120.9	-699.7	-0.1291 µg/L	-0.1291 ppb	00:23:59
1	As 188.979†	3.3	6.7	0.9166 µg/L	0.9166 ppb	00:24:20
1	B 249.677†	537.8	257.2	-24.198 µg/L	-24.198 ppb	00:23:59
1	Ba 233.527†	5570.0	5772.3	126.29 µg/L	126.29 ppb	00:23:59
1	Be 313.107†	6512.2	7897.7	3.1550 µg/L	3.1550 ppb	00:23:59
1	Cd 226.502†	216.7	394.8	1.6143 µg/L	1.6143 ppb	00:24:20
1	Co 228.616†	350.5	314.7	5.3912 µg/L	5.3912 ppb	00:24:20
1	Cr 267.716†	1240.5	1203.5	26.193 µg/L	26.193 ppb	00:24:20
1	Cu 324.752†	4495.5	275.3	14.737 µg/L	14.737 ppb	00:23:59
1	Mn 257.610†	807022.7	835799.6	2515.9 µg/L	2515.9 ppb	00:23:54
1	Mo 202.031†	106.2	104.8	12.984 µg/L	12.984 ppb	00:24:20
1	Ni 231.604†	459.0	98.0	6.3772 µg/L	6.3772 ppb	00:24:20
1	P 214.914†	710.1	462.4	714.87 µg/L	714.87 ppb	00:24:20
1	Pb 220.353†	153.5	128.7	35.931 µg/L	35.931 ppb	00:24:20
1	S 181.975 Axial†	13.2	-8.8	-28.123 µg/L	-28.123 ppb	00:24:20
1	Sb 206.836†	7.6	-14.8	-13.425 µg/L	-13.425 ppb	00:24:20
1	Se 196.026†	-45.6	-74.5	147.41 µg/L	147.41 ppb	00:24:20
1	SiO2†	353391.0	362911.7	65519 µg/L	65519 ppb	00:23:54
1	Si 251.611†	431000.0	445577.7	30292 µg/L	30292 ppb	00:23:54
1	Sn 189.927†	-6.8	0.4	0.1674 µg/L	0.1674 ppb	00:24:20
1	Ti 334.940†	1610554.2	1667189.6	3898.5 µg/L	3898.5 ppb	00:23:54
1	Tl 190.801†	-73.8	-42.2	12.024 µg/L	12.024 ppb	00:24:20
1	U 409.014†	-1927.0	-1988.2	-190.30 µg/L	-190.30 ppb	00:23:54
1	V 292.402†	2554.3	2530.9	21.093 µg/L	21.093 ppb	00:23:59
1	Zn 213.857†	18727.2	18370.2	419.57 µg/L	419.57 ppb	00:23:59
2	Sc RADIAL	94122.8	94122.8	97.2 %		00:22:54
2	Al 396.153Radial†	22163.7	22910.7	10937 µg/L	10937 ppb	00:22:54
2	Ca 317.933Radial†	9678.6	9567.4	3481.8 µg/L	3481.8 ppb	00:22:54
2	Fe 238.204 Radial†	5705.0	5854.6	69246 µg/L	69246 ppb	00:23:15
2	K 766.490 Radial†	12251.3	12112.9	5652.9 µg/L	5652.9 ppb	00:22:54
2	Mg 279.077 IEC†	118.1	113.5	1422.0 µg/L	1422.0 ppb	00:23:15
2	Na 589.592 Radial†	9184.7	9264.3	4623.8 µg/L	4623.8 ppb	00:22:54
2	Sr 421.552†	2693.8	2630.7	15.639 µg/L	15.639 ppb	00:22:54
2	Sc 361.383	2029969.2	2029969.2	96.983 %		00:24:28
2	Y 371.029	1489402.8	1489402.8	103.95 %		00:24:28
2	Ag 328.068†	-1092.2	-666.0	0.1765 µg/L	0.1765 ppb	00:24:33
2	As 188.979†	6.4	9.8	5.4974 µg/L	5.4974 ppb	00:24:54
2	B 249.677†	564.1	282.3	-23.280 µg/L	-23.280 ppb	00:24:33
2	Ba 233.527†	5500.3	5679.8	124.27 µg/L	124.27 ppb	00:24:33
2	Be 313.107†	6558.9	7921.7	3.1695 µg/L	3.1695 ppb	00:24:33
2	Cd 226.502†	198.7	375.4	1.1048 µg/L	1.1048 ppb	00:24:54
2	Co 228.616†	345.6	308.3	5.1172 µg/L	5.1172 ppb	00:24:54
2	Cr 267.716†	1192.2	1149.1	25.011 µg/L	25.011 ppb	00:24:54
2	Cu 324.752†	4506.5	270.0	14.782 µg/L	14.782 ppb	00:24:33
2	Mn 257.610†	811418.3	837343.2	2520.6 µg/L	2520.6 ppb	00:24:28
2	Mo 202.031†	94.9	92.7	11.806 µg/L	11.806 ppb	00:24:54
2	Ni 231.604†	455.0	92.2	6.0569 µg/L	6.0569 ppb	00:24:54
2	P 214.914†	700.5	449.9	693.70 µg/L	693.70 ppb	00:24:54
2	Pb 220.353†	152.3	126.9	35.466 µg/L	35.466 ppb	00:24:54

2	S 181.975 Axial†	7.2	-15.1	-48.034 µg/L	-48.034 ppb	00:24:54
2	Sb 206.836†	8.0	-14.5	-13.090 µg/L	-13.090 ppb	00:24:54
2	Se 196.026†	-39.5	-68.1	154.77 µg/L	154.77 ppb	00:24:54
2	SiO2†	354187.9	362424.6	65431 µg/L	65431 ppb	00:24:28
2	Si 251.611†	432138.1	445155.0	30263 µg/L	30263 ppb	00:24:28
2	Sn 189.927†	-9.9	-2.8	-1.0638 µg/L	-1.0638 ppb	00:24:54
2	Ti 334.940†	1615923.5	1666761.6	3897.5 µg/L	3897.5 ppb	00:24:28
2	Tl 190.801†	-78.2	-46.5	7.8725 µg/L	7.8725 ppb	00:24:54
2	U 409.014†	-2022.3	-2079.4	-198.64 µg/L	-198.64 ppb	00:24:28
2	V 292.402†	2584.1	2552.1	21.271 µg/L	21.271 ppb	00:24:33
2	Zn 213.857†	18568.8	18137.5	414.20 µg/L	414.20 ppb	00:24:33
3	Sc RADIAL	94395.3	94395.3	97.5 %		00:23:20
3	Al 396.153Radial†	22124.7	22804.8	10886 µg/L	10886 ppb	00:23:20
3	Ca 317.933Radial†	9707.3	9568.1	3482.0 µg/L	3482.0 ppb	00:23:20
3	Fe 238.204 Radial†	5715.3	5848.3	69172 µg/L	69172 ppb	00:23:41
3	K 766.490 Radial†	12280.5	12106.5	5649.9 µg/L	5649.9 ppb	00:23:20
3	Mg 279.077 IEC†	121.3	116.4	1460.3 µg/L	1460.3 ppb	00:23:41
3	Na 589.592 Radial†	9182.4	9234.6	4609.0 µg/L	4609.0 ppb	00:23:20
3	Sr 421.552†	2695.5	2624.4	15.602 µg/L	15.602 ppb	00:23:20
3	Sc 361.383	2039530.9	2039530.9	97.440 %		00:25:02
3	Y 371.029	1487880.6	1487880.6	103.84 %		00:25:02
3	Ag 328.068†	-1166.2	-736.7	-0.4087 µg/L	-0.4087 ppb	00:25:07
3	As 188.979†	2.0	5.3	-1.1661 µg/L	-1.1661 ppb	00:25:28
3	B 249.677†	545.7	260.7	-24.226 µg/L	-24.226 ppb	00:25:07
3	Ba 233.527†	5200.6	5345.6	116.96 µg/L	116.96 ppb	00:25:07
3	Be 313.107†	6068.9	7387.2	2.9340 µg/L	2.9340 ppb	00:25:07
3	Cd 226.502†	166.2	341.1	0.2971 µg/L	0.2971 ppb	00:25:28
3	Co 228.616†	318.5	278.8	4.2801 µg/L	4.2801 ppb	00:25:28
3	Cr 267.716†	1082.9	1031.1	22.443 µg/L	22.443 ppb	00:25:28
3	Cu 324.752†	4567.4	310.7	15.034 µg/L	15.034 ppb	00:25:07
3	Mn 257.610†	776657.8	797747.2	2401.6 µg/L	2401.6 ppb	00:25:02
3	Mo 202.031†	90.9	88.2	11.355 µg/L	11.355 ppb	00:25:28
3	Ni 231.604†	455.5	90.5	5.9632 µg/L	5.9632 ppb	00:25:28
3	P 214.914†	681.7	427.2	656.01 µg/L	656.01 ppb	00:25:28
3	Pb 220.353†	131.0	104.2	29.517 µg/L	29.517 ppb	00:25:28
3	S 181.975 Axial†	14.2	-8.0	-25.337 µg/L	-25.337 ppb	00:25:28
3	Sb 206.836†	11.3	-11.2	-10.114 µg/L	-10.114 ppb	00:25:28
3	Se 196.026†	-31.2	-59.3	162.74 µg/L	162.74 ppb	00:25:28
3	SiO2†	342236.5	348447.2	62907 µg/L	62907 ppb	00:25:02
3	Si 251.611†	417105.1	427638.2	29072 µg/L	29072 ppb	00:25:02
3	Sn 189.927†	-14.0	-6.9	-2.6868 µg/L	-2.6868 ppb	00:25:28
3	Ti 334.940†	1537593.6	1578562.7	3691.2 µg/L	3691.2 ppb	00:25:02
3	Tl 190.801†	-78.9	-46.9	5.2318 µg/L	5.2318 ppb	00:25:28
3	U 409.014†	-1939.0	-1984.2	-189.99 µg/L	-189.99 ppb	00:25:02
3	V 292.402†	2450.3	2402.4	19.512 µg/L	19.512 ppb	00:25:07
3	Zn 213.857†	17742.3	17199.6	392.60 µg/L	392.60 ppb	00:25:07

Mean Data: 247347008|955136|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2030734.9	97.020 %	%	0.4032			0.42%
Sc RADIAL	94422.1	97.6 %	%	0.32			0.33%
Y 371.029	1487154.7	103.79 %	%	0.187			0.18%
Ag 328.068†	-700.8	-0.1204 µg/L	µg/L	0.29272	-0.1204 ppb	0.29272	243.07%
Al 396.153Radial†	22820.9	10894 µg/L	µg/L	39.6	10894 ppb	39.6	0.36%
As 188.979†	7.3	1.7493 µg/L	µg/L	3.40894	1.7493 ppb	3.40894	194.87%
B 249.677†	266.7	-23.901 µg/L	µg/L	0.5381	-23.901 ppb	0.5381	2.25%
Ba 233.527†	5599.3	122.51 µg/L	µg/L	4.911	122.51 ppb	4.911	4.01%
Be 313.107†	7735.5	3.0862 µg/L	µg/L	0.13199	3.0862 ppb	0.13199	4.28%
Ca 317.933Radial†	9549.3	3475.2 µg/L	µg/L	11.59	3475.2 ppb	11.59	0.33%
Cd 226.502†	370.5	1.0054 µg/L	µg/L	0.66417	1.0054 ppb	0.66417	66.06%
Co 228.616†	300.6	4.9295 µg/L	µg/L	0.57885	4.9295 ppb	0.57885	11.74%
Cr 267.716†	1127.9	24.549 µg/L	µg/L	1.9176	24.549 ppb	1.9176	7.81%
Cu 324.752†	285.3	14.851 µg/L	µg/L	0.1600	14.851 ppb	0.1600	1.08%
Fe 238.204 Radial†	5840.5	69080 µg/L	µg/L	226.2	69080 ppb	226.2	0.33%
K 766.490 Radial†	12112.2	5652.5 µg/L	µg/L	2.53	5652.5 ppb	2.53	0.04%
Mg 279.077 IEC†	114.4	1434.6 µg/L	µg/L	22.23	1434.6 ppb	22.23	1.55%
Mn 257.610†	823630.0	2479.4 µg/L	µg/L	67.40	2479.4 ppb	67.40	2.72%
Mo 202.031†	95.2	12.048 µg/L	µg/L	0.8409	12.048 ppb	0.8409	6.98%
Na 589.592 Radial†	9242.3	4612.9 µg/L	µg/L	9.61	4612.9 ppb	9.61	0.21%

Ni 231.604†	93.6	6.1324 µg/L	0.21706	6.1324 ppb	0.21706	3.54%
P 214.914†	446.5	688.20 µg/L	29.816	688.20 ppb	29.816	4.33%
Pb 220.353†	119.9	33.638 µg/L	3.5765	33.638 ppb	3.5765	10.63%
S 181.975 Axial†	-10.6	-33.831 µg/L	12.3783	-33.831 ppb	12.3783	36.59%
Sb 206.836†	-13.5	-12.210 µg/L	1.8224	-12.210 ppb	1.8224	14.93%
Se 196.026†	-67.3	154.97 µg/L	7.667	154.97 ppb	7.667	4.95%
SiO2†	357927.8	64619 µg/L	1482.9	64619 ppb	1482.9	2.29%
Si 251.611†	439456.9	29876 µg/L	696.0	29876 ppb	696.0	2.33%
Sn 189.927†	-3.1	-1.1944 µg/L	1.43156	-1.1944 ppb	1.43156	119.85%
Sr 421.552†	2615.7	15.550 µg/L	0.1232	15.550 ppb	0.1232	0.79%
Ti 334.940†	1637504.7	3829.0 µg/L	119.37	3829.0 ppb	119.37	3.12%
Tl 190.801†	-45.2	8.3760 µg/L	3.42379	8.3760 ppb	3.42379	40.88%
U 409.014†	-2017.3	-192.98 µg/L	4.909	-192.98 ppb	4.909	2.54%
V 292.402†	2495.1	20.625 µg/L	0.9683	20.625 ppb	0.9683	4.69%
Zn 213.857†	17902.4	408.79 µg/L	14.275	408.79 ppb	14.275	3.49%

Sequence No.: 38

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/17/2010 00:25:37

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	94274.1	94274.1	97.4 %		00:26:09
1	Al 396.153Radial†	10687.6	11091.9	5283.4 µg/L	5283.4 ppb	00:26:09
1	Ca 317.933Radial†	14529.8	14532.0	5288.5 µg/L	5288.5 ppb	00:26:09
1	Fe 238.204 Radial†	452.7	452.9	5367.8 µg/L	5367.8 ppb	00:26:29
1	K 766.490 Radial†	11485.0	11305.9	5276.3 µg/L	5276.3 ppb	00:26:09
1	Mg 279.077 IEC†	406.3	409.2	5397.7 µg/L	5397.7 ppb	00:26:29
1	Na 589.592 Radial†	20543.6	20910.9	10437 µg/L	10437 ppb	00:26:09
1	Sr 421.552†	86153.4	88311.6	525.00 µg/L	525.00 ppb	00:26:09
1	Sc 361.383	2038726.1	2038726.1	97.402 %		00:27:33
1	Y 371.029	1391366.1	1391366.1	97.103 %		00:27:33
1	Ag 328.068†	64338.9	66515.3	538.09 µg/L	538.09 ppb	00:27:39
1	As 188.979†	364.8	377.7	555.96 µg/L	555.96 ppb	00:27:59
1	B 249.677†	11799.2	11814.6	534.25 µg/L	534.25 ppb	00:27:39
1	Ba 233.527†	24131.9	24784.0	543.01 µg/L	543.01 ppb	00:27:39
1	Be 313.107†	887785.0	912625.2	536.01 µg/L	536.01 ppb	00:27:33
1	Cd 226.502†	22122.4	22883.1	543.88 µg/L	543.88 ppb	00:27:39
1	Co 228.616†	12338.6	12619.7	541.55 µg/L	541.55 ppb	00:27:39
1	Cr 267.716†	24718.4	25297.5	550.55 µg/L	550.55 ppb	00:27:39
1	Cu 324.752†	85011.2	82902.2	542.49 µg/L	542.49 ppb	00:27:39
1	Mn 257.610†	177569.3	182992.8	549.93 µg/L	549.93 ppb	00:27:33
1	Mo 202.031†	5527.7	5670.0	561.26 µg/L	561.26 ppb	00:27:59
1	Ni 231.604†	9765.7	9649.3	540.63 µg/L	540.63 ppb	00:27:39
1	P 214.914†	1888.7	1666.7	2715.7 µg/L	2715.7 ppb	00:27:59
1	Pb 220.353†	2095.8	2121.6	556.89 µg/L	556.89 ppb	00:27:59
1	S 181.975 Axial†	354.6	341.5	1086.8 µg/L	1086.8 ppb	00:27:59
1	Sb 206.836†	627.6	621.6	557.37 µg/L	557.37 ppb	00:27:59
1	Se 196.026†	607.2	596.1	572.80 µg/L	572.80 ppb	00:27:59
1	SiO2†	34390.9	32528.5	5872.6 µg/L	5872.6 ppb	00:27:39
1	Si 251.611†	39638.1	40271.3	2737.8 µg/L	2737.8 ppb	00:27:39
1	Sn 189.927†	1405.5	1450.4	565.20 µg/L	565.20 ppb	00:27:59
1	Ti 334.940†	222995.2	229520.7	536.36 µg/L	536.36 ppb	00:27:33
1	Tl 190.801†	517.4	565.3	557.27 µg/L	557.27 ppb	00:27:59
1	U 409.014†	5903.6	6066.9	549.80 µg/L	549.80 ppb	00:27:39
1	V 292.402†	45055.7	46145.2	550.19 µg/L	550.19 ppb	00:27:39
1	Zn 213.857†	24239.7	23877.4	545.93 µg/L	545.93 ppb	00:27:39
2	Sc RADIAL	95627.6	95627.6	98.8 %		00:26:35
2	Al 396.153Radial†	10812.7	11063.3	5269.9 µg/L	5269.9 ppb	00:26:35
2	Ca 317.933Radial†	14689.3	14482.3	5270.4 µg/L	5270.4 ppb	00:26:35
2	Fe 238.204 Radial†	455.7	449.2	5325.0 µg/L	5325.0 ppb	00:26:56
2	K 766.490 Radial†	11678.9	11335.3	5290.0 µg/L	5290.0 ppb	00:26:35
2	Mg 279.077 IEC†	401.1	398.0	5250.0 µg/L	5250.0 ppb	00:26:56
2	Na 589.592 Radial†	20795.5	20867.3	10415 µg/L	10415 ppb	00:26:35
2	Sr 421.552†	87089.9	88007.5	523.19 µg/L	523.19 ppb	00:26:35
2	Sc 361.383	2036553.6	2036553.6	97.298 %		00:28:06
2	Y 371.029	1391552.1	1391552.1	97.116 %		00:28:06
2	Ag 328.068†	64104.1	66344.5	536.71 µg/L	536.71 ppb	00:28:12
2	As 188.979†	360.8	374.1	550.58 µg/L	550.58 ppb	00:28:33
2	B 249.677†	11764.5	11791.8	533.24 µg/L	533.24 ppb	00:28:12
2	Ba 233.527†	24005.3	24680.3	540.74 µg/L	540.74 ppb	00:28:12
2	Be 313.107†	889318.6	915173.7	537.51 µg/L	537.51 ppb	00:28:06
2	Cd 226.502†	22033.9	22816.4	542.30 µg/L	542.30 ppb	00:28:12
2	Co 228.616†	12312.2	12606.1	540.96 µg/L	540.96 ppb	00:28:12
2	Cr 267.716†	24638.0	25241.9	549.33 µg/L	549.33 ppb	00:28:12
2	Cu 324.752†	84893.8	82874.6	542.30 µg/L	542.30 ppb	00:28:12
2	Mn 257.610†	177520.2	183136.9	550.37 µg/L	550.37 ppb	00:28:06
2	Mo 202.031†	5444.2	5590.2	553.36 µg/L	553.36 ppb	00:28:33
2	Ni 231.604†	9785.6	9680.5	542.38 µg/L	542.38 ppb	00:28:12
2	P 214.914†	1861.8	1641.1	2673.2 µg/L	2673.2 ppb	00:28:33
2	Pb 220.353†	2062.3	2089.4	548.44 µg/L	548.44 ppb	00:28:33

2	S 181.975 Axial†	351.0	338.2	1076.4 µg/L	1076.4 ppb	00:28:33
2	Sb 206.836†	618.5	613.0	549.55 µg/L	549.55 ppb	00:28:33
2	Se 196.026†	591.5	580.6	558.23 µg/L	558.23 ppb	00:28:33
2	SiO2†	34367.0	32541.6	5874.9 µg/L	5874.9 ppb	00:28:12
2	Si 251.611†	39610.9	40286.8	2738.8 µg/L	2738.8 ppb	00:28:12
2	Sn 189.927†	1379.5	1425.2	555.41 µg/L	555.41 ppb	00:28:33
2	Ti 334.940†	222803.8	229568.2	536.49 µg/L	536.49 ppb	00:28:06
2	Tl 190.801†	503.9	552.0	544.29 µg/L	544.29 ppb	00:28:33
2	U 409.014†	5827.6	5995.3	543.30 µg/L	543.30 ppb	00:28:12
2	V 292.402†	44879.6	46013.6	548.57 µg/L	548.57 ppb	00:28:12
2	Zn 213.857†	24218.5	23882.2	546.04 µg/L	546.04 ppb	00:28:12
3	Sc RADIAL	94706.4	94706.4	97.8 %		00:27:01
3	Al 396.153Radial†	10691.9	11046.2	5263.7 µg/L	5263.7 ppb	00:27:01
3	Ca 317.933Radial†	14532.8	14466.9	5264.8 µg/L	5264.8 ppb	00:27:01
3	Fe 238.204 Radial†	450.5	448.4	5313.9 µg/L	5313.9 ppb	00:27:21
3	K 766.490 Radial†	11594.9	11364.5	5303.6 µg/L	5303.6 ppb	00:27:01
3	Mg 279.077 IEC†	410.3	411.3	5424.2 µg/L	5424.2 ppb	00:27:21
3	Na 589.592 Radial†	20591.7	20863.8	10413 µg/L	10413 ppb	00:27:01
3	Sr 421.552†	86184.3	87939.5	522.79 µg/L	522.79 ppb	00:27:01
3	Sc 361.383	2045185.0	2045185.0	97.710 %		00:28:40
3	Y 371.029	1396492.0	1396492.0	97.461 %		00:28:40
3	Ag 328.068†	60493.7	62371.4	504.42 µg/L	504.42 ppb	00:28:45
3	As 188.979†	303.7	314.0	461.98 µg/L	461.98 ppb	00:29:06
3	B 249.677†	11036.1	10995.3	496.99 µg/L	496.99 ppb	00:28:45
3	Ba 233.527†	22025.6	22550.2	494.05 µg/L	494.05 ppb	00:28:45
3	Be 313.107†	832763.1	853435.5	501.25 µg/L	501.25 ppb	00:28:40
3	Cd 226.502†	20078.5	20719.6	492.40 µg/L	492.40 ppb	00:28:45
3	Co 228.616†	11157.6	11371.0	487.89 µg/L	487.89 ppb	00:28:45
3	Cr 267.716†	21698.9	22127.1	481.55 µg/L	481.55 ppb	00:28:45
3	Cu 324.752†	77481.5	74920.4	490.35 µg/L	490.35 ppb	00:28:45
3	Mn 257.610†	167060.3	171661.9	515.87 µg/L	515.87 ppb	00:28:40
3	Mo 202.031†	4545.5	4646.9	460.02 µg/L	460.02 ppb	00:29:06
3	Ni 231.604†	8899.1	8730.7	489.17 µg/L	489.17 ppb	00:28:45
3	P 214.914†	1648.0	1414.2	2300.4 µg/L	2300.4 ppb	00:29:06
3	Pb 220.353†	1799.9	1811.9	475.57 µg/L	475.57 ppb	00:29:06
3	S 181.975 Axial†	309.0	293.7	934.84 µg/L	934.84 ppb	00:29:06
3	Sb 206.836†	534.0	523.8	469.21 µg/L	469.21 ppb	00:29:06
3	Se 196.026†	524.6	509.5	491.25 µg/L	491.25 ppb	00:29:06
3	SiO2†	32228.4	30203.8	5452.9 µg/L	5452.9 ppb	00:28:45
3	Si 251.611†	36996.7	37439.5	2545.3 µg/L	2545.3 ppb	00:28:45
3	Sn 189.927†	1133.9	1167.9	455.22 µg/L	455.22 ppb	00:29:06
3	Ti 334.940†	207750.2	213195.5	498.19 µg/L	498.19 ppb	00:28:40
3	Tl 190.801†	464.6	509.6	502.48 µg/L	502.48 ppb	00:29:06
3	U 409.014†	5158.9	5285.6	478.87 µg/L	478.87 ppb	00:28:45
3	V 292.402†	40294.9	41126.8	489.95 µg/L	489.95 ppb	00:28:45
3	Zn 213.857†	22057.5	21565.5	493.01 µg/L	493.01 ppb	00:28:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2040154.9	97.470 %	0.2145			0.22%
Sc RADIAL	94869.4	98.0 %	0.71			0.73%
Y 371.029	1393136.7	97.227 %	0.2029			0.21%
Ag 328.068†	65077.1	526.41 µg/L	19.051	526.41 ppb	19.051	3.62%
QC value within limits for Ag 328.068 Recovery = 105.28%						
Al 396.153Radial†	11067.1	5272.3 µg/L	10.09	5272.3 ppb	10.09	0.19%
QC value within limits for Al 396.153Radial Recovery = 105.45%						
As 188.979†	355.3	522.84 µg/L	52.777	522.84 ppb	52.777	10.09%
QC value within limits for As 188.979 Recovery = 104.57%						
B 249.677†	11533.9	521.49 µg/L	21.226	521.49 ppb	21.226	4.07%
QC value within limits for B 249.677 Recovery = 104.30%						
Ba 233.527†	24004.8	525.93 µg/L	27.636	525.93 ppb	27.636	5.25%
QC value within limits for Ba 233.527 Recovery = 105.19%						
Be 313.107†	893744.8	524.93 µg/L	20.516	524.93 ppb	20.516	3.91%
QC value within limits for Be 313.107 Recovery = 104.99%						
Ca 317.933Radial†	14493.8	5274.6 µg/L	12.38	5274.6 ppb	12.38	0.23%
QC value within limits for Ca 317.933Radial Recovery = 105.49%						
Cd 226.502†	22139.7	526.19 µg/L	29.273	526.19 ppb	29.273	5.56%
QC value within limits for Cd 226.502 Recovery = 105.24%						
Co 228.616†	12198.9	523.47 µg/L	30.810	523.47 ppb	30.810	5.89%

QC value within limits for Co 228.616	Recovery = 104.69%			
Cr 267.716†	24222.2	527.14 µg/L	39.487	7.49%
QC value within limits for Cr 267.716	Recovery = 105.43%			
Cu 324.752†	80232.4	525.05 µg/L	30.051	5.72%
QC value within limits for Cu 324.752	Recovery = 105.01%			
Fe 238.204 Radial†	450.2	5335.5 µg/L	28.45	0.53%
QC value within limits for Fe 238.204 Radial	Recovery = 106.71%			
K 766.490 Radial†	11335.2	5289.9 µg/L	13.65	0.26%
QC value within limits for K 766.490 Radial	Recovery = 105.80%			
Mg 279.077 IEC†	406.1	5357.3 µg/L	93.87	1.75%
QC value within limits for Mg 279.077 IEC	Recovery = 107.15%			
Mn 257.610†	179263.9	538.72 µg/L	19.793	3.67%
QC value within limits for Mn 257.610	Recovery = 107.74%			
Mo 202.031†	5302.4	524.88 µg/L	56.309	10.73%
QC value within limits for Mo 202.031	Recovery = 104.98%			
Na 589.592 Radial†	20880.7	10422 µg/L	13.1	0.13%
QC value within limits for Na 589.592 Radial	Recovery = 104.22%			
Ni 231.604†	9353.5	524.06 µg/L	30.228	5.77%
QC value within limits for Ni 231.604	Recovery = 104.81%			
P 214.914†	1574.0	2563.1 µg/L	228.47	8.91%
QC value within limits for P 214.914	Recovery = 102.52%			
Pb 220.353†	2007.6	526.96 µg/L	44.708	8.48%
QC value within limits for Pb 220.353	Recovery = 105.39%			
S 181.975 Axial†	324.5	1032.7 µg/L	84.88	8.22%
QC value within limits for S 181.975 Axial	Recovery = 103.27%			
Sb 206.836†	586.1	525.38 µg/L	48.795	9.29%
QC value within limits for Sb 206.836	Recovery = 105.08%			
Se 196.026†	562.1	540.76 µg/L	43.491	8.04%
QC value within limits for Se 196.026	Recovery = 108.15%			
SiO2†	31758.0	5733.5 µg/L	242.99	4.24%
QC value within limits for SiO2	Recovery = 107.22%			
Si 251.611†	39332.5	2674.0 µg/L	111.46	4.17%
QC value within limits for Si 251.611	Recovery = 106.96%			
Sn 189.927†	1347.8	525.28 µg/L	60.871	11.59%
QC value within limits for Sn 189.927	Recovery = 105.06%			
Sr 421.552†	88086.2	523.66 µg/L	1.178	0.22%
QC value within limits for Sr 421.552	Recovery = 104.73%			
Ti 334.940†	224094.8	523.68 µg/L	22.077	4.22%
QC value within limits for Ti 334.940	Recovery = 104.74%			
Tl 190.801†	542.3	534.68 µg/L	28.627	5.35%
QC value within limits for Tl 190.801	Recovery = 106.94%			
U 409.014†	5782.6	523.99 µg/L	39.213	7.48%
QC value within limits for U 409.014	Recovery = 104.80%			
V 292.402†	44428.6	529.57 µg/L	34.323	6.48%
QC value within limits for V 292.402	Recovery = 105.91%			
Zn 213.857†	23108.3	528.33 µg/L	30.584	5.79%
QC value within limits for Zn 213.857	Recovery = 105.67%			

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/17/2010 00:29:15

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	94576.7	94576.7	97.7 %		00:29:46
1	Al 396.153Radial†	-120.9	-4.4	-2.1549 µg/L	-2.1549 ppb	00:29:46
1	Ca 317.933Radial†	362.9	-13.9	-5.0753 µg/L	-5.0753 ppb	00:30:06
1	Fe 238.204 Radial†	14.8	3.2	37.341 µg/L	37.341 ppb	00:30:06
1	K 766.490 Radial†	372.6	-104.0	-48.540 µg/L	-48.540 ppb	00:29:46
1	Mg 279.077 IEC†	8.0	0.2	2.0135 µg/L	2.0135 ppb	00:30:06
1	Na 589.592 Radial†	193.5	17.5	8.7280 µg/L	8.7280 ppb	00:29:46
1	Sr 421.552†	103.9	-33.1	-0.1967 µg/L	-0.1967 ppb	00:29:46
1	Sc 361.383	2035830.2	2035830.2	97.263 %		00:31:08
1	Y 371.029	1391583.4	1391583.4	97.119 %		00:31:08
1	Ag 328.068†	-492.3	-45.9	-0.3670 µg/L	-0.3670 ppb	00:31:14
1	As 188.979†	-2.6	0.6	0.9057 µg/L	0.9057 ppb	00:31:34
1	B 249.677†	343.6	53.9	2.4258 µg/L	2.4258 ppb	00:31:14
1	Ba 233.527†	3.3	11.8	0.2583 µg/L	0.2583 ppb	00:31:34
1	Be 313.107†	-934.9	197.6	0.1159 µg/L	0.1159 ppb	00:31:14
1	Cd 226.502†	-172.5	-6.8	-0.1648 µg/L	-0.1648 ppb	00:31:34
1	Co 228.616†	54.3	7.8	0.3353 µg/L	0.3353 ppb	00:31:34
1	Cr 267.716†	66.6	-11.7	-0.2550 µg/L	-0.2550 ppb	00:31:14
1	Cu 324.752†	4351.4	97.2	0.6416 µg/L	0.6416 ppb	00:31:14
1	Mn 257.610†	-690.4	-22.8	-0.0666 µg/L	-0.0666 ppb	00:31:14
1	Mo 202.031†	28.0	23.7	2.3443 µg/L	2.3443 ppb	00:31:34
1	Ni 231.604†	370.2	3.7	0.2060 µg/L	0.2060 ppb	00:31:34
1	P 214.914†	264.8	-0.2	-0.4164 µg/L	-0.4164 ppb	00:31:34
1	Pb 220.353†	24.0	-5.5	-1.4503 µg/L	-1.4503 ppb	00:31:34
1	S 181.975 Axial†	21.4	-0.5	-1.6323 µg/L	-1.6323 ppb	00:31:34
1	Sb 206.836†	26.8	4.8	4.3260 µg/L	4.3260 ppb	00:31:34
1	Se 196.026†	30.2	3.7	3.5800 µg/L	3.5800 ppb	00:31:34
1	SiO2†	2817.0	116.6	21.042 µg/L	21.042 ppb	00:31:14
1	Si 251.611†	532.6	123.4	8.3925 µg/L	8.3925 ppb	00:31:34
1	Sn 189.927†	-6.2	1.1	0.4244 µg/L	0.4244 ppb	00:31:34
1	Ti 334.940†	-318.4	249.9	0.5841 µg/L	0.5841 ppb	00:31:14
1	Tl 190.801†	-31.9	1.3	1.2793 µg/L	1.2793 ppb	00:31:34
1	U 409.014†	23.6	30.1	2.7246 µg/L	2.7246 ppb	00:31:14
1	V 292.402†	94.9	-14.7	-0.1578 µg/L	-0.1578 ppb	00:31:14
1	Zn 213.857†	740.0	-248.0	-5.7142 µg/L	-5.7142 ppb	00:31:34
2	Sc RADIAL	94423.2	94423.2	97.6 %		00:30:12
2	Al 396.153Radial†	-96.5	20.4	9.6774 µg/L	9.6774 ppb	00:30:12
2	Ca 317.933Radial†	357.0	-19.3	-7.0331 µg/L	-7.0331 ppb	00:30:32
2	Fe 238.204 Radial†	15.1	3.5	41.059 µg/L	41.059 ppb	00:30:32
2	K 766.490 Radial†	447.6	-26.6	-12.399 µg/L	-12.399 ppb	00:30:12
2	Mg 279.077 IEC†	7.7	-0.1	-1.8207 µg/L	-1.8207 ppb	00:30:32
2	Na 589.592 Radial†	212.9	37.6	18.772 µg/L	18.772 ppb	00:30:12
2	Sr 421.552†	111.7	-24.9	-0.1480 µg/L	-0.1480 ppb	00:30:12
2	Sc 361.383	2028431.6	2028431.6	96.910 %		00:31:40
2	Y 371.029	1387416.3	1387416.3	96.828 %		00:31:40
2	Ag 328.068†	-465.0	-19.6	-0.1584 µg/L	-0.1584 ppb	00:31:46
2	As 188.979†	-2.4	0.7	1.0808 µg/L	1.0808 ppb	00:32:07
2	B 249.677†	298.7	8.9	0.3826 µg/L	0.3826 ppb	00:31:46
2	Ba 233.527†	-4.9	3.4	0.0728 µg/L	0.0728 ppb	00:32:07
2	Be 313.107†	-935.0	194.0	0.1139 µg/L	0.1139 ppb	00:31:46
2	Cd 226.502†	-176.1	-11.1	-0.2685 µg/L	-0.2685 ppb	00:32:07
2	Co 228.616†	53.8	7.4	0.3204 µg/L	0.3204 ppb	00:32:07
2	Cr 267.716†	55.1	-23.4	-0.5096 µg/L	-0.5096 ppb	00:31:46
2	Cu 324.752†	4322.3	83.5	0.5528 µg/L	0.5528 ppb	00:31:46
2	Mn 257.610†	-690.3	-25.4	-0.0737 µg/L	-0.0737 ppb	00:31:46
2	Mo 202.031†	23.1	18.7	1.8518 µg/L	1.8518 ppb	00:32:07
2	Ni 231.604†	364.7	-0.6	-0.0320 µg/L	-0.0320 ppb	00:32:07
2	P 214.914†	262.9	-1.1	-1.9752 µg/L	-1.9752 ppb	00:32:07
2	Pb 220.353†	36.3	7.3	1.9159 µg/L	1.9159 ppb	00:32:07

2	S 181.975 Axial†	21.8	-0.0	-0.0700 µg/L	-0.0700 ppb	00:32:07
2	Sb 206.836†	20.7	-1.4	-1.1736 µg/L	-1.1736 ppb	00:32:07
2	Se 196.026†	23.9	-2.7	-2.3616 µg/L	-2.3616 ppb	00:32:07
2	SiO2†	2853.3	164.6	29.710 µg/L	29.710 ppb	00:31:46
2	Si 251.611†	528.4	121.2	8.2383 µg/L	8.2383 ppb	00:32:07
2	Sn 189.927†	-4.4	2.9	1.1099 µg/L	1.1099 ppb	00:32:07
2	Ti 334.940†	-398.1	166.4	0.3893 µg/L	0.3893 ppb	00:31:46
2	Tl 190.801†	-32.2	0.9	0.8344 µg/L	0.8344 ppb	00:32:07
2	U 409.014†	-67.5	-63.9	-5.8038 µg/L	-5.8038 ppb	00:31:46
2	V 292.402†	54.1	-56.5	-0.6648 µg/L	-0.6648 ppb	00:31:46
2	Zn 213.857†	722.9	-262.9	-6.0565 µg/L	-6.0565 ppb	00:32:07
3	Sc RADIAL	94406.7	94406.7	97.5 %		00:30:38
3	Al 396.153Radial†	-106.7	9.9	4.6882 µg/L	4.6882 ppb	00:30:38
3	Ca 317.933Radial†	359.3	-16.9	-6.1434 µg/L	-6.1434 ppb	00:30:58
3	Fe 238.204 Radial†	13.2	1.5	18.246 µg/L	18.246 ppb	00:30:58
3	K 766.490 Radial†	361.4	-114.8	-53.592 µg/L	-53.592 ppb	00:30:38
3	Mg 279.077 IEC†	11.2	3.5	45.854 µg/L	45.854 ppb	00:30:58
3	Na 589.592 Radial†	199.6	24.1	12.016 µg/L	12.016 ppb	00:30:38
3	Sr 421.552†	139.7	3.8	0.0225 µg/L	0.0225 ppb	00:30:38
3	Sc 361.383	2044619.2	2044619.2	97.683 %		00:32:13
3	Y 371.029	1401593.1	1401593.1	97.817 %		00:32:13
3	Ag 328.068†	-522.8	-75.0	-0.6033 µg/L	-0.6033 ppb	00:32:19
3	As 188.979†	-4.9	-1.8	-2.6774 µg/L	-2.6774 ppb	00:32:39
3	B 249.677†	327.2	35.6	1.6052 µg/L	1.6052 ppb	00:32:19
3	Ba 233.527†	-10.0	-1.8	-0.0396 µg/L	-0.0396 ppb	00:32:39
3	Be 313.107†	-885.0	252.9	0.1484 µg/L	0.1484 ppb	00:32:19
3	Cd 226.502†	-170.5	-3.9	-0.0965 µg/L	-0.0965 ppb	00:32:39
3	Co 228.616†	52.2	5.4	0.2305 µg/L	0.2305 ppb	00:32:39
3	Cr 267.716†	55.4	-23.5	-0.5110 µg/L	-0.5110 ppb	00:32:19
3	Cu 324.752†	4294.9	20.0	0.1343 µg/L	0.1343 ppb	00:32:19
3	Mn 257.610†	-699.4	-29.0	-0.0891 µg/L	-0.0891 ppb	00:32:19
3	Mo 202.031†	25.0	20.4	2.0212 µg/L	2.0212 ppb	00:32:39
3	Ni 231.604†	357.5	-10.9	-0.6109 µg/L	-0.6109 ppb	00:32:39
3	P 214.914†	259.9	-6.4	-10.593 µg/L	-10.593 ppb	00:32:39
3	Pb 220.353†	25.0	-4.5	-1.1817 µg/L	-1.1817 ppb	00:32:39
3	S 181.975 Axial†	17.7	-4.4	-13.955 µg/L	-13.955 ppb	00:32:39
3	Sb 206.836†	26.4	4.3	3.8799 µg/L	3.8799 ppb	00:32:39
3	Se 196.026†	20.1	-6.7	-6.2901 µg/L	-6.2901 ppb	00:32:39
3	SiO2†	2853.8	141.8	25.597 µg/L	25.597 ppb	00:32:19
3	Si 251.611†	527.7	116.2	7.8966 µg/L	7.8966 ppb	00:32:39
3	Sn 189.927†	-6.8	0.5	0.1910 µg/L	0.1910 ppb	00:32:39
3	Ti 334.940†	-335.9	233.4	0.5421 µg/L	0.5421 ppb	00:32:19
3	Tl 190.801†	-29.3	4.2	4.0662 µg/L	4.0662 ppb	00:32:39
3	U 409.014†	-34.0	-29.0	-2.6325 µg/L	-2.6325 ppb	00:32:19
3	V 292.402†	79.2	-31.2	-0.3593 µg/L	-0.3593 ppb	00:32:19
3	Zn 213.857†	728.0	-263.6	-6.0691 µg/L	-6.0691 ppb	00:32:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2036293.6	97.286 %	0.3872			0.40%
Sc RADIAL	94468.9	97.6 %	0.10			0.10%
Y 371.029	1393531.0	97.255 %	0.5085			0.52%
Ag 328.068†	-46.8	-0.3762 µg/L	0.22259	-0.3762 ppb	0.22259	59.16%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.6	4.0702 µg/L	5.94031	4.0702 ppb	5.94031	145.94%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.2303 µg/L	2.12106	-0.2303 ppb	2.12106	921.14%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	32.8	1.4712 µg/L	1.02819	1.4712 ppb	1.02819	69.89%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.5	0.0972 µg/L	0.15039	0.0972 ppb	0.15039	154.78%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	214.8	0.1260 µg/L	0.01937	0.1260 ppb	0.01937	15.37%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-16.7	-6.0839 µg/L	0.98025	-6.0839 ppb	0.98025	16.11%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-7.3	-0.1766 µg/L	0.08658	-0.1766 ppb	0.08658	49.03%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.9	0.2954 µg/L	0.05668	0.2954 ppb	0.05668	19.19%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-19.5	-0.4252 µg/L	0.14742	-0.4252 ppb	0.14742 34.67%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	66.9	0.4429 µg/L	0.27094	0.4429 ppb	0.27094 61.17%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	2.7	32.215 µg/L	12.2399	32.215 ppb	12.2399 37.99%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-81.8	-38.177 µg/L	22.4669	-38.177 ppb	22.4669 58.85%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.2	15.349 µg/L	26.4878	15.349 ppb	26.4878 172.57%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	-25.7	-0.0764 µg/L	0.01151	-0.0764 ppb	0.01151 15.06%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	20.9	2.0724 µg/L	0.25022	2.0724 ppb	0.25022 12.07%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	26.4	13.172 µg/L	5.1208	13.172 ppb	5.1208 38.88%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-2.6	-0.1456 µg/L	0.42013	-0.1456 ppb	0.42013 288.47%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-2.6	-4.3283 µg/L	5.48137	-4.3283 ppb	5.48137 126.64%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-0.9	-0.2387 µg/L	1.87078	-0.2387 ppb	1.87078 783.75%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-1.6	-5.2192 µg/L	7.60592	-5.2192 ppb	7.60592 145.73%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	2.6	2.3441 µg/L	3.05460	2.3441 ppb	3.05460 130.31%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-1.9	-1.6906 µg/L	4.96913	-1.6906 ppb	4.96913 293.93%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	141.0	25.449 µg/L	4.3359	25.449 ppb	4.3359 17.04%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	120.3	8.1758 µg/L	0.25377	8.1758 ppb	0.25377 3.10%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	1.5	0.5751 µg/L	0.47763	0.5751 ppb	0.47763 83.05%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-18.1	-0.1074 µg/L	0.11509	-0.1074 ppb	0.11509 107.15%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	216.6	0.5052 µg/L	0.10256	0.5052 ppb	0.10256 20.30%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	2.1	2.0600 µg/L	1.75162	2.0600 ppb	1.75162 85.03%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-20.9	-1.9039 µg/L	4.31064	-1.9039 ppb	4.31064 226.41%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-34.1	-0.3940 µg/L	0.25524	-0.3940 ppb	0.25524 64.79%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-258.2	-5.9466 µg/L	0.20131	-5.9466 ppb	0.20131 3.39%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 3/17/2010 00:42:57

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\COPY.SIF

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optima1\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/17/2010 00:42:59

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	94890.9	94890.9	98.0 %		00:43:32
1	Al 396.153Radial†	10747.0	11081.2	5278.4 µg/L	5278.4 ppb	00:43:32
1	Ca 317.933Radial†	14668.3	14576.3	5304.6 µg/L	5304.6 ppb	00:43:32
1	Fe 238.204 Radial†	452.5	449.6	5329.2 µg/L	5329.2 ppb	00:43:53
1	K 766.490 Radial†	11624.4	11371.5	5306.9 µg/L	5306.9 ppb	00:43:32
1	Mg 279.077 IEC†	402.8	402.8	5314.1 µg/L	5314.1 ppb	00:43:53
1	Na 589.592 Radial†	20737.2	20971.3	10467 µg/L	10467 ppb	00:43:32
1	Sr 421.552†	86442.7	88031.8	523.34 µg/L	523.34 ppb	00:43:32
1	Sc 361.383	2053602.3	2053602.3	98.113 %		00:44:57
1	Y 371.029	1402195.1	1402195.1	97.859 %		00:44:57
1	Ag 328.068†	64461.3	66161.6	535.24 µg/L	535.24 ppb	00:45:02
1	As 188.979†	367.4	377.7	555.92 µg/L	555.92 ppb	00:45:23
1	B 249.677†	11866.4	11795.3	533.40 µg/L	533.40 ppb	00:45:02
1	Ba 233.527†	24259.1	24734.2	541.92 µg/L	541.92 ppb	00:45:02
1	Be 313.107†	892781.1	911114.8	535.13 µg/L	535.13 ppb	00:44:57
1	Cd 226.502†	22307.0	22906.7	544.44 µg/L	544.44 ppb	00:45:02
1	Co 228.616†	12447.6	12639.0	542.38 µg/L	542.38 ppb	00:45:02
1	Cr 267.716†	24920.4	25319.5	551.02 µg/L	551.02 ppb	00:45:02
1	Cu 324.752†	85375.1	82640.8	540.78 µg/L	540.78 ppb	00:45:02
1	Mn 257.610†	178419.5	182538.8	548.57 µg/L	548.57 ppb	00:44:57
1	Mo 202.031†	5508.9	5609.7	555.29 µg/L	555.29 ppb	00:45:23
1	Ni 231.604†	9846.5	9659.0	541.17 µg/L	541.17 ppb	00:45:02
1	P 214.914†	1895.3	1659.3	2703.6 µg/L	2703.6 ppb	00:45:23
1	Pb 220.353†	2072.4	2082.1	546.55 µg/L	546.55 ppb	00:45:23
1	S 181.975 Axial†	348.1	332.3	1057.4 µg/L	1057.4 ppb	00:45:23
1	Sb 206.836†	624.5	613.8	550.31 µg/L	550.31 ppb	00:45:23
1	Se 196.026†	604.1	588.4	565.47 µg/L	565.47 ppb	00:45:23
1	SiO2†	34442.2	32325.1	5835.8 µg/L	5835.8 ppb	00:45:02
1	Si 251.611†	39609.6	39947.5	2715.8 µg/L	2715.8 ppb	00:45:02
1	Sn 189.927†	1402.1	1436.5	559.79 µg/L	559.79 ppb	00:45:23
1	Ti 334.940†	223150.1	228020.2	532.86 µg/L	532.86 ppb	00:44:57
1	Tl 190.801†	515.4	559.5	551.52 µg/L	551.52 ppb	00:45:23
1	U 409.014†	5787.5	5904.6	535.07 µg/L	535.07 ppb	00:45:02
1	V 292.402†	45287.9	46046.8	548.97 µg/L	548.97 ppb	00:45:02
1	Zn 213.857†	24347.4	23806.9	544.31 µg/L	544.31 ppb	00:45:02
2	Sc RADIAL	94215.4	94215.4	97.3 %		00:43:59
2	Al 396.153Radial†	10708.4	11120.1	5297.2 µg/L	5297.2 ppb	00:43:59
2	Ca 317.933Radial†	14546.2	14558.2	5298.0 µg/L	5298.0 ppb	00:43:59
2	Fe 238.204 Radial†	452.9	453.4	5373.5 µg/L	5373.5 ppb	00:44:19
2	K 766.490 Radial†	11505.2	11334.1	5289.4 µg/L	5289.4 ppb	00:43:59
2	Mg 279.077 IEC†	405.4	408.4	5388.0 µg/L	5388.0 ppb	00:44:19
2	Na 589.592 Radial†	20600.4	20982.4	10472 µg/L	10472 ppb	00:43:59
2	Sr 421.552†	85999.7	88208.8	524.39 µg/L	524.39 ppb	00:43:59
2	Sc 361.383	2047047.2	2047047.2	97.799 %		00:45:30
2	Y 371.029	1396711.4	1396711.4	97.476 %		00:45:30
2	Ag 328.068†	63629.3	65521.3	530.07 µg/L	530.07 ppb	00:45:35
2	As 188.979†	354.0	365.2	537.44 µg/L	537.44 ppb	00:45:56

2	B 249.677†	11688.2	11651.8	526.85 µg/L	526.85 ppb	00:45:35
2	Ba 233.527†	23888.5	24434.5	535.35 µg/L	535.35 ppb	00:45:35
2	Be 313.107†	888513.4	909664.9	534.28 µg/L	534.28 ppb	00:45:30
2	Cd 226.502†	21911.2	22574.8	536.54 µg/L	536.54 ppb	00:45:35
2	Co 228.616†	12241.1	12468.5	535.05 µg/L	535.05 ppb	00:45:35
2	Cr 267.716†	24537.7	25009.6	544.28 µg/L	544.28 ppb	00:45:35
2	Cu 324.752†	84476.4	82000.6	536.60 µg/L	536.60 ppb	00:45:35
2	Mn 257.610†	178085.9	182780.0	549.29 µg/L	549.29 ppb	00:45:30
2	Mo 202.031†	5412.6	5529.2	547.33 µg/L	547.33 ppb	00:45:56
2	Ni 231.604†	9742.5	9584.8	537.02 µg/L	537.02 ppb	00:45:35
2	P 214.914†	1867.6	1637.2	2667.2 µg/L	2667.2 ppb	00:45:56
2	Pb 220.353†	2069.3	2085.7	547.45 µg/L	547.45 ppb	00:45:56
2	S 181.975 Axial†	351.8	337.1	1072.9 µg/L	1072.9 ppb	00:45:56
2	Sb 206.836†	617.0	608.1	545.18 µg/L	545.18 ppb	00:45:56
2	Se 196.026†	600.4	586.6	563.87 µg/L	563.87 ppb	00:45:56
2	SiO2†	34012.7	31998.3	5776.8 µg/L	5776.8 ppb	00:45:35
2	Si 251.611†	39209.0	39667.1	2696.7 µg/L	2696.7 ppb	00:45:35
2	Sn 189.927†	1377.1	1415.5	551.63 µg/L	551.63 ppb	00:45:56
2	Ti 334.940†	222458.6	228041.5	532.91 µg/L	532.91 ppb	00:45:30
2	Tl 190.801†	509.3	554.9	547.12 µg/L	547.12 ppb	00:45:56
2	U 409.014†	5801.7	5938.0	538.09 µg/L	538.09 ppb	00:45:35
2	V 292.402†	44698.7	45592.2	543.53 µg/L	543.53 ppb	00:45:35
2	Zn 213.857†	24096.1	23629.4	540.24 µg/L	540.24 ppb	00:45:35
3	Sc RADIAL	94724.9	94724.9	97.9 %		00:44:24
3	Al 396.153Radial†	10708.9	11061.4	5270.9 µg/L	5270.9 ppb	00:44:24
3	Ca 317.933Radial†	14620.6	14553.8	5296.4 µg/L	5296.4 ppb	00:44:24
3	Fe 238.204 Radial†	447.6	445.3	5277.8 µg/L	5277.8 ppb	00:44:45
3	K 766.490 Radial†	11564.6	11331.2	5288.1 µg/L	5288.1 ppb	00:44:24
3	Mg 279.077 IEC†	400.4	401.2	5290.7 µg/L	5290.7 ppb	00:44:45
3	Na 589.592 Radial†	20628.7	20897.5	10430 µg/L	10430 ppb	00:44:24
3	Sr 421.552†	86064.9	87800.3	521.96 µg/L	521.96 ppb	00:44:24
3	Sc 361.383	2037788.0	2037788.0	97.357 %		00:46:03
3	Y 371.029	1391354.8	1391354.8	97.103 %		00:46:03
3	Ag 328.068†	60571.8	62676.3	506.89 µg/L	506.89 ppb	00:46:09
3	As 188.979†	310.3	321.9	473.68 µg/L	473.68 ppb	00:46:29
3	B 249.677†	11028.1	11028.1	498.50 µg/L	498.50 ppb	00:46:09
3	Ba 233.527†	22089.6	22697.7	497.28 µg/L	497.28 ppb	00:46:09
3	Be 313.107†	827372.5	850992.3	499.82 µg/L	499.82 ppb	00:46:03
3	Cd 226.502†	20136.5	20853.7	495.60 µg/L	495.60 ppb	00:46:09
3	Co 228.616†	11170.5	11425.6	490.25 µg/L	490.25 ppb	00:46:09
3	Cr 267.716†	21720.4	22229.9	483.79 µg/L	483.79 ppb	00:46:09
3	Cu 324.752†	77411.8	75136.7	491.75 µg/L	491.75 ppb	00:46:09
3	Mn 257.610†	165612.5	170795.5	513.27 µg/L	513.27 ppb	00:46:03
3	Mo 202.031†	4555.3	4673.9	462.69 µg/L	462.69 ppb	00:46:29
3	Ni 231.604†	8898.8	8763.5	491.00 µg/L	491.00 ppb	00:46:09
3	P 214.914†	1643.7	1416.0	2303.1 µg/L	2303.1 ppb	00:46:29
3	Pb 220.353†	1782.0	1800.2	472.51 µg/L	472.51 ppb	00:46:29
3	S 181.975 Axial†	308.7	294.5	937.22 µg/L	937.22 ppb	00:46:29
3	Sb 206.836†	534.9	526.7	471.83 µg/L	471.83 ppb	00:46:29
3	Se 196.026†	522.3	509.1	490.84 µg/L	490.84 ppb	00:46:29
3	SiO2†	31919.7	30006.5	5417.2 µg/L	5417.2 ppb	00:46:09
3	Si 251.611†	36676.7	37248.3	2532.3 µg/L	2532.3 ppb	00:46:09
3	Sn 189.927†	1126.2	1164.3	453.80 µg/L	453.80 ppb	00:46:29
3	Ti 334.940†	205846.3	212011.7	495.43 µg/L	495.43 ppb	00:46:03
3	Tl 190.801†	463.8	510.5	503.33 µg/L	503.33 ppb	00:46:29
3	U 409.014†	5102.6	5247.0	475.36 µg/L	475.36 ppb	00:46:09
3	V 292.402†	40455.9	41441.8	493.69 µg/L	493.69 ppb	00:46:09
3	Zn 213.857†	22050.9	21640.6	494.74 µg/L	494.74 ppb	00:46:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2046145.8	97.756 %	0.3796			0.39%
Sc RADIAL	94610.4	97.7 %	0.36			0.37%
Y 371.029	1396753.8	97.479 %	0.3783			0.39%
Ag 328.068†	64786.4	524.07 µg/L	15.096	524.07 ppb	15.096	2.88%
QC value within limits for Ag 328.068 Recovery = 104.81%						
Al 396.153Radial†	11087.6	5282.2 µg/L	13.54	5282.2 ppb	13.54	0.26%
QC value within limits for Al 396.153Radial Recovery = 105.64%						
As 188.979†	354.9	522.34 µg/L	43.150	522.34 ppb	43.150	8.26%

QC value within limits for As 188.979 Recovery = 104.47%					
B 249.677†	11491.8	519.58 µg/L	18.550	519.58 ppb	3.57%
QC value within limits for B 249.677 Recovery = 103.92%					
Ba 233.527†	23955.4	524.85 µg/L	24.100	524.85 ppb	4.59%
QC value within limits for Ba 233.527 Recovery = 104.97%					
Be 313.107†	890590.7	523.07 µg/L	20.145	523.07 ppb	3.85%
QC value within limits for Be 313.107 Recovery = 104.61%					
Ca 317.933Radial†	14562.8	5299.7 µg/L	4.33	5299.7 ppb	0.08%
QC value within limits for Ca 317.933Radial Recovery = 105.99%					
Cd 226.502†	22111.7	525.53 µg/L	26.219	525.53 ppb	4.99%
QC value within limits for Cd 226.502 Recovery = 105.11%					
Co 228.616†	12177.7	522.56 µg/L	28.222	522.56 ppb	5.40%
QC value within limits for Co 228.616 Recovery = 104.51%					
Cr 267.716†	24186.3	526.36 µg/L	37.024	526.36 ppb	7.03%
QC value within limits for Cr 267.716 Recovery = 105.27%					
Cu 324.752†	79926.0	523.04 µg/L	27.179	523.04 ppb	5.20%
QC value within limits for Cu 324.752 Recovery = 104.61%					
Fe 238.204 Radial†	449.4	5326.8 µg/L	47.90	5326.8 ppb	0.90%
QC value within limits for Fe 238.204 Radial Recovery = 106.54%					
K 766.490 Radial†	11345.6	5294.8 µg/L	10.48	5294.8 ppb	0.20%
QC value within limits for K 766.490 Radial Recovery = 105.90%					
Mg 279.077 IEC†	404.1	5330.9 µg/L	50.76	5330.9 ppb	0.95%
QC value within limits for Mg 279.077 IEC Recovery = 106.62%					
Mn 257.610†	178704.8	537.05 µg/L	20.590	537.05 ppb	3.83%
QC value within limits for Mn 257.610 Recovery = 107.41%					
Mo 202.031†	5270.9	521.77 µg/L	51.323	521.77 ppb	9.84%
QC value within limits for Mo 202.031 Recovery = 104.35%					
Na 589.592 Radial†	20950.4	10456 µg/L	23.0	10456 ppb	0.22%
QC value within limits for Na 589.592 Radial Recovery = 104.56%					
Ni 231.604†	9335.8	523.06 µg/L	27.842	523.06 ppb	5.32%
QC value within limits for Ni 231.604 Recovery = 104.61%					
P 214.914†	1570.8	2558.0 µg/L	221.44	2558.0 ppb	8.66%
QC value within limits for P 214.914 Recovery = 102.32%					
Pb 220.353†	1989.3	522.17 µg/L	43.012	522.17 ppb	8.24%
QC value within limits for Pb 220.353 Recovery = 104.43%					
S 181.975 Axial†	321.3	1022.5 µg/L	74.27	1022.5 ppb	7.26%
QC value within limits for S 181.975 Axial Recovery = 102.25%					
Sb 206.836†	582.9	522.44 µg/L	43.902	522.44 ppb	8.40%
QC value within limits for Sb 206.836 Recovery = 104.49%					
Se 196.026†	561.4	540.06 µg/L	42.633	540.06 ppb	7.89%
QC value within limits for Se 196.026 Recovery = 108.01%					
SiO2†	31443.3	5676.6 µg/L	226.57	5676.6 ppb	3.99%
QC value within limits for SiO2 Recovery = 106.15%					
Si 251.611†	38954.3	2648.3 µg/L	100.89	2648.3 ppb	3.81%
QC value within limits for Si 251.611 Recovery = 105.93%					
Sn 189.927†	1338.8	521.74 µg/L	58.980	521.74 ppb	11.30%
QC value within limits for Sn 189.927 Recovery = 104.35%					
Sr 421.552†	88013.6	523.23 µg/L	1.218	523.23 ppb	0.23%
QC value within limits for Sr 421.552 Recovery = 104.65%					
Ti 334.940†	222691.1	520.40 µg/L	21.624	520.40 ppb	4.16%
QC value within limits for Ti 334.940 Recovery = 104.08%					
Tl 190.801†	541.6	533.99 µg/L	26.644	533.99 ppb	4.99%
QC value within limits for Tl 190.801 Recovery = 106.80%					
U 409.014†	5696.5	516.17 µg/L	35.379	516.17 ppb	6.85%
QC value within limits for U 409.014 Recovery = 103.23%					
V 292.402†	44360.3	528.73 µg/L	30.466	528.73 ppb	5.76%
QC value within limits for V 292.402 Recovery = 105.75%					
Zn 213.857†	23025.7	526.43 µg/L	27.522	526.43 ppb	5.23%
QC value within limits for Zn 213.857 Recovery = 105.29%					
All analyte(s) passed QC.					

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/17/2010 00:46:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	94600.2	94600.2	97.7 %		00:47:09
1	Al 396.153Radial†	-98.1	18.9	9.0023 µg/L	9.0023 ppb	00:47:09
1	Ca 317.933Radial†	359.2	-17.7	-6.4596 µg/L	-6.4596 ppb	00:47:29
1	Fe 238.204 Radial†	11.6	-0.1	-1.0491 µg/L	-1.0491 ppb	00:47:29
1	K 766.490 Radial†	450.8	-24.2	-11.276 µg/L	-11.276 ppb	00:47:09
1	Mg 279.077 IEC†	6.7	-1.1	-14.920 µg/L	-14.920 ppb	00:47:29
1	Na 589.592 Radial†	159.0	-17.9	-8.9516 µg/L	-8.9516 ppb	00:47:09
1	Sr 421.552†	118.6	-18.1	-0.1078 µg/L	-0.1078 ppb	00:47:09
1	Sc 361.383	2040168.0	2040168.0	97.471 %		00:48:31
1	Y 371.029	1397312.4	1397312.4	97.518 %		00:48:31
1	Ag 328.068†	-446.3	2.4	0.0144 µg/L	0.0144 ppb	00:48:37
1	As 188.979†	0.5	3.8	5.5455 µg/L	5.5455 ppb	00:48:57
1	B 249.677†	312.9	21.6	0.9814 µg/L	0.9814 ppb	00:48:37
1	Ba 233.527†	11.0	19.7	0.4288 µg/L	0.4288 ppb	00:48:57
1	Be 313.107†	-867.1	269.3	0.1580 µg/L	0.1580 ppb	00:48:37
1	Cd 226.502†	-178.4	-12.5	-0.2971 µg/L	-0.2971 ppb	00:48:57
1	Co 228.616†	49.4	2.6	0.1130 µg/L	0.1130 ppb	00:48:57
1	Cr 267.716†	62.8	-15.8	-0.3451 µg/L	-0.3451 ppb	00:48:37
1	Cu 324.752†	4387.2	124.3	0.8119 µg/L	0.8119 ppb	00:48:37
1	Mn 257.610†	-703.5	-34.8	-0.1036 µg/L	-0.1036 ppb	00:48:57
1	Mo 202.031†	25.8	21.3	2.1117 µg/L	2.1117 ppb	00:48:57
1	Ni 231.604†	362.8	-4.6	-0.2606 µg/L	-0.2606 ppb	00:48:57
1	P 214.914†	259.1	-6.6	-10.946 µg/L	-10.946 ppb	00:48:57
1	Pb 220.353†	33.2	3.9	1.0228 µg/L	1.0228 ppb	00:48:57
1	S 181.975 Axial†	22.4	0.5	1.4986 µg/L	1.4986 ppb	00:48:57
1	Sb 206.836†	27.6	5.6	5.0483 µg/L	5.0483 ppb	00:48:57
1	Se 196.026†	24.1	-2.6	-2.4209 µg/L	-2.4209 ppb	00:48:57
1	SiO2†	2840.4	134.4	24.265 µg/L	24.265 ppb	00:48:37
1	Si 251.611†	501.4	90.3	6.1370 µg/L	6.1370 ppb	00:48:57
1	Sn 189.927†	-0.1	7.3	2.8429 µg/L	2.8429 ppb	00:48:57
1	Ti 334.940†	-389.6	177.6	0.4163 µg/L	0.4163 ppb	00:48:37
1	Tl 190.801†	-30.1	3.3	3.1857 µg/L	3.1857 ppb	00:48:57
1	U 409.014†	17.9	24.2	2.1985 µg/L	2.1985 ppb	00:48:37
1	V 292.402†	52.7	-58.2	-0.6696 µg/L	-0.6696 ppb	00:48:37
1	Zn 213.857†	733.4	-256.4	-5.9021 µg/L	-5.9021 ppb	00:48:57
2	Sc RADIAL	94419.9	94419.9	97.6 %		00:47:35
2	Al 396.153Radial†	-88.3	28.8	13.701 µg/L	13.701 ppb	00:47:35
2	Ca 317.933Radial†	347.7	-28.8	-10.494 µg/L	-10.494 ppb	00:47:55
2	Fe 238.204 Radial†	13.6	2.0	23.162 µg/L	23.162 ppb	00:47:55
2	K 766.490 Radial†	513.2	40.8	19.029 µg/L	19.029 ppb	00:47:35
2	Mg 279.077 IEC†	12.8	5.1	67.513 µg/L	67.513 ppb	00:47:55
2	Na 589.592 Radial†	148.5	-28.4	-14.179 µg/L	-14.179 ppb	00:47:35
2	Sr 421.552†	127.5	-8.7	-0.0517 µg/L	-0.0517 ppb	00:47:35
2	Sc 361.383	2038560.6	2038560.6	97.394 %		00:49:03
2	Y 371.029	1396845.5	1396845.5	97.486 %		00:49:03
2	Ag 328.068†	-460.9	-13.0	-0.1080 µg/L	-0.1080 ppb	00:49:09
2	As 188.979†	-2.1	1.1	1.5824 µg/L	1.5824 ppb	00:49:29
2	B 249.677†	299.7	8.4	0.3676 µg/L	0.3676 ppb	00:49:09
2	Ba 233.527†	-0.9	7.5	0.1628 µg/L	0.1628 ppb	00:49:29
2	Be 313.107†	-939.2	194.5	0.1142 µg/L	0.1142 ppb	00:49:09
2	Cd 226.502†	-159.4	6.9	0.1621 µg/L	0.1621 ppb	00:49:29
2	Co 228.616†	39.0	-8.0	-0.3419 µg/L	-0.3419 ppb	00:49:29
2	Cr 267.716†	82.9	4.9	0.1060 µg/L	0.1060 ppb	00:49:09
2	Cu 324.752†	4410.8	152.1	0.9980 µg/L	0.9980 ppb	00:49:09
2	Mn 257.610†	-683.8	-15.2	-0.0487 µg/L	-0.0487 ppb	00:49:29
2	Mo 202.031†	25.3	20.8	2.0618 µg/L	2.0618 ppb	00:49:29
2	Ni 231.604†	373.8	6.9	0.3903 µg/L	0.3903 ppb	00:49:29
2	P 214.914†	266.6	1.3	2.0431 µg/L	2.0431 ppb	00:49:29
2	Pb 220.353†	20.4	-9.2	-2.4119 µg/L	-2.4119 ppb	00:49:29

2	S 181.975 Axial†	20.6	-1.4	-4.4859 µg/L	-4.4859 ppb	00:49:29
2	Sb 206.836†	25.4	3.3	3.0070 µg/L	3.0070 ppb	00:49:29
2	Se 196.026†	20.3	-6.5	-6.0990 µg/L	-6.0990 ppb	00:49:29
2	SiO2†	2883.0	180.4	32.574 µg/L	32.574 ppb	00:49:09
2	Si 251.611†	504.4	93.8	6.3744 µg/L	6.3744 ppb	00:49:29
2	Sn 189.927†	-11.2	-4.0	-1.5636 µg/L	-1.5636 ppb	00:49:29
2	Ti 334.940†	-391.2	175.6	0.4051 µg/L	0.4051 ppb	00:49:09
2	Tl 190.801†	-31.3	1.9	1.8963 µg/L	1.8963 ppb	00:49:29
2	U 409.014†	-11.9	-6.4	-0.5870 µg/L	-0.5870 ppb	00:49:09
2	V 292.402†	45.7	-65.4	-0.7595 µg/L	-0.7595 ppb	00:49:09
2	Zn 213.857†	727.5	-261.9	-6.0373 µg/L	-6.0373 ppb	00:49:29
3	Sc RADIAL	94835.7	94835.7	98.0 %		00:48:00
3	Al 396.153Radial†	-131.2	-14.6	-7.0400 µg/L	-7.0400 ppb	00:48:00
3	Ca 317.933Radial†	355.8	-22.2	-8.0684 µg/L	-8.0684 ppb	00:48:21
3	Fe 238.204 Radial†	13.2	1.5	17.908 µg/L	17.908 ppb	00:48:21
3	K 766.490 Radial†	484.0	8.6	4.0326 µg/L	4.0326 ppb	00:48:00
3	Mg 279.077 IEC†	8.0	0.2	2.6990 µg/L	2.6990 ppb	00:48:21
3	Na 589.592 Radial†	184.9	8.1	4.0466 µg/L	4.0466 ppb	00:48:00
3	Sr 421.552†	127.7	-9.1	-0.0539 µg/L	-0.0539 ppb	00:48:00
3	Sc 361.383	2050435.5	2050435.5	97.961 %		00:49:35
3	Y 371.029	1404588.0	1404588.0	98.026 %		00:49:35
3	Ag 328.068†	-488.9	-38.9	-0.3142 µg/L	-0.3142 ppb	00:49:41
3	As 188.979†	-2.6	0.6	0.9436 µg/L	0.9436 ppb	00:50:01
3	B 249.677†	309.0	16.1	0.7194 µg/L	0.7194 ppb	00:49:41
3	Ba 233.527†	-6.8	1.4	0.0306 µg/L	0.0306 ppb	00:50:01
3	Be 313.107†	-974.0	164.6	0.0966 µg/L	0.0966 ppb	00:49:41
3	Cd 226.502†	-170.1	-3.1	-0.0765 µg/L	-0.0765 ppb	00:50:01
3	Co 228.616†	42.9	-4.3	-0.1825 µg/L	-0.1825 ppb	00:50:01
3	Cr 267.716†	42.5	-36.9	-0.8027 µg/L	-0.8027 ppb	00:49:41
3	Cu 324.752†	4348.3	62.1	0.4090 µg/L	0.4090 ppb	00:49:41
3	Mn 257.610†	-687.8	-15.2	-0.0447 µg/L	-0.0447 ppb	00:50:01
3	Mo 202.031†	27.6	23.1	2.2845 µg/L	2.2845 ppb	00:50:01
3	Ni 231.604†	354.7	-14.9	-0.8325 µg/L	-0.8325 ppb	00:50:01
3	P 214.914†	266.8	-0.0	-0.0814 µg/L	-0.0814 ppb	00:50:01
3	Pb 220.353†	29.2	-0.4	-0.0987 µg/L	-0.0987 ppb	00:50:01
3	S 181.975 Axial†	19.7	-2.4	-7.7059 µg/L	-7.7059 ppb	00:50:01
3	Sb 206.836†	26.5	4.3	3.8861 µg/L	3.8861 ppb	00:50:01
3	Se 196.026†	23.0	-3.9	-3.5791 µg/L	-3.5791 ppb	00:50:01
3	SiO2†	2842.8	122.2	22.057 µg/L	22.057 ppb	00:49:41
3	Si 251.611†	506.4	92.9	6.3141 µg/L	6.3141 ppb	00:50:01
3	Sn 189.927†	-9.5	-2.2	-0.8748 µg/L	-0.8748 ppb	00:50:01
3	Ti 334.940†	-396.9	172.1	0.4021 µg/L	0.4021 ppb	00:49:41
3	Tl 190.801†	-36.3	-3.0	-2.8804 µg/L	-2.8804 ppb	00:50:01
3	U 409.014†	-16.6	-11.1	-1.0091 µg/L	-1.0091 ppb	00:49:41
3	V 292.402†	67.2	-43.7	-0.5032 µg/L	-0.5032 ppb	00:49:41
3	Zn 213.857†	732.8	-260.8	-6.0021 µg/L	-6.0021 ppb	00:50:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2043054.7	97.609 %	0.3078			0.32%
Sc RADIAL	94618.6	97.8 %	0.22			0.22%
Y 371.029	1399582.0	97.677 %	0.3030			0.31%
Ag 328.068†	-16.5	-0.1359 µg/L	0.16605	-0.1359 ppb	0.16605	122.15%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.0	5.2211 µg/L	10.87525	5.2211 ppb	10.87525	208.29%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.8	2.6905 µg/L	2.49305	2.6905 ppb	2.49305	92.66%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	15.4	0.6895 µg/L	0.30799	0.6895 ppb	0.30799	44.67%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.5	0.2074 µg/L	0.20282	0.2074 ppb	0.20282	97.79%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	209.5	0.1229 µg/L	0.03167	0.1229 ppb	0.03167	25.76%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-22.9	-8.3406 µg/L	2.03087	-8.3406 ppb	2.03087	24.35%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.9	-0.0705 µg/L	0.22965	-0.0705 ppb	0.22965	325.73%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.2	-0.1372 µg/L	0.23080	-0.1372 ppb	0.23080	168.26%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-15.9 -0.3473 µg/L	0.45433 -0.3473 ppb	0.45433 130.83%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	112.9 0.7397 µg/L	0.30107 0.7397 ppb	0.30107 40.70%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.1 13.340 µg/L	12.7357 13.340 ppb	12.7357 95.47%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	8.4 3.9285 µg/L	15.15238 3.9285 ppb	15.15238 385.70%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.4 18.431 µg/L	43.4100 18.431 ppb	43.4100 235.53%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-21.7 -0.0657 µg/L	0.03289 -0.0657 ppb	0.03289 50.07%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	21.7 2.1527 µg/L	0.11685 2.1527 ppb	0.11685 5.43%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-12.7 -6.3613 µg/L	9.38473 -6.3613 ppb	9.38473 147.53%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-4.2 -0.2343 µg/L	0.61185 -0.2343 ppb	0.61185 261.17%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-1.8 -2.9947 µg/L	6.96723 -2.9947 ppb	6.96723 232.66%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-1.9 -0.4959 µg/L	1.75144 -0.4959 ppb	1.75144 353.15%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.1 -3.5644 µg/L	4.67091 -3.5644 ppb	4.67091 131.04%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	4.4 3.9805 µg/L	1.02394 3.9805 ppb	1.02394 25.72%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-4.3 -4.0330 µg/L	1.88060 -4.0330 ppb	1.88060 46.63%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	145.7 26.299 µg/L	5.5458 26.299 ppb	5.5458 21.09%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	92.3 6.2752 µg/L	0.12343 6.2752 ppb	0.12343 1.97%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	0.3 0.1348 µg/L	2.37042 0.1348 ppb	2.37042 >999.9%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-12.0 -0.0711 µg/L	0.03175 -0.0711 ppb	0.03175 44.64%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	175.1 0.4079 µg/L	0.00748 0.4079 ppb	0.00748 1.83%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.7 0.7339 µg/L	3.19579 0.7339 ppb	3.19579 435.46%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	2.2 0.2008 µg/L	1.74290 0.2008 ppb	1.74290 868.01%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-55.8 -0.6441 µg/L	0.13004 -0.6441 ppb	0.13004 20.19%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-259.7 -5.9805 µg/L	0.07012 -5.9805 ppb	0.07012 1.17%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 3
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/17/2010 01:05:45
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96681.6	96681.6	99.9 %		01:06:16
1	Al 396.153Radial†	10819.9	10951.1	5216.4 µg/L	5216.4 ppb	01:06:16
1	Ca 317.933Radial†	14792.7	14423.7	5249.1 µg/L	5249.1 ppb	01:06:16
1	Fe 238.204 Radial†	455.8	444.3	5266.9 µg/L	5266.9 ppb	01:06:37
1	K 766.490 Radial†	11645.4	11172.9	5214.2 µg/L	5214.2 ppb	01:06:16
1	Mg 279.077 IEC†	404.6	397.0	5238.0 µg/L	5238.0 ppb	01:06:37
1	Na 589.592 Radial†	20949.0	20791.5	10377 µg/L	10377 ppb	01:06:16
1	Sr 421.552†	87603.6	87560.8	520.54 µg/L	520.54 ppb	01:06:16
1	Sc 361.383	2057865.6	2057865.6	98.316 %		01:07:40
1	Y 371.029	1404688.3	1404688.3	98.033 %		01:07:40
1	Ag 328.068†	63899.7	65454.3	529.51 µg/L	529.51 ppb	01:07:46
1	As 188.979†	360.7	370.1	544.67 µg/L	544.67 ppb	01:08:06
1	B 249.677†	11734.8	11636.4	526.20 µg/L	526.20 ppb	01:07:46
1	Ba 233.527†	23931.7	24350.0	533.50 µg/L	533.50 ppb	01:07:46
1	Be 313.107†	894142.5	910614.4	534.83 µg/L	534.83 ppb	01:07:40
1	Cd 226.502†	21931.0	22477.2	534.23 µg/L	534.23 ppb	01:07:46
1	Co 228.616†	12298.3	12460.8	534.73 µg/L	534.73 ppb	01:07:46
1	Cr 267.716†	24504.5	24844.0	540.68 µg/L	540.68 ppb	01:07:46
1	Cu 324.752†	84798.2	81873.8	535.75 µg/L	535.75 ppb	01:07:46
1	Mn 257.610†	178602.5	182348.2	548.00 µg/L	548.00 ppb	01:07:40
1	Mo 202.031†	5478.7	5567.3	551.10 µg/L	551.10 ppb	01:08:06
1	Ni 231.604†	9745.0	9535.0	534.22 µg/L	534.22 ppb	01:07:46
1	P 214.914†	1889.2	1649.2	2687.2 µg/L	2687.2 ppb	01:08:06
1	Pb 220.353†	2080.1	2085.5	547.43 µg/L	547.43 ppb	01:08:06
1	S 181.975 Axial†	344.4	327.7	1043.0 µg/L	1043.0 ppb	01:08:06
1	Sb 206.836†	621.3	609.2	546.26 µg/L	546.26 ppb	01:08:06
1	Se 196.026†	604.5	587.6	564.54 µg/L	564.54 ppb	01:08:06
1	SiO2†	33927.9	31729.2	5728.2 µg/L	5728.2 ppb	01:07:46
1	Si 251.611†	39167.0	39413.7	2679.5 µg/L	2679.5 ppb	01:07:46
1	Sn 189.927†	1388.8	1420.0	553.38 µg/L	553.38 ppb	01:08:06
1	Ti 334.940†	223351.1	227753.5	532.24 µg/L	532.24 ppb	01:07:40
1	Tl 190.801†	510.3	553.1	545.35 µg/L	545.35 ppb	01:08:06
1	U 409.014†	5720.4	5824.2	527.78 µg/L	527.78 ppb	01:07:46
1	V 292.402†	44817.5	45472.8	542.14 µg/L	542.14 ppb	01:07:46
1	Zn 213.857†	24143.0	23547.6	538.39 µg/L	538.39 ppb	01:07:46
2	Sc RADIAL	96107.4	96107.4	99.3 %		01:06:42
2	Al 396.153Radial†	10789.4	10985.1	5232.7 µg/L	5232.7 ppb	01:06:42
2	Ca 317.933Radial†	14723.6	14442.6	5256.0 µg/L	5256.0 ppb	01:06:42
2	Fe 238.204 Radial†	450.6	441.8	5237.5 µg/L	5237.5 ppb	01:07:03
2	K 766.490 Radial†	11577.6	11174.2	5214.8 µg/L	5214.8 ppb	01:06:42
2	Mg 279.077 IEC†	402.2	397.1	5238.4 µg/L	5238.4 ppb	01:07:03
2	Na 589.592 Radial†	20780.6	20747.2	10355 µg/L	10355 ppb	01:06:42
2	Sr 421.552†	86958.5	87435.2	519.79 µg/L	519.79 ppb	01:06:42
2	Sc 361.383	2046271.4	2046271.4	97.762 %		01:08:13
2	Y 371.029	1397941.7	1397941.7	97.562 %		01:08:13
2	Ag 328.068†	63924.1	65847.4	532.69 µg/L	532.69 ppb	01:08:19
2	As 188.979†	358.5	369.9	544.48 µg/L	544.48 ppb	01:08:40
2	B 249.677†	11754.6	11724.3	530.21 µg/L	530.21 ppb	01:08:19
2	Ba 233.527†	24031.3	24589.7	538.75 µg/L	538.75 ppb	01:08:19
2	Be 313.107†	889140.1	910650.4	534.86 µg/L	534.86 ppb	01:08:13
2	Cd 226.502†	22048.2	22723.5	540.10 µg/L	540.10 ppb	01:08:19
2	Co 228.616†	12326.1	12560.2	538.99 µg/L	538.99 ppb	01:08:19
2	Cr 267.716†	24612.0	25095.1	546.14 µg/L	546.14 ppb	01:08:19
2	Cu 324.752†	84580.8	82140.1	537.49 µg/L	537.49 ppb	01:08:19
2	Mn 257.610†	178040.2	182802.4	549.36 µg/L	549.36 ppb	01:08:13
2	Mo 202.031†	5394.6	5513.0	545.72 µg/L	545.72 ppb	01:08:40
2	Ni 231.604†	9826.0	9674.0	542.01 µg/L	542.01 ppb	01:08:19
2	P 214.914†	1864.6	1634.8	2663.2 µg/L	2663.2 ppb	01:08:40
2	Pb 220.353†	2048.8	2065.5	542.16 µg/L	542.16 ppb	01:08:40

2	S 181.975 Axial†	350.2	335.6	1068.2 µg/L	1068.2 ppb	01:08:40
2	Sb 206.836†	616.9	608.3	545.26 µg/L	545.26 ppb	01:08:40
2	Se 196.026†	595.6	581.9	559.12 µg/L	559.12 ppb	01:08:40
2	SiO2†	34065.2	32065.1	5788.9 µg/L	5788.9 ppb	01:08:19
2	Si 251.611†	39256.6	39731.0	2701.1 µg/L	2701.1 ppb	01:08:19
2	Sn 189.927†	1380.2	1419.2	553.05 µg/L	553.05 ppb	01:08:40
2	Ti 334.940†	222391.3	228058.8	532.96 µg/L	532.96 ppb	01:08:13
2	Tl 190.801†	499.8	545.3	537.71 µg/L	537.71 ppb	01:08:40
2	U 409.014†	5791.2	5929.6	537.35 µg/L	537.35 ppb	01:08:19
2	V 292.402†	44864.2	45778.8	545.74 µg/L	545.74 ppb	01:08:19
2	Zn 213.857†	24179.0	23723.6	542.40 µg/L	542.40 ppb	01:08:19
3	Sc RADIAL	96278.1	96278.1	99.5 %		01:07:08
3	Al 396.153Radial†	10767.6	10943.9	5214.8 µg/L	5214.8 ppb	01:07:08
3	Ca 317.933Radial†	14723.1	14415.8	5246.2 µg/L	5246.2 ppb	01:07:08
3	Fe 238.204 Radial†	455.6	446.0	5286.0 µg/L	5286.0 ppb	01:07:28
3	K 766.490 Radial†	11419.5	10994.7	5131.0 µg/L	5131.0 ppb	01:07:08
3	Mg 279.077 IEC†	403.2	397.4	5240.6 µg/L	5240.6 ppb	01:07:28
3	Na 589.592 Radial†	20855.2	20785.2	10374 µg/L	10374 ppb	01:07:08
3	Sr 421.552†	87167.5	87490.1	520.12 µg/L	520.12 ppb	01:07:08
3	Sc 361.383	2030250.0	2030250.0	96.997 %		01:08:47
3	Y 371.029	1384436.1	1384436.1	96.620 %		01:08:47
3	Ag 328.068†	60014.8	62333.1	504.12 µg/L	504.12 ppb	01:08:52
3	As 188.979†	310.9	323.8	476.43 µg/L	476.43 ppb	01:09:13
3	B 249.677†	10935.1	10974.3	496.05 µg/L	496.05 ppb	01:08:52
3	Ba 233.527†	21916.9	22603.9	495.23 µg/L	495.23 ppb	01:08:52
3	Be 313.107†	824788.0	851483.0	500.11 µg/L	500.11 ppb	01:08:47
3	Cd 226.502†	19943.7	20731.8	492.69 µg/L	492.69 ppb	01:08:52
3	Co 228.616†	11068.7	11363.3	487.57 µg/L	487.57 ppb	01:08:52
3	Cr 267.716†	21518.0	22103.9	481.05 µg/L	481.05 ppb	01:08:52
3	Cu 324.752†	77021.2	75029.2	491.05 µg/L	491.05 ppb	01:08:52
3	Mn 257.610†	165389.8	171197.4	514.49 µg/L	514.49 ppb	01:08:47
3	Mo 202.031†	4549.1	4684.8	463.77 µg/L	463.77 ppb	01:09:13
3	Ni 231.604†	8802.3	8697.9	487.33 µg/L	487.33 ppb	01:08:52
3	P 214.914†	1653.7	1432.5	2330.8 µg/L	2330.8 ppb	01:09:13
3	Pb 220.353†	1782.8	1807.8	474.49 µg/L	474.49 ppb	01:09:13
3	S 181.975 Axial†	314.0	301.2	958.43 µg/L	958.43 ppb	01:09:13
3	Sb 206.836†	533.9	527.7	472.78 µg/L	472.78 ppb	01:09:13
3	Se 196.026†	527.9	516.9	498.25 µg/L	498.25 ppb	01:09:13
3	SiO2†	31696.5	29898.1	5397.7 µg/L	5397.7 ppb	01:08:52
3	Si 251.611†	36354.6	37056.1	2519.2 µg/L	2519.2 ppb	01:08:52
3	Sn 189.927†	1138.4	1181.0	460.33 µg/L	460.33 ppb	01:09:13
3	Ti 334.940†	205429.7	212367.2	496.26 µg/L	496.26 ppb	01:08:47
3	Tl 190.801†	457.1	505.3	498.32 µg/L	498.32 ppb	01:09:13
3	U 409.014†	5118.4	5282.6	478.60 µg/L	478.60 ppb	01:08:52
3	V 292.402†	40099.8	41229.0	491.19 µg/L	491.19 ppb	01:08:52
3	Zn 213.857†	21903.6	21572.9	493.20 µg/L	493.20 ppb	01:08:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2044795.6	97.692 %	0.6625			0.68%
Sc RADIAL	96355.7	99.6 %	0.30			0.31%
Y 371.029	1395688.7	97.405 %	0.7197			0.74%
Ag 328.068†	64545.0	522.11 µg/L	15.657	522.11 ppb	15.657	3.00%
QC value within limits for Ag 328.068 Recovery = 104.42%						
Al 396.153Radial†	10960.1	5221.3 µg/L	9.94	5221.3 ppb	9.94	0.19%
QC value within limits for Al 396.153Radial Recovery = 104.43%						
As 188.979†	354.6	521.86 µg/L	39.341	521.86 ppb	39.341	7.54%
QC value within limits for As 188.979 Recovery = 104.37%						
B 249.677†	11445.0	517.49 µg/L	18.675	517.49 ppb	18.675	3.61%
QC value within limits for B 249.677 Recovery = 103.50%						
Ba 233.527†	23847.9	522.49 µg/L	23.761	522.49 ppb	23.761	4.55%
QC value within limits for Ba 233.527 Recovery = 104.50%						
Be 313.107†	890916.0	523.27 µg/L	20.057	523.27 ppb	20.057	3.83%
QC value within limits for Be 313.107 Recovery = 104.65%						
Ca 317.933Radial†	14427.4	5250.4 µg/L	5.01	5250.4 ppb	5.01	0.10%
QC value within limits for Ca 317.933Radial Recovery = 105.01%						
Cd 226.502†	21977.5	522.34 µg/L	25.842	522.34 ppb	25.842	4.95%
QC value within limits for Cd 226.502 Recovery = 104.47%						
Co 228.616†	12128.1	520.43 µg/L	28.534	520.43 ppb	28.534	5.48%

QC value within limits for Co 228.616	Recovery = 104.09%			
Cr 267.716†	24014.3	522.62 µg/L	36.105	522.62 ppb 36.105 6.91%
QC value within limits for Cr 267.716	Recovery = 104.52%			
Cu 324.752†	79681.0	521.43 µg/L	26.324	521.43 ppb 26.324 5.05%
QC value within limits for Cu 324.752	Recovery = 104.29%			
Fe 238.204 Radial†	444.1	5263.5 µg/L	24.46	5263.5 ppb 24.46 0.46%
QC value within limits for Fe 238.204 Radial	Recovery = 105.27%			
K 766.490 Radial†	11113.9	5186.7 µg/L	48.21	5186.7 ppb 48.21 0.93%
QC value within limits for K 766.490 Radial	Recovery = 103.73%			
Mg 279.077 IEC†	397.2	5239.0 µg/L	1.42	5239.0 ppb 1.42 0.03%
QC value within limits for Mg 279.077 IEC	Recovery = 104.78%			
Mn 257.610†	178782.7	537.28 µg/L	19.754	537.28 ppb 19.754 3.68%
QC value within limits for Mn 257.610	Recovery = 107.46%			
Mo 202.031†	5255.1	520.20 µg/L	48.938	520.20 ppb 48.938 9.41%
QC value within limits for Mo 202.031	Recovery = 104.04%			
Na 589.592 Radial†	20774.6	10369 µg/L	12.0	10369 ppb 12.0 0.12%
QC value within limits for Na 589.592 Radial	Recovery = 103.69%			
Ni 231.604†	9302.3	521.19 µg/L	29.581	521.19 ppb 29.581 5.68%
QC value within limits for Ni 231.604	Recovery = 104.24%			
P 214.914†	1572.2	2560.4 µg/L	199.21	2560.4 ppb 199.21 7.78%
QC value within limits for P 214.914	Recovery = 102.42%			
Pb 220.353†	1986.3	521.36 µg/L	40.676	521.36 ppb 40.676 7.80%
QC value within limits for Pb 220.353	Recovery = 104.27%			
S 181.975 Axial†	321.5	1023.2 µg/L	57.49	1023.2 ppb 57.49 5.62%
QC value within limits for S 181.975 Axial	Recovery = 102.32%			
Sb 206.836†	581.7	521.44 µg/L	42.139	521.44 ppb 42.139 8.08%
QC value within limits for Sb 206.836	Recovery = 104.29%			
Se 196.026†	562.1	540.64 µg/L	36.808	540.64 ppb 36.808 6.81%
QC value within limits for Se 196.026	Recovery = 108.13%			
SiO2†	31230.8	5638.3 µg/L	210.56	5638.3 ppb 210.56 3.73%
QC value within limits for SiO2	Recovery = 105.44%			
Si 251.611†	38733.6	2633.3 µg/L	99.35	2633.3 ppb 99.35 3.77%
QC value within limits for Si 251.611	Recovery = 105.33%			
Sn 189.927†	1340.1	522.25 µg/L	53.628	522.25 ppb 53.628 10.27%
QC value within limits for Sn 189.927	Recovery = 104.45%			
Sr 421.552†	87495.4	520.15 µg/L	0.374	520.15 ppb 0.374 0.07%
QC value within limits for Sr 421.552	Recovery = 104.03%			
Ti 334.940†	222726.5	520.49 µg/L	20.982	520.49 ppb 20.982 4.03%
QC value within limits for Ti 334.940	Recovery = 104.10%			
Tl 190.801†	534.6	527.13 µg/L	25.237	527.13 ppb 25.237 4.79%
QC value within limits for Tl 190.801	Recovery = 105.43%			
U 409.014†	5678.8	514.58 µg/L	31.520	514.58 ppb 31.520 6.13%
QC value within limits for U 409.014	Recovery = 102.92%			
V 292.402†	44160.2	526.36 µg/L	30.511	526.36 ppb 30.511 5.80%
QC value within limits for V 292.402	Recovery = 105.27%			
Zn 213.857†	22948.0	524.66 µg/L	27.321	524.66 ppb 27.321 5.21%
QC value within limits for Zn 213.857	Recovery = 104.93%			

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/17/2010 01:09:23

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	94760.8	94760.8	97.9 %		01:09:53
1	Al 396.153Radial†	-87.4	30.0	14.269 µg/L	14.269 ppb	01:09:53
1	Ca 317.933Radial†	356.8	-20.8	-7.5836 µg/L	-7.5836 ppb	01:10:14
1	Fe 238.204 Radial†	13.4	1.8	20.960 µg/L	20.960 ppb	01:10:14
1	K 766.490 Radial†	436.1	-39.9	-18.606 µg/L	-18.606 ppb	01:09:53
1	Mg 279.077 IEC†	10.0	2.3	29.690 µg/L	29.690 ppb	01:10:14
1	Na 589.592 Radial†	154.7	-22.6	-11.280 µg/L	-11.280 ppb	01:09:53
1	Sr 421.552†	137.4	0.9	0.0052 µg/L	0.0052 ppb	01:09:53
1	Sc 361.383	2036454.0	2036454.0	97.293 %		01:11:16
1	Y 371.029	1392767.5	1392767.5	97.201 %		01:11:16
1	Ag 328.068†	-426.8	21.5	0.1749 µg/L	0.1749 ppb	01:11:21
1	As 188.979†	-4.2	-1.0	-1.5255 µg/L	-1.5255 ppb	01:11:42
1	B 249.677†	336.5	46.5	2.0996 µg/L	2.0996 ppb	01:11:21
1	Ba 233.527†	-3.1	5.2	0.1147 µg/L	0.1147 ppb	01:11:42
1	Be 313.107†	-949.1	183.4	0.1076 µg/L	0.1076 ppb	01:11:21
1	Cd 226.502†	-174.7	-8.9	-0.2151 µg/L	-0.2151 ppb	01:11:42
1	Co 228.616†	50.6	4.0	0.1724 µg/L	0.1724 ppb	01:11:42
1	Cr 267.716†	42.9	-36.2	-0.7866 µg/L	-0.7866 ppb	01:11:21
1	Cu 324.752†	4318.8	62.3	0.4108 µg/L	0.4108 ppb	01:11:21
1	Mn 257.610†	-693.2	-25.5	-0.0775 µg/L	-0.0775 ppb	01:11:42
1	Mo 202.031†	26.1	21.7	2.1475 µg/L	2.1475 ppb	01:11:42
1	Ni 231.604†	361.4	-5.5	-0.3073 µg/L	-0.3073 ppb	01:11:42
1	P 214.914†	275.8	11.0	18.280 µg/L	18.280 ppb	01:11:42
1	Pb 220.353†	27.0	-2.4	-0.6240 µg/L	-0.6240 ppb	01:11:42
1	S 181.975 Axial†	19.7	-2.3	-7.3096 µg/L	-7.3096 ppb	01:11:42
1	Sb 206.836†	25.4	3.4	3.0830 µg/L	3.0830 ppb	01:11:42
1	Se 196.026†	22.1	-4.6	-4.2590 µg/L	-4.2590 ppb	01:11:42
1	SiO2†	2788.4	86.3	15.574 µg/L	15.574 ppb	01:11:21
1	Si 251.611†	481.7	71.0	4.8281 µg/L	4.8281 ppb	01:11:42
1	Sn 189.927†	-3.0	4.3	1.6889 µg/L	1.6889 ppb	01:11:42
1	Ti 334.940†	-375.7	191.1	0.4443 µg/L	0.4443 ppb	01:11:21
1	Tl 190.801†	-33.6	-0.4	-0.4251 µg/L	-0.4251 ppb	01:11:42
1	U 409.014†	-58.9	-54.7	-4.9674 µg/L	-4.9674 ppb	01:11:21
1	V 292.402†	114.0	4.8	0.0639 µg/L	0.0639 ppb	01:11:21
1	Zn 213.857†	732.9	-255.5	-5.8857 µg/L	-5.8857 ppb	01:11:42
2	Sc RADIAL	94098.3	94098.3	97.2 %		01:10:19
2	Al 396.153Radial†	-87.6	29.2	13.880 µg/L	13.880 ppb	01:10:19
2	Ca 317.933Radial†	355.5	-19.6	-7.1329 µg/L	-7.1329 ppb	01:10:40
2	Fe 238.204 Radial†	15.3	3.8	45.058 µg/L	45.058 ppb	01:10:40
2	K 766.490 Radial†	500.8	29.8	13.901 µg/L	13.901 ppb	01:10:19
2	Mg 279.077 IEC†	7.9	0.1	1.4365 µg/L	1.4365 ppb	01:10:40
2	Na 589.592 Radial†	171.0	-4.7	-2.3532 µg/L	-2.3532 ppb	01:10:19
2	Sr 421.552†	107.2	-29.2	-0.1734 µg/L	-0.1734 ppb	01:10:19
2	Sc 361.383	2025810.9	2025810.9	96.785 %		01:11:48
2	Y 371.029	1386260.9	1386260.9	96.747 %		01:11:48
2	Ag 328.068†	-469.9	-25.4	-0.2043 µg/L	-0.2043 ppb	01:11:54
2	As 188.979†	-1.9	1.3	1.9439 µg/L	1.9439 ppb	01:12:14
2	B 249.677†	316.7	27.9	1.2426 µg/L	1.2426 ppb	01:11:54
2	Ba 233.527†	0.5	8.9	0.1936 µg/L	0.1936 ppb	01:12:14
2	Be 313.107†	-953.2	174.0	0.1021 µg/L	0.1021 ppb	01:11:54
2	Cd 226.502†	-169.0	-4.0	-0.1000 µg/L	-0.1000 ppb	01:12:14
2	Co 228.616†	44.1	-2.5	-0.1048 µg/L	-0.1048 ppb	01:12:14
2	Cr 267.716†	78.1	0.4	0.0084 µg/L	0.0084 ppb	01:11:54
2	Cu 324.752†	4318.7	85.5	0.5670 µg/L	0.5670 ppb	01:11:54
2	Mn 257.610†	-709.5	-46.1	-0.1360 µg/L	-0.1360 ppb	01:12:14
2	Mo 202.031†	30.5	26.4	2.6132 µg/L	2.6132 ppb	01:12:14
2	Ni 231.604†	362.1	-2.8	-0.1560 µg/L	-0.1560 ppb	01:12:14
2	P 214.914†	270.7	7.3	11.962 µg/L	11.962 ppb	01:12:14
2	Pb 220.353†	24.7	-4.6	-1.1981 µg/L	-1.1981 ppb	01:12:14

2	S 181.975 Axial†	22.5	0.7	2.1456 µg/L	2.1456 ppb	01:12:14
2	Sb 206.836†	29.0	7.3	6.5198 µg/L	6.5198 ppb	01:12:14
2	Se 196.026†	28.3	1.9	1.9449 µg/L	1.9449 ppb	01:12:14
2	SiO2†	2820.1	134.0	24.199 µg/L	24.199 ppb	01:11:54
2	Si 251.611†	479.6	71.5	4.8582 µg/L	4.8582 ppb	01:12:14
2	Sn 189.927†	-5.6	1.7	0.6500 µg/L	0.6500 ppb	01:12:14
2	Ti 334.940†	-385.4	179.0	0.4183 µg/L	0.4183 ppb	01:11:54
2	Tl 190.801†	-30.2	2.9	2.8163 µg/L	2.8163 ppb	01:12:14
2	U 409.014†	-53.4	-49.3	-4.4852 µg/L	-4.4852 ppb	01:11:54
2	V 292.402†	56.7	-53.7	-0.6245 µg/L	-0.6245 ppb	01:11:54
2	Zn 213.857†	726.7	-258.0	-5.9433 µg/L	-5.9433 ppb	01:12:14
3	Sc RADIAL	94948.6	94948.6	98.1 %		01:10:45
3	Al 396.153Radial†	-106.9	10.3	4.8908 µg/L	4.8908 ppb	01:10:45
3	Ca 317.933Radial†	358.0	-20.4	-7.4169 µg/L	-7.4169 ppb	01:11:05
3	Fe 238.204 Radial†	13.3	1.6	19.151 µg/L	19.151 ppb	01:11:05
3	K 766.490 Radial†	495.9	20.1	9.4019 µg/L	9.4019 ppb	01:10:45
3	Mg 279.077 IEC†	6.4	-1.5	-19.456 µg/L	-19.456 ppb	01:11:05
3	Na 589.592 Radial†	146.9	-30.8	-15.391 µg/L	-15.391 ppb	01:10:45
3	Sr 421.552†	96.4	-41.1	-0.2445 µg/L	-0.2445 ppb	01:10:45
3	Sc 361.383	2031728.5	2031728.5	97.068 %		01:12:20
3	Y 371.029	1389924.2	1389924.2	97.003 %		01:12:20
3	Ag 328.068†	-479.4	-33.7	-0.2673 µg/L	-0.2673 ppb	01:12:26
3	As 188.979†	-1.4	1.9	2.7414 µg/L	2.7414 ppb	01:12:46
3	B 249.677†	275.2	-15.9	-0.7303 µg/L	-0.7303 ppb	01:12:26
3	Ba 233.527†	-8.9	-0.8	-0.0170 µg/L	-0.0170 ppb	01:12:46
3	Be 313.107†	-949.6	180.5	0.1060 µg/L	0.1060 ppb	01:12:26
3	Cd 226.502†	-170.2	-4.8	-0.1162 µg/L	-0.1162 ppb	01:12:46
3	Co 228.616†	51.9	5.4	0.2325 µg/L	0.2325 ppb	01:12:46
3	Cr 267.716†	98.5	21.2	0.4612 µg/L	0.4612 ppb	01:12:26
3	Cu 324.752†	4296.8	49.9	0.3296 µg/L	0.3296 ppb	01:12:26
3	Mn 257.610†	-696.8	-30.9	-0.0904 µg/L	-0.0904 ppb	01:12:46
3	Mo 202.031†	16.7	12.1	1.1983 µg/L	1.1983 ppb	01:12:46
3	Ni 231.604†	368.4	2.6	0.1480 µg/L	0.1480 ppb	01:12:46
3	P 214.914†	263.9	-0.6	-0.9674 µg/L	-0.9674 ppb	01:12:46
3	Pb 220.353†	29.3	-0.0	0.0071 µg/L	0.0071 ppb	01:12:46
3	S 181.975 Axial†	31.1	9.5	30.193 µg/L	30.193 ppb	01:12:46
3	Sb 206.836†	26.0	4.0	3.6207 µg/L	3.6207 ppb	01:12:46
3	Se 196.026†	26.9	0.4	0.4892 µg/L	0.4892 ppb	01:12:46
3	SiO2†	2817.2	122.6	22.132 µg/L	22.132 ppb	01:12:26
3	Si 251.611†	489.4	80.1	5.4475 µg/L	5.4475 ppb	01:12:46
3	Sn 189.927†	-6.1	1.1	0.4404 µg/L	0.4404 ppb	01:12:46
3	Ti 334.940†	-427.1	137.3	0.3225 µg/L	0.3225 ppb	01:12:26
3	Tl 190.801†	-33.2	-0.1	-0.1091 µg/L	-0.1091 ppb	01:12:46
3	U 409.014†	-52.1	-47.8	-4.3463 µg/L	-4.3463 ppb	01:12:26
3	V 292.402†	133.7	25.4	0.3030 µg/L	0.3030 ppb	01:12:26
3	Zn 213.857†	736.6	-250.0	-5.7581 µg/L	-5.7581 ppb	01:12:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031331.2	97.049 %	0.2548			0.26%
Sc RADIAL	94602.6	97.7 %	0.46			0.47%
Y 371.029	1389650.9	96.984 %	0.2276			0.23%
Ag 328.068†	-12.5	-0.0989 µg/L	0.23916	-0.0989 ppb	0.23916	241.82%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	23.2	11.013 µg/L	5.3057	11.013 ppb	5.3057	48.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.7	1.0533 µg/L	2.26861	1.0533 ppb	2.26861	215.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	19.5	0.8706 µg/L	1.45116	0.8706 ppb	1.45116	166.68%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.4	0.0971 µg/L	0.10637	0.0971 ppb	0.10637	109.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	179.3	0.1052 µg/L	0.00282	0.1052 ppb	0.00282	2.68%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-20.3	-7.3778 µg/L	0.22785	-7.3778 ppb	0.22785	3.09%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-5.9	-0.1438 µg/L	0.06229	-0.1438 ppb	0.06229	43.33%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.3	0.1000 µg/L	0.17994	0.1000 ppb	0.17994	179.93%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-4.9	-0.1057 µg/L	0.63169	-0.1057 ppb	0.63169 597.88%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	65.9	0.4358 µg/L	0.12068	0.4358 ppb	0.12068 27.69%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	2.4	28.390 µg/L	14.4638	28.390 ppb	14.4638 50.95%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	3.4	1.5655 µg/L	17.61356	1.5655 ppb	17.61356 >999.9%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	0.3	3.8900 µg/L	24.66481	3.8900 ppb	24.66481 634.06%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	-34.2	-0.1013 µg/L	0.03075	-0.1013 ppb	0.03075 30.35%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	20.1	1.9863 µg/L	0.72108	1.9863 ppb	0.72108 36.30%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-19.4	-9.6747 µg/L	6.66548	-9.6747 ppb	6.66548 68.90%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-1.9	-0.1051 µg/L	0.23191	-0.1051 ppb	0.23191 220.59%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	5.9	9.7582 µg/L	9.81104	9.7582 ppb	9.81104 100.54%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-2.3	-0.6050 µg/L	0.60282	-0.6050 ppb	0.60282 99.64%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	2.6	8.3429 µg/L	19.50410	8.3429 ppb	19.50410 233.78%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	4.9	4.4078 µg/L	1.84866	4.4078 ppb	1.84866 41.94%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-0.7	-0.6083 µg/L	3.24428	-0.6083 ppb	3.24428 533.34%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	114.3	20.635 µg/L	4.5029	20.635 ppb	4.5029 21.82%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	74.2	5.0446 µg/L	0.34924	5.0446 ppb	0.34924 6.92%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	2.4	0.9265 µg/L	0.66860	0.9265 ppb	0.66860 72.17%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	-23.1	-0.1376 µg/L	0.12868	-0.1376 ppb	0.12868 93.54%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	169.1	0.3950 µg/L	0.06419	0.3950 ppb	0.06419 16.25%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.8	0.7607 µg/L	1.78722	0.7607 ppb	1.78722 234.95%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-50.6	-4.5996 µg/L	0.32602	-4.5996 ppb	0.32602 7.09%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	-7.8	-0.0858 µg/L	0.48155	-0.0858 ppb	0.48155 561.12%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-254.5	-5.8624 µg/L	0.09480	-5.8624 ppb	0.09480 1.62%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

=====

Analysis Begun

Start Time: 3/17/2010 01:13:27

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\031610.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 341

Sample ID: 247347001|955136|5

Date Collected: 3/17/2010 01:13:29

Analyst: JWJ

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: 247347001|955136|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95616.4	95616.4	98.8 %		01:14:02
1	Al 396.153Radial†	4110.8	4280.5	2043.3 µg/L	2043.3 ppb	01:14:02
1	Ca 317.933Radial†	2995.2	2646.6	963.17 µg/L	963.17 ppb	01:14:02
1	Fe 238.204 Radial†	1415.4	1420.8	16805 µg/L	16805 ppb	01:14:22
1	K 766.490 Radial†	2634.5	2181.5	1018.0 µg/L	1018.0 ppb	01:14:02
1	Mg 279.077 IEC†	40.8	33.3	421.13 µg/L	421.13 ppb	01:14:22
1	Na 589.592 Radial†	1732.0	1572.6	784.91 µg/L	784.91 ppb	01:14:02
1	Sr 421.552†	607.6	475.6	2.8275 µg/L	2.8275 ppb	01:14:02
1	Sc 361.383	2032889.3	2032889.3	97.123 %		01:15:25
1	Y 371.029	1407009.6	1407009.6	98.195 %		01:15:25
1	Ag 328.068†	-731.3	-292.7	-1.0167 µg/L	-1.0167 ppb	01:15:31
1	As 188.979†	-0.9	2.3	1.2496 µg/L	1.2496 ppb	01:15:51
1	B 249.677†	367.0	78.5	-5.2041 µg/L	-5.2041 ppb	01:15:51
1	Ba 233.527†	979.2	1016.6	22.245 µg/L	22.245 ppb	01:15:51
1	Be 313.107†	913.8	2099.7	0.9197 µg/L	0.9197 ppb	01:15:31
1	Cd 226.502†	-78.4	89.9	0.2396 µg/L	0.2396 ppb	01:15:51
1	Co 228.616†	104.1	59.1	0.8200 µg/L	0.8200 ppb	01:15:51
1	Cr 267.716†	138.0	61.8	1.3486 µg/L	1.3486 ppb	01:15:51
1	Cu 324.752†	4345.6	97.6	3.7970 µg/L	3.7970 ppb	01:15:31
1	Mn 257.610†	172657.6	178459.1	537.32 µg/L	537.32 ppb	01:15:25
1	Mo 202.031†	32.8	28.6	3.4691 µg/L	3.4691 ppb	01:15:51
1	Ni 231.604†	388.7	23.3	1.5244 µg/L	1.5244 ppb	01:15:51
1	P 214.914†	354.8	92.9	141.17 µg/L	141.17 ppb	01:15:51
1	Pb 220.353†	65.4	37.2	10.232 µg/L	10.232 ppb	01:15:51
1	S 181.975 Axial†	24.8	2.9	9.3733 µg/L	9.3733 ppb	01:15:51
1	Sb 206.836†	15.7	-6.6	-5.8736 µg/L	-5.8736 ppb	01:15:51
1	Se 196.026†	7.7	-19.4	34.810 µg/L	34.810 ppb	01:15:51
1	SiO2†	66752.2	65949.8	11906 µg/L	11906 ppb	01:15:31
1	Si 251.611†	79500.2	81431.1	5536.0 µg/L	5536.0 ppb	01:15:31
1	Sn 189.927†	-10.1	-2.9	-1.1240 µg/L	-1.1240 ppb	01:15:51
1	Ti 334.940†	341771.3	352472.6	824.20 µg/L	824.20 ppb	01:15:25
1	Tl 190.801†	-44.6	-11.8	-0.0220 µg/L	-0.0220 ppb	01:15:51
1	U 409.014†	-367.4	-372.5	-36.216 µg/L	-36.216 ppb	01:15:31
1	V 292.402†	628.0	534.3	4.1644 µg/L	4.1644 ppb	01:15:31
1	Zn 213.857†	5502.7	4656.9	106.39 µg/L	106.39 ppb	01:15:51
2	Sc RADIAL	95829.5	95829.5	99.0 %		01:14:28
2	Al 396.153Radial†	4099.7	4260.0	2033.6 µg/L	2033.6 ppb	01:14:28
2	Ca 317.933Radial†	3020.4	2665.3	969.97 µg/L	969.97 ppb	01:14:28
2	Fe 238.204 Radial†	1414.6	1416.8	16757 µg/L	16757 ppb	01:14:48
2	K 766.490 Radial†	2560.0	2100.2	980.15 µg/L	980.15 ppb	01:14:28
2	Mg 279.077 IEC†	48.7	41.2	525.22 µg/L	525.22 ppb	01:14:48
2	Na 589.592 Radial†	1743.6	1580.4	788.80 µg/L	788.80 ppb	01:14:28
2	Sr 421.552†	645.6	512.6	3.0475 µg/L	3.0475 ppb	01:14:28
2	Sc 361.383	2030709.0	2030709.0	97.019 %		01:15:58
2	Y 371.029	1403230.2	1403230.2	97.931 %		01:15:58
2	Ag 328.068†	-653.5	-213.4	-0.3819 µg/L	-0.3819 ppb	01:16:03
2	As 188.979†	2.0	5.4	5.7317 µg/L	5.7317 ppb	01:16:24

2	B 249.677†	357.5	69.2	-5.6020 µg/L	-5.6020 ppb	01:16:24
2	Ba 233.527†	983.2	1021.9	22.360 µg/L	22.360 ppb	01:16:24
2	Be 313.107†	929.8	2117.2	0.9292 µg/L	0.9292 ppb	01:16:03
2	Cd 226.502†	-66.8	101.7	0.5252 µg/L	0.5252 ppb	01:16:24
2	Co 228.616†	99.0	54.0	0.5985 µg/L	0.5985 ppb	01:16:24
2	Cr 267.716†	157.5	82.1	1.7897 µg/L	1.7897 ppb	01:16:24
2	Cu 324.752†	4366.0	123.5	3.9569 µg/L	3.9569 ppb	01:16:03
2	Mn 257.610†	172885.2	178884.6	538.59 µg/L	538.59 ppb	01:15:58
2	Mo 202.031†	29.7	25.5	3.1572 µg/L	3.1572 ppb	01:16:24
2	Ni 231.604†	381.0	15.8	1.1039 µg/L	1.1039 ppb	01:16:24
2	P 214.914†	356.6	95.2	144.91 µg/L	144.91 ppb	01:16:24
2	Pb 220.353†	61.7	33.4	9.2327 µg/L	9.2327 ppb	01:16:24
2	S 181.975 Axial†	22.0	0.1	0.3596 µg/L	0.3596 ppb	01:16:24
2	Sb 206.836†	18.3	-3.8	-3.4173 µg/L	-3.4173 ppb	01:16:24
2	Se 196.026†	5.7	-21.4	32.671 µg/L	32.671 ppb	01:16:24
2	SiO2†	66449.6	65711.7	11863 µg/L	11863 ppb	01:16:03
2	Si 251.611†	79142.5	81150.2	5516.9 µg/L	5516.9 ppb	01:16:03
2	Sn 189.927†	-10.4	-3.2	-1.2461 µg/L	-1.2461 ppb	01:16:24
2	Ti 334.940†	342243.0	353336.7	826.21 µg/L	826.21 ppb	01:15:58
2	Tl 190.801†	-38.3	-5.3	6.3635 µg/L	6.3635 ppb	01:16:24
2	U 409.014†	-336.9	-341.4	-33.390 µg/L	-33.390 ppb	01:16:03
2	V 292.402†	641.8	549.2	4.3488 µg/L	4.3488 ppb	01:16:03
2	Zn 213.857†	5489.0	4648.8	106.20 µg/L	106.20 ppb	01:16:24
3	Sc RADIAL	95695.4	95695.4	98.9 %		01:14:54
3	Al 396.153Radial†	4091.3	4257.3	2032.3 µg/L	2032.3 ppb	01:14:54
3	Ca 317.933Radial†	3044.2	2693.7	980.29 µg/L	980.29 ppb	01:14:54
3	Fe 238.204 Radial†	1423.2	1427.5	16884 µg/L	16884 ppb	01:15:14
3	K 766.490 Radial†	2719.9	2265.6	1057.3 µg/L	1057.3 ppb	01:14:54
3	Mg 279.077 IEC†	51.2	43.8	559.68 µg/L	559.68 ppb	01:15:14
3	Na 589.592 Radial†	1749.3	1588.7	792.93 µg/L	792.93 ppb	01:14:54
3	Sr 421.552†	627.9	495.6	2.9465 µg/L	2.9465 ppb	01:14:54
3	Sc 361.383	2041337.8	2041337.8	97.527 %		01:16:31
3	Y 371.029	1411019.3	1411019.3	98.475 %		01:16:31
3	Ag 328.068†	-634.8	-190.7	-0.1963 µg/L	-0.1963 ppb	01:16:36
3	As 188.979†	-2.5	0.7	-1.2281 µg/L	-1.2281 ppb	01:16:57
3	B 249.677†	360.7	70.5	-5.6093 µg/L	-5.6093 ppb	01:16:57
3	Ba 233.527†	876.4	907.0	19.847 µg/L	19.847 ppb	01:16:57
3	Be 313.107†	798.9	1978.0	0.8615 µg/L	0.8615 ppb	01:16:36
3	Cd 226.502†	-88.5	79.9	-0.0087 µg/L	-0.0087 ppb	01:16:57
3	Co 228.616†	104.3	58.9	0.8864 µg/L	0.8864 ppb	01:16:57
3	Cr 267.716†	127.2	50.2	1.0945 µg/L	1.0945 ppb	01:16:57
3	Cu 324.752†	4421.0	156.4	4.1960 µg/L	4.1960 ppb	01:16:36
3	Mn 257.610†	167238.2	172166.5	518.40 µg/L	518.40 ppb	01:16:31
3	Mo 202.031†	27.1	22.7	2.8871 µg/L	2.8871 ppb	01:16:57
3	Ni 231.604†	381.6	14.4	1.0252 µg/L	1.0252 ppb	01:16:57
3	P 214.914†	333.5	69.6	102.29 µg/L	102.29 ppb	01:16:57
3	Pb 220.353†	75.1	46.9	12.765 µg/L	12.765 ppb	01:16:57
3	S 181.975 Axial†	24.8	2.9	9.2583 µg/L	9.2583 ppb	01:16:57
3	Sb 206.836†	17.6	-4.6	-4.1226 µg/L	-4.1226 ppb	01:16:57
3	Se 196.026†	11.9	-15.1	38.936 µg/L	38.936 ppb	01:16:57
3	SiO2†	64108.3	62954.4	11366 µg/L	11366 ppb	01:16:36
3	Si 251.611†	76182.7	77690.7	5281.7 µg/L	5281.7 ppb	01:16:36
3	Sn 189.927†	-10.3	-3.2	-1.2164 µg/L	-1.2164 ppb	01:16:57
3	Ti 334.940†	328552.6	337462.3	789.09 µg/L	789.09 ppb	01:16:31
3	Tl 190.801†	-41.8	-8.8	2.6070 µg/L	2.6070 ppb	01:16:57
3	U 409.014†	-350.1	-353.1	-34.469 µg/L	-34.469 ppb	01:16:36
3	V 292.402†	562.6	464.5	3.3277 µg/L	3.3277 ppb	01:16:36
3	Zn 213.857†	4931.8	4048.1	92.362 µg/L	92.362 ppb	01:16:57

Mean Data: 247347001|955136|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2034978.7	97.223 %	0.2682			0.28%
Sc RADIAL	95713.8	98.9 %	0.11			0.11%
Y 371.029	1407086.4	98.201 %	0.2718			0.28%
Ag 328.068†	-232.3	-0.5316 µg/L	0.43019	-0.5316 ppb	0.43019	80.92%
Al 396.153Radial†	4266.0	2036.4 µg/L	6.04	2036.4 ppb	6.04	0.30%
As 188.979†	2.8	1.9177 µg/L	3.52765	1.9177 ppb	3.52765	183.95%
B 249.677†	72.7	-5.4718 µg/L	0.23187	-5.4718 ppb	0.23187	4.24%
Ba 233.527†	981.8	21.484 µg/L	1.4188	21.484 ppb	1.4188	6.60%

Be 313.107†	2065.0	0.9035 µg/L	0.03664	0.9035 ppb	0.03664	4.06%
Ca 317.933 Radial†	2668.6	971.14 µg/L	8.622	971.14 ppb	8.622	0.89%
Cd 226.502†	90.5	0.2520 µg/L	0.26721	0.2520 ppb	0.26721	106.02%
Co 228.616†	57.3	0.7683 µg/L	0.15078	0.7683 ppb	0.15078	19.63%
Cr 267.716†	64.7	1.4110 µg/L	0.35178	1.4110 ppb	0.35178	24.93%
Cu 324.752†	125.9	3.9833 µg/L	0.20079	3.9833 ppb	0.20079	5.04%
Fe 238.204 Radial†	1421.7	16815 µg/L	64.1	16815 ppb	64.1	0.38%
K 766.490 Radial†	2182.4	1018.5 µg/L	38.58	1018.5 ppb	38.58	3.79%
Mg 279.077 IEC†	39.4	502.01 µg/L	72.133	502.01 ppb	72.133	14.37%
Mn 257.610†	176503.4	531.43 µg/L	11.306	531.43 ppb	11.306	2.13%
Mo 202.031†	25.6	3.1711 µg/L	0.29124	3.1711 ppb	0.29124	9.18%
Na 589.592 Radial†	1580.6	788.88 µg/L	4.011	788.88 ppb	4.011	0.51%
Ni 231.604†	17.9	1.2178 µg/L	0.26842	1.2178 ppb	0.26842	22.04%
P 214.914†	85.9	129.46 µg/L	23.600	129.46 ppb	23.600	18.23%
Pb 220.353†	39.2	10.743 µg/L	1.8207	10.743 ppb	1.8207	16.95%
S 181.975 Axial†	2.0	6.3304 µg/L	5.17117	6.3304 ppb	5.17117	81.69%
Sb 206.836†	-5.0	-4.4712 µg/L	1.26472	-4.4712 ppb	1.26472	28.29%
Se 196.026†	-18.6	35.472 µg/L	3.1850	35.472 ppb	3.1850	8.98%
SiO2†	64872.0	11712 µg/L	300.6	11712 ppb	300.6	2.57%
Si 251.611†	80090.7	5444.9 µg/L	141.62	5444.9 ppb	141.62	2.60%
Sn 189.927†	-3.1	-1.1955 µg/L	0.06368	-1.1955 ppb	0.06368	5.33%
Sr 421.552†	494.6	2.9405 µg/L	0.11014	2.9405 ppb	0.11014	3.75%
Ti 334.940†	347757.2	813.16 µg/L	20.876	813.16 ppb	20.876	2.57%
Tl 190.801†	-8.6	2.9828 µg/L	3.20928	2.9828 ppb	3.20928	107.59%
U 409.014†	-355.7	-34.692 µg/L	1.4259	-34.692 ppb	1.4259	4.11%
V 292.402†	516.0	3.9470 µg/L	0.54416	3.9470 ppb	0.54416	13.79%
Zn 213.857†	4451.2	101.65 µg/L	8.045	101.65 ppb	8.045	7.91%

Sequence No.: 2

Sample ID: 247347008|955136|5

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 348

Date Collected: 3/17/2010 01:17:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247347008|955136|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95420.2	95420.2	98.6 %		01:17:39
1	Al 396.153Radial†	4393.2	4575.5	2184.2 µg/L	2184.2 ppb	01:17:39
1	Ca 317.933Radial†	2183.4	1829.4	665.76 µg/L	665.76 ppb	01:17:59
1	Fe 238.204 Radial†	1149.8	1154.4	13653 µg/L	13653 ppb	01:17:59
1	K 766.490 Radial†	2845.1	2400.6	1120.3 µg/L	1120.3 ppb	01:17:39
1	Mg 279.077 IEC†	31.4	23.9	300.49 µg/L	300.49 ppb	01:17:59
1	Na 589.592 Radial†	1982.7	1830.5	913.61 µg/L	913.61 ppb	01:17:39
1	Sr 421.552†	668.0	538.2	3.1993 µg/L	3.1993 ppb	01:17:39
1	Sc 361.383	2041019.0	2041019.0	97.511 %		01:19:02
1	Y 371.029	1414713.5	1414713.5	98.733 %		01:19:02
1	Ag 328.068†	-598.8	-153.9	-0.1498 µg/L	-0.1498 ppb	01:19:08
1	As 188.979†	-1.0	2.3	1.5850 µg/L	1.5850 ppb	01:19:28
1	B 249.677†	342.4	51.8	-4.7666 µg/L	-4.7666 ppb	01:19:28
1	Ba 233.527†	1083.9	1120.0	24.504 µg/L	24.504 ppb	01:19:28
1	Be 313.107†	457.0	1627.5	0.6608 µg/L	0.6608 ppb	01:19:08
1	Cd 226.502†	-97.9	70.2	0.1272 µg/L	0.1272 ppb	01:19:28
1	Co 228.616†	107.8	62.5	1.0682 µg/L	1.0682 ppb	01:19:28
1	Cr 267.716†	312.8	240.5	5.2348 µg/L	5.2348 ppb	01:19:28
1	Cu 324.752†	4274.6	7.0	2.6125 µg/L	2.6125 ppb	01:19:08
1	Mn 257.610†	161520.0	166329.1	500.68 µg/L	500.68 ppb	01:19:02
1	Mo 202.031†	33.6	29.4	3.4232 µg/L	3.4232 ppb	01:19:28
1	Ni 231.604†	390.9	23.9	1.5164 µg/L	1.5164 ppb	01:19:28
1	P 214.914†	343.3	79.7	121.85 µg/L	121.85 ppb	01:19:28
1	Pb 220.353†	48.9	20.0	5.6797 µg/L	5.6797 ppb	01:19:28
1	S 181.975 Axial†	16.0	-6.1	-19.406 µg/L	-19.406 ppb	01:19:28
1	Sb 206.836†	16.8	-5.5	-4.9187 µg/L	-4.9187 ppb	01:19:28
1	Se 196.026†	2.8	-24.4	20.141 µg/L	20.141 ppb	01:19:28
1	SiO2†	72574.3	71646.7	12935 µg/L	12935 ppb	01:19:08
1	Si 251.611†	86666.6	88454.3	6013.5 µg/L	6013.5 ppb	01:19:08
1	Sn 189.927†	-5.8	1.5	0.5852 µg/L	0.5852 ppb	01:19:28
1	Ti 334.940†	322758.7	331573.2	775.33 µg/L	775.33 ppb	01:19:02
1	Tl 190.801†	-42.9	-9.9	0.9065 µg/L	0.9065 ppb	01:19:28
1	U 409.014†	-399.9	-404.3	-38.650 µg/L	-38.650 ppb	01:19:08
1	V 292.402†	562.2	464.2	3.7432 µg/L	3.7432 ppb	01:19:08
1	Zn 213.857†	4223.9	3322.9	75.833 µg/L	75.833 ppb	01:19:28
2	Sc RADIAL	94891.3	94891.3	98.0 %		01:18:05
2	Al 396.153Radial†	4316.5	4522.1	2158.6 µg/L	2158.6 ppb	01:18:05
2	Ca 317.933Radial†	2174.4	1832.6	666.91 µg/L	666.91 ppb	01:18:25
2	Fe 238.204 Radial†	1153.7	1164.8	13777 µg/L	13777 ppb	01:18:25
2	K 766.490 Radial†	2864.2	2436.2	1136.9 µg/L	1136.9 ppb	01:18:05
2	Mg 279.077 IEC†	31.0	23.6	296.85 µg/L	296.85 ppb	01:18:25
2	Na 589.592 Radial†	1949.8	1808.2	902.47 µg/L	902.47 ppb	01:18:05
2	Sr 421.552†	662.5	536.3	3.1884 µg/L	3.1884 ppb	01:18:05
2	Sc 361.383	2046412.2	2046412.2	97.769 %		01:19:35
2	Y 371.029	1417906.1	1417906.1	98.956 %		01:19:35
2	Ag 328.068†	-657.0	-211.8	-0.6011 µg/L	-0.6011 ppb	01:19:40
2	As 188.979†	-2.4	0.8	-0.5944 µg/L	-0.5944 ppb	01:20:01
2	B 249.677†	352.2	60.8	-4.4198 µg/L	-4.4198 ppb	01:20:01
2	Ba 233.527†	1079.1	1112.1	24.333 µg/L	24.333 ppb	01:20:01
2	Be 313.107†	475.5	1645.2	0.6712 µg/L	0.6712 ppb	01:19:40
2	Cd 226.502†	-102.5	65.7	0.0068 µg/L	0.0068 ppb	01:20:01
2	Co 228.616†	107.7	62.1	1.0523 µg/L	1.0523 ppb	01:20:01
2	Cr 267.716†	292.9	219.4	4.7747 µg/L	4.7747 ppb	01:20:01
2	Cu 324.752†	4208.8	-71.8	2.1209 µg/L	2.1209 ppb	01:19:40
2	Mn 257.610†	162079.1	166464.5	501.10 µg/L	501.10 ppb	01:19:35
2	Mo 202.031†	30.2	25.8	3.0726 µg/L	3.0726 ppb	01:20:01
2	Ni 231.604†	392.8	24.9	1.5699 µg/L	1.5699 ppb	01:20:01
2	P 214.914†	351.8	87.5	134.71 µg/L	134.71 ppb	01:20:01
2	Pb 220.353†	61.8	33.0	9.0928 µg/L	9.0928 ppb	01:20:01

2	S 181.975 Axial†	17.6	-4.6	-14.516 µg/L	-14.516 ppb	01:20:01
2	Sb 206.836†	15.5	-6.9	-6.1765 µg/L	-6.1765 ppb	01:20:01
2	Se 196.026†	15.9	-11.0	33.168 µg/L	33.168 ppb	01:20:01
2	SiO2†	72050.7	70915.0	12803 µg/L	12803 ppb	01:19:40
2	Si 251.611†	86003.9	87542.3	5951.5 µg/L	5951.5 ppb	01:19:40
2	Sn 189.927†	-7.9	-0.7	-0.2585 µg/L	-0.2585 ppb	01:20:01
2	Ti 334.940†	323618.7	331580.4	775.35 µg/L	775.35 ppb	01:19:35
2	Tl 190.801†	-44.3	-11.2	-0.3232 µg/L	-0.3232 ppb	01:20:01
2	U 409.014†	-344.4	-346.5	-33.416 µg/L	-33.416 ppb	01:19:40
2	V 292.402†	616.3	518.1	4.3650 µg/L	4.3650 ppb	01:19:40
2	Zn 213.857†	4207.1	3294.2	75.168 µg/L	75.168 ppb	01:20:01
3	Sc RADIAL	95278.4	95278.4	98.4 %		01:18:31
3	Al 396.153Radial†	4390.6	4579.5	2186.1 µg/L	2186.1 ppb	01:18:31
3	Ca 317.933Radial†	2171.4	1820.5	662.51 µg/L	662.51 ppb	01:18:51
3	Fe 238.204 Radial†	1151.9	1158.1	13698 µg/L	13698 ppb	01:18:51
3	K 766.490 Radial†	2857.8	2417.7	1128.3 µg/L	1128.3 ppb	01:18:31
3	Mg 279.077 IEC†	28.1	20.5	255.94 µg/L	255.94 ppb	01:18:51
3	Na 589.592 Radial†	1987.0	1837.9	917.29 µg/L	917.29 ppb	01:18:31
3	Sr 421.552†	634.1	504.7	3.0002 µg/L	3.0002 ppb	01:18:31
3	Sc 361.383	2044321.4	2044321.4	97.669 %		01:20:08
3	Y 371.029	1415436.4	1415436.4	98.783 %		01:20:08
3	Ag 328.068†	-589.9	-143.8	-0.0643 µg/L	-0.0643 ppb	01:20:13
3	As 188.979†	0.3	3.5	3.4575 µg/L	3.4575 ppb	01:20:34
3	B 249.677†	318.8	27.1	-5.9112 µg/L	-5.9112 ppb	01:20:34
3	Ba 233.527†	956.9	988.2	21.621 µg/L	21.621 ppb	01:20:34
3	Be 313.107†	417.1	1585.9	0.6484 µg/L	0.6484 ppb	01:20:13
3	Cd 226.502†	-104.2	63.9	-0.0294 µg/L	-0.0294 ppb	01:20:34
3	Co 228.616†	106.7	61.2	1.0799 µg/L	1.0799 ppb	01:20:34
3	Cr 267.716†	265.7	191.9	4.1761 µg/L	4.1761 ppb	01:20:34
3	Cu 324.752†	4287.4	13.0	2.6603 µg/L	2.6603 ppb	01:20:13
3	Mn 257.610†	155908.1	160315.8	482.61 µg/L	482.61 ppb	01:20:08
3	Mo 202.031†	32.2	27.9	3.2804 µg/L	3.2804 ppb	01:20:34
3	Ni 231.604†	375.4	7.4	0.5921 µg/L	0.5921 ppb	01:20:34
3	P 214.914†	346.2	82.1	125.76 µg/L	125.76 ppb	01:20:34
3	Pb 220.353†	36.2	6.9	2.2500 µg/L	2.2500 ppb	01:20:34
3	S 181.975 Axial†	16.0	-6.2	-19.696 µg/L	-19.696 ppb	01:20:34
3	Sb 206.836†	22.4	0.2	0.1504 µg/L	0.1504 ppb	01:20:34
3	Se 196.026†	11.4	-15.6	28.631 µg/L	28.631 ppb	01:20:34
3	SiO2†	68904.2	67768.8	12235 µg/L	12235 ppb	01:20:13
3	Si 251.611†	82149.6	83686.0	5689.3 µg/L	5689.3 ppb	01:20:13
3	Sn 189.927†	-2.5	4.8	1.8872 µg/L	1.8872 ppb	01:20:34
3	Ti 334.940†	310088.7	318066.1	743.75 µg/L	743.75 ppb	01:20:08
3	Tl 190.801†	-38.4	-5.3	5.1230 µg/L	5.1230 ppb	01:20:34
3	U 409.014†	-386.3	-389.7	-37.332 µg/L	-37.332 ppb	01:20:13
3	V 292.402†	572.2	473.5	3.8451 µg/L	3.8451 ppb	01:20:13
3	Zn 213.857†	3796.0	2877.8	65.589 µg/L	65.589 ppb	01:20:34

Mean Data: 247347008|955136|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2043917.5	97.650 %	0.1299			0.13%
Sc RADIAL	95196.7	98.4 %	0.28			0.29%
Y 371.029	1416018.7	98.824 %	0.1168			0.12%
Ag 328.068†	-169.8	-0.2717 µg/L	0.28845	-0.2717 ppb	0.28845	106.16%
Al 396.153Radial†	4559.0	2176.3 µg/L	15.30	2176.3 ppb	15.30	0.70%
As 188.979†	2.2	1.4827 µg/L	2.02789	1.4827 ppb	2.02789	136.77%
B 249.677†	46.6	-5.0325 µg/L	0.78044	-5.0325 ppb	0.78044	15.51%
Ba 233.527†	1073.4	23.486 µg/L	1.6172	23.486 ppb	1.6172	6.89%
Be 313.107†	1619.5	0.6602 µg/L	0.01141	0.6602 ppb	0.01141	1.73%
Ca 317.933Radial†	1827.5	665.06 µg/L	2.281	665.06 ppb	2.281	0.34%
Cd 226.502†	66.6	0.0349 µg/L	0.08196	0.0349 ppb	0.08196	235.12%
Co 228.616†	61.9	1.0668 µg/L	0.01385	1.0668 ppb	0.01385	1.30%
Cr 267.716†	217.2	4.7285 µg/L	0.53085	4.7285 ppb	0.53085	11.23%
Cu 324.752†	-17.3	2.4646 µg/L	0.29858	2.4646 ppb	0.29858	12.12%
Fe 238.204 Radial†	1159.1	13709 µg/L	62.5	13709 ppb	62.5	0.46%
K 766.490 Radial†	2418.2	1128.5 µg/L	8.30	1128.5 ppb	8.30	0.74%
Mg 279.077 IEC†	22.7	284.43 µg/L	24.741	284.43 ppb	24.741	8.70%
Mn 257.610†	164369.8	494.80 µg/L	10.553	494.80 ppb	10.553	2.13%
Mo 202.031†	27.7	3.2587 µg/L	0.17630	3.2587 ppb	0.17630	5.41%
Na 589.592 Radial†	1825.5	911.12 µg/L	7.717	911.12 ppb	7.717	0.85%

Ni 231.604†	18.7	1.2261 µg/L	0.54976	1.2261 ppb	0.54976	44.84%
P 214.914†	83.1	127.44 µg/L	6.592	127.44 ppb	6.592	5.17%
Pb 220.353†	20.0	5.6742 µg/L	3.42139	5.6742 ppb	3.42139	60.30%
S 181.975 Axial†	-5.6	-17.873 µg/L	2.9104	-17.873 ppb	2.9104	16.28%
Sb 206.836†	-4.1	-3.6483 µg/L	3.34931	-3.6483 ppb	3.34931	91.80%
Se 196.026†	-17.0	27.313 µg/L	6.6129	27.313 ppb	6.6129	24.21%
SiO2†	70110.2	12657 µg/L	372.0	12657 ppb	372.0	2.94%
Si 251.611†	86560.9	5884.7 µg/L	172.08	5884.7 ppb	172.08	2.92%
Sn 189.927†	1.9	0.7380 µg/L	1.08099	0.7380 ppb	1.08099	146.48%
Sr 421.552†	526.4	3.1293 µg/L	0.11192	3.1293 ppb	0.11192	3.58%
Ti 334.940†	327073.2	764.81 µg/L	18.238	764.81 ppb	18.238	2.38%
Tl 190.801†	-8.8	1.9021 µg/L	2.85637	1.9021 ppb	2.85637	150.17%
U 409.014†	-380.2	-36.466 µg/L	2.7227	-36.466 ppb	2.7227	7.47%
V 292.402†	485.3	3.9844 µg/L	0.33353	3.9844 ppb	0.33353	8.37%
Zn 213.857†	3164.9	72.197 µg/L	5.7319	72.197 ppb	5.7319	7.94%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/17/2010 01:20:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	96447.1	96447.1	99.6 %		01:21:15
1	Al 396.153Radial†	10656.9	10813.9	5150.8 µg/L	5150.8 ppb	01:21:15
1	Ca 317.933Radial†	14616.9	14283.3	5198.0 µg/L	5198.0 ppb	01:21:15
1	Fe 238.204 Radial†	460.8	450.5	5339.5 µg/L	5339.5 ppb	01:21:36
1	K 766.490 Radial†	11556.2	11111.8	5185.7 µg/L	5185.7 ppb	01:21:15
1	Mg 279.077 IEC†	410.1	403.6	5323.8 µg/L	5323.8 ppb	01:21:36
1	Na 589.592 Radial†	21141.3	21035.5	10499 µg/L	10499 ppb	01:21:15
1	Sr 421.552†	87283.8	87453.2	519.90 µg/L	519.90 ppb	01:21:15
1	Sc 361.383	2035517.7	2035517.7	97.249 %		01:22:39
1	Y 371.029	1390638.7	1390638.7	97.053 %		01:22:39
1	Ag 328.068†	63391.2	65645.0	531.06 µg/L	531.06 ppb	01:22:45
1	As 188.979†	360.3	373.8	550.12 µg/L	550.12 ppb	01:23:06
1	B 249.677†	11592.4	11621.0	525.47 µg/L	525.47 ppb	01:22:45
1	Ba 233.527†	23754.1	24434.6	535.36 µg/L	535.36 ppb	01:22:45
1	Be 313.107†	878234.7	904241.3	531.09 µg/L	531.09 ppb	01:22:39
1	Cd 226.502†	21776.6	22563.4	536.27 µg/L	536.27 ppb	01:22:45
1	Co 228.616†	12204.8	12502.0	536.50 µg/L	536.50 ppb	01:22:45
1	Cr 267.716†	24433.3	25044.3	545.03 µg/L	545.03 ppb	01:22:45
1	Cu 324.752†	84034.5	82035.4	536.82 µg/L	536.82 ppb	01:22:45
1	Mn 257.610†	175365.3	181013.9	543.99 µg/L	543.99 ppb	01:22:39
1	Mo 202.031†	5457.2	5606.5	554.97 µg/L	554.97 ppb	01:23:06
1	Ni 231.604†	9678.3	9575.2	536.48 µg/L	536.48 ppb	01:22:45
1	P 214.914†	1862.8	1643.1	2677.0 µg/L	2677.0 ppb	01:23:06
1	Pb 220.353†	2064.1	2092.3	549.21 µg/L	549.21 ppb	01:23:06
1	S 181.975 Axial†	345.8	333.1	1060.0 µg/L	1060.0 ppb	01:23:06
1	Sb 206.836†	618.4	613.2	549.85 µg/L	549.85 ppb	01:23:06
1	Se 196.026†	599.6	589.2	566.28 µg/L	566.28 ppb	01:23:06
1	SiO2†	33574.3	31744.4	5731.0 µg/L	5731.0 ppb	01:22:45
1	Si 251.611†	38784.1	39457.3	2682.5 µg/L	2682.5 ppb	01:22:45
1	Sn 189.927†	1379.5	1426.0	555.68 µg/L	555.68 ppb	01:23:06
1	Ti 334.940†	219820.9	226617.5	529.58 µg/L	529.58 ppb	01:22:39
1	Tl 190.801†	504.4	552.8	545.02 µg/L	545.02 ppb	01:23:06
1	U 409.014†	5671.7	5838.0	529.02 µg/L	529.02 ppb	01:22:45
1	V 292.402†	44451.2	45596.6	543.64 µg/L	543.64 ppb	01:22:45
1	Zn 213.857†	23939.9	23608.4	539.77 µg/L	539.77 ppb	01:22:45
2	Sc RADIAL	96747.9	96747.9	100.0 %		01:21:41
2	Al 396.153Radial†	10662.4	10786.1	5137.8 µg/L	5137.8 ppb	01:21:41
2	Ca 317.933Radial†	14636.8	14257.7	5188.7 µg/L	5188.7 ppb	01:21:41
2	Fe 238.204 Radial†	454.1	442.4	5243.5 µg/L	5243.5 ppb	01:22:02
2	K 766.490 Radial†	11460.3	10979.7	5124.0 µg/L	5124.0 ppb	01:21:41
2	Mg 279.077 IEC†	403.6	395.8	5221.6 µg/L	5221.6 ppb	01:22:02
2	Na 589.592 Radial†	21252.0	21080.3	10521 µg/L	10521 ppb	01:21:41
2	Sr 421.552†	87724.3	87621.5	520.90 µg/L	520.90 ppb	01:21:41
2	Sc 361.383	2039204.9	2039204.9	97.425 %		01:23:13
2	Y 371.029	1391099.1	1391099.1	97.085 %		01:23:13
2	Ag 328.068†	63558.4	65698.7	531.48 µg/L	531.48 ppb	01:23:18
2	As 188.979†	354.3	366.9	539.98 µg/L	539.98 ppb	01:23:39
2	B 249.677†	11599.5	11606.7	524.87 µg/L	524.87 ppb	01:23:18
2	Ba 233.527†	23747.3	24383.5	534.24 µg/L	534.24 ppb	01:23:18
2	Be 313.107†	878795.7	903184.3	530.47 µg/L	530.47 ppb	01:23:13
2	Cd 226.502†	21771.7	22517.8	535.20 µg/L	535.20 ppb	01:23:18
2	Co 228.616†	12205.7	12480.3	535.56 µg/L	535.56 ppb	01:23:18
2	Cr 267.716†	24406.5	24971.4	543.45 µg/L	543.45 ppb	01:23:18
2	Cu 324.752†	84111.7	81958.4	536.30 µg/L	536.30 ppb	01:23:18
2	Mn 257.610†	175508.8	180835.1	543.45 µg/L	543.45 ppb	01:23:13
2	Mo 202.031†	5371.1	5508.0	545.22 µg/L	545.22 ppb	01:23:39
2	Ni 231.604†	9712.5	9592.3	537.44 µg/L	537.44 ppb	01:23:18
2	P 214.914†	1873.2	1650.3	2688.9 µg/L	2688.9 ppb	01:23:39
2	Pb 220.353†	2028.7	2052.1	538.66 µg/L	538.66 ppb	01:23:39

2	S 181.975 Axial†	346.4	333.0	1059.8 µg/L	1059.8 ppb	01:23:39
2	Sb 206.836†	612.7	606.1	543.40 µg/L	543.40 ppb	01:23:39
2	Se 196.026†	584.7	572.9	550.67 µg/L	550.67 ppb	01:23:39
2	SiO2†	33739.0	31851.0	5750.3 µg/L	5750.3 ppb	01:23:18
2	Si 251.611†	38820.7	39422.8	2680.1 µg/L	2680.1 ppb	01:23:18
2	Sn 189.927†	1359.2	1402.6	546.58 µg/L	546.58 ppb	01:23:39
2	Ti 334.940†	220295.5	226695.9	529.77 µg/L	529.77 ppb	01:23:13
2	Tl 190.801†	501.0	548.4	540.65 µg/L	540.65 ppb	01:23:39
2	U 409.014†	5677.3	5833.2	528.60 µg/L	528.60 ppb	01:23:18
2	V 292.402†	44434.4	45496.7	542.39 µg/L	542.39 ppb	01:23:18
2	Zn 213.857†	23979.7	23604.7	539.69 µg/L	539.69 ppb	01:23:18
3	Sc RADIAL	97031.6	97031.6	100 %		01:22:07
3	Al 396.153Radial†	10667.0	10759.5	5126.9 µg/L	5126.9 ppb	01:22:07
3	Ca 317.933Radial†	14704.5	14282.3	5197.6 µg/L	5197.6 ppb	01:22:07
3	Fe 238.204 Radial†	461.0	447.9	5307.4 µg/L	5307.4 ppb	01:22:28
3	K 766.490 Radial†	11519.7	11005.5	5136.1 µg/L	5136.1 ppb	01:22:07
3	Mg 279.077 IEC†	406.1	397.1	5237.3 µg/L	5237.3 ppb	01:22:28
3	Na 589.592 Radial†	21255.3	21021.4	10492 µg/L	10492 ppb	01:22:07
3	Sr 421.552†	87818.6	87459.0	519.93 µg/L	519.93 ppb	01:22:07
3	Sc 361.383	2045008.3	2045008.3	97.702 %		01:23:46
3	Y 371.029	1397560.5	1397560.5	97.536 %		01:23:46
3	Ag 328.068†	60041.4	61913.8	500.74 µg/L	500.74 ppb	01:23:51
3	As 188.979†	301.7	312.1	459.09 µg/L	459.09 ppb	01:24:12
3	B 249.677†	10943.8	10901.9	492.74 µg/L	492.74 ppb	01:23:51
3	Ba 233.527†	21842.0	22364.2	489.98 µg/L	489.98 ppb	01:23:51
3	Be 313.107†	825201.2	845769.4	496.75 µg/L	496.75 ppb	01:23:46
3	Cd 226.502†	20016.2	20657.6	490.92 µg/L	490.92 ppb	01:23:51
3	Co 228.616†	11100.9	11314.0	485.45 µg/L	485.45 ppb	01:23:51
3	Cr 267.716†	21555.8	21982.6	478.41 µg/L	478.41 ppb	01:23:51
3	Cu 324.752†	76921.4	74354.0	486.65 µg/L	486.65 ppb	01:23:51
3	Mn 257.610†	164848.2	169412.6	509.12 µg/L	509.12 ppb	01:23:46
3	Mo 202.031†	4506.8	4607.6	456.13 µg/L	456.13 ppb	01:24:12
3	Ni 231.604†	8769.5	8598.9	481.78 µg/L	481.78 ppb	01:23:51
3	P 214.914†	1630.9	1396.9	2271.9 µg/L	2271.9 ppb	01:24:12
3	Pb 220.353†	1783.6	1795.4	471.21 µg/L	471.21 ppb	01:24:12
3	S 181.975 Axial†	305.6	290.2	923.67 µg/L	923.67 ppb	01:24:12
3	Sb 206.836†	531.8	521.6	467.22 µg/L	467.22 ppb	01:24:12
3	Se 196.026†	522.4	507.4	489.31 µg/L	489.31 ppb	01:24:12
3	SiO2†	31611.1	29574.8	5339.3 µg/L	5339.3 ppb	01:23:51
3	Si 251.611†	36189.5	36616.6	2489.3 µg/L	2489.3 ppb	01:23:51
3	Sn 189.927†	1116.6	1150.3	448.35 µg/L	448.35 ppb	01:24:12
3	Ti 334.940†	205288.8	210694.6	492.35 µg/L	492.35 ppb	01:23:46
3	Tl 190.801†	457.4	502.3	495.31 µg/L	495.31 ppb	01:24:12
3	U 409.014†	5203.4	5331.6	483.05 µg/L	483.05 ppb	01:23:51
3	V 292.402†	40143.2	40975.0	488.13 µg/L	488.13 ppb	01:23:51
3	Zn 213.857†	21756.1	21259.0	486.00 µg/L	486.00 ppb	01:23:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2039910.3	97.458 %	0.2286			0.23%
Sc RADIAL	96742.2	100.0 %	0.30			0.30%
Y 371.029	1393099.5	97.224 %	0.2701			0.28%
Ag 328.068†	64419.1	521.09 µg/L	17.628	521.09 ppb	17.628	3.38%
QC value within limits for Ag 328.068 Recovery = 104.22%						
Al 396.153Radial†	10786.5	5138.5 µg/L	11.97	5138.5 ppb	11.97	0.23%
QC value within limits for Al 396.153Radial Recovery = 102.77%						
As 188.979†	350.9	516.40 µg/L	49.888	516.40 ppb	49.888	9.66%
QC value within limits for As 188.979 Recovery = 103.28%						
B 249.677†	11376.5	514.36 µg/L	18.723	514.36 ppb	18.723	3.64%
QC value within limits for B 249.677 Recovery = 102.87%						
Ba 233.527†	23727.4	519.86 µg/L	25.882	519.86 ppb	25.882	4.98%
QC value within limits for Ba 233.527 Recovery = 103.97%						
Be 313.107†	884398.4	519.44 µg/L	19.650	519.44 ppb	19.650	3.78%
QC value within limits for Be 313.107 Recovery = 103.89%						
Ca 317.933Radial†	14274.4	5194.8 µg/L	5.29	5194.8 ppb	5.29	0.10%
QC value within limits for Ca 317.933Radial Recovery = 103.90%						
Cd 226.502†	21912.9	520.80 µg/L	25.880	520.80 ppb	25.880	4.97%
QC value within limits for Cd 226.502 Recovery = 104.16%						
Co 228.616†	12098.8	519.17 µg/L	29.206	519.17 ppb	29.206	5.63%

QC value within limits for Co 228.616	Recovery = 103.83%			
Cr 267.716†	23999.4	522.30 µg/L	38.016	522.30 ppb
QC value within limits for Cr 267.716	Recovery = 104.46%			
Cu 324.752†	79449.3	519.92 µg/L	28.821	519.92 ppb
QC value within limits for Cu 324.752	Recovery = 103.98%			
Fe 238.204 Radial†	446.9	5296.8 µg/L	48.88	5296.8 ppb
QC value within limits for Fe 238.204 Radial	Recovery = 105.94%			
K 766.490 Radial†	11032.3	5148.6 µg/L	32.66	5148.6 ppb
QC value within limits for K 766.490 Radial	Recovery = 102.97%			
Mg 279.077 IEC†	398.8	5260.9 µg/L	55.01	5260.9 ppb
QC value within limits for Mg 279.077 IEC	Recovery = 105.22%			
Mn 257.610†	177087.2	532.19 µg/L	19.975	532.19 ppb
QC value within limits for Mn 257.610	Recovery = 106.44%			
Mo 202.031†	5240.7	518.78 µg/L	54.469	518.78 ppb
QC value within limits for Mo 202.031	Recovery = 103.76%			
Na 589.592 Radial†	21045.7	10504 µg/L	15.4	10504 ppb
QC value within limits for Na 589.592 Radial	Recovery = 105.04%			
Ni 231.604†	9255.5	518.56 µg/L	31.860	518.56 ppb
QC value within limits for Ni 231.604	Recovery = 103.71%			
P 214.914†	1563.4	2545.9 µg/L	237.38	2545.9 ppb
QC value within limits for P 214.914	Recovery = 101.84%			
Pb 220.353†	1979.9	519.69 µg/L	42.317	519.69 ppb
QC value within limits for Pb 220.353	Recovery = 103.94%			
S 181.975 Axial†	318.8	1014.5 µg/L	78.65	1014.5 ppb
QC value within limits for S 181.975 Axial	Recovery = 101.45%			
Sb 206.836†	580.3	520.16 µg/L	45.960	520.16 ppb
QC value within limits for Sb 206.836	Recovery = 104.03%			
Se 196.026†	556.5	535.42 µg/L	40.684	535.42 ppb
QC value within limits for Se 196.026	Recovery = 107.08%			
SiO2†	31056.8	5606.9 µg/L	231.90	5606.9 ppb
QC value within limits for SiO2	Recovery = 104.85%			
Si 251.611†	38498.9	2617.3 µg/L	110.83	2617.3 ppb
QC value within limits for Si 251.611	Recovery = 104.69%			
Sn 189.927†	1326.3	516.87 µg/L	59.511	516.87 ppb
QC value within limits for Sn 189.927	Recovery = 103.37%			
Sr 421.552†	87511.2	520.24 µg/L	0.568	520.24 ppb
QC value within limits for Sr 421.552	Recovery = 104.05%			
Ti 334.940†	221336.0	517.23 µg/L	21.548	517.23 ppb
QC value within limits for Ti 334.940	Recovery = 103.45%			
Tl 190.801†	534.5	526.99 µg/L	27.527	526.99 ppb
QC value within limits for Tl 190.801	Recovery = 105.40%			
U 409.014†	5667.6	513.56 µg/L	26.421	513.56 ppb
QC value within limits for U 409.014	Recovery = 102.71%			
V 292.402†	44022.8	524.72 µg/L	31.695	524.72 ppb
QC value within limits for V 292.402	Recovery = 104.94%			
Zn 213.857†	22824.0	521.82 µg/L	31.017	521.82 ppb
QC value within limits for Zn 213.857	Recovery = 104.36%			

All analyte(s) passed QC.

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

Autosampler Location: 8
 Date Collected: 3/17/2010 01:24:21
 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	94915.5	94915.5	98.1 %		01:24:52
1	Al 396.153Radial†	-94.1	23.4	11.107 µg/L	11.107 ppb	01:24:52
1	Ca 317.933Radial†	363.0	-15.1	-5.5091 µg/L	-5.5091 ppb	01:25:12
1	Fe 238.204 Radial†	14.6	2.9	34.631 µg/L	34.631 ppb	01:25:12
1	K 766.490 Radial†	439.6	-37.0	-17.281 µg/L	-17.281 ppb	01:24:52
1	Mg 279.077 IEC†	6.3	-1.6	-20.839 µg/L	-20.839 ppb	01:25:12
1	Na 589.592 Radial†	201.2	24.6	12.293 µg/L	12.293 ppb	01:24:52
1	Sr 421.552†	132.2	-4.6	-0.0276 µg/L	-0.0276 ppb	01:24:52
1	Sc 361.383	2041329.2	2041329.2	97.526 %		01:26:14
1	Y 371.029	1398382.2	1398382.2	97.593 %		01:26:14
1	Ag 328.068†	-394.7	55.5	0.4514 µg/L	0.4514 ppb	01:26:20
1	As 188.979†	-0.2	3.0	4.4439 µg/L	4.4439 ppb	01:26:40
1	B 249.677†	293.2	1.3	0.0378 µg/L	0.0378 ppb	01:26:20
1	Ba 233.527†	-3.5	4.9	0.1076 µg/L	0.1076 ppb	01:26:40
1	Be 313.107†	-940.0	195.0	0.1144 µg/L	0.1144 ppb	01:26:20
1	Cd 226.502†	-177.5	-11.4	-0.2740 µg/L	-0.2740 ppb	01:26:40
1	Co 228.616†	48.3	1.5	0.0648 µg/L	0.0648 ppb	01:26:40
1	Cr 267.716†	18.3	-61.5	-1.3363 µg/L	-1.3363 ppb	01:26:20
1	Cu 324.752†	4361.0	94.9	0.6266 µg/L	0.6266 ppb	01:26:20
1	Mn 257.610†	-696.4	-27.1	-0.0780 µg/L	-0.0780 ppb	01:26:40
1	Mo 202.031†	26.0	21.5	2.1289 µg/L	2.1289 ppb	01:26:40
1	Ni 231.604†	370.6	3.1	0.1716 µg/L	0.1716 ppb	01:26:40
1	P 214.914†	259.2	-6.7	-11.126 µg/L	-11.126 ppb	01:26:40
1	Pb 220.353†	34.1	4.8	1.2768 µg/L	1.2768 ppb	01:26:40
1	S 181.975 Axial†	17.4	-4.7	-15.112 µg/L	-15.112 ppb	01:26:40
1	Sb 206.836†	24.6	2.5	2.2398 µg/L	2.2398 ppb	01:26:40
1	Se 196.026†	29.1	2.5	2.5059 µg/L	2.5059 ppb	01:26:40
1	SiO2†	2800.8	92.1	16.629 µg/L	16.629 ppb	01:26:20
1	Si 251.611†	480.2	68.3	4.6407 µg/L	4.6407 ppb	01:26:40
1	Sn 189.927†	-3.0	4.4	1.7135 µg/L	1.7135 ppb	01:26:40
1	Ti 334.940†	-430.8	135.5	0.3183 µg/L	0.3183 ppb	01:26:20
1	Tl 190.801†	-28.4	5.0	4.8532 µg/L	4.8532 ppb	01:26:40
1	U 409.014†	-29.2	-24.1	-2.1936 µg/L	-2.1936 ppb	01:26:20
1	V 292.402†	152.9	44.4	0.5316 µg/L	0.5316 ppb	01:26:20
1	Zn 213.857†	728.2	-262.2	-6.0397 µg/L	-6.0397 ppb	01:26:40
2	Sc RADIAL	94180.4	94180.4	97.3 %		01:25:18
2	Al 396.153Radial†	-110.9	5.3	2.4888 µg/L	2.4888 ppb	01:25:18
2	Ca 317.933Radial†	348.8	-26.8	-9.7636 µg/L	-9.7636 ppb	01:25:38
2	Fe 238.204 Radial†	12.7	1.1	13.335 µg/L	13.335 ppb	01:25:38
2	K 766.490 Radial†	350.4	-125.2	-58.424 µg/L	-58.424 ppb	01:25:18
2	Mg 279.077 IEC†	10.6	2.9	38.140 µg/L	38.140 ppb	01:25:38
2	Na 589.592 Radial†	155.4	-20.9	-10.415 µg/L	-10.415 ppb	01:25:18
2	Sr 421.552†	142.5	7.0	0.0418 µg/L	0.0418 ppb	01:25:18
2	Sc 361.383	2014285.9	2014285.9	96.234 %		01:26:46
2	Y 371.029	1378383.1	1378383.1	96.197 %		01:26:46
2	Ag 328.068†	-500.7	-60.1	-0.4862 µg/L	-0.4862 ppb	01:26:52
2	As 188.979†	-2.0	1.2	1.7813 µg/L	1.7813 ppb	01:27:12
2	B 249.677†	314.5	27.5	1.2408 µg/L	1.2408 ppb	01:26:52
2	Ba 233.527†	-3.0	5.3	0.1149 µg/L	0.1149 ppb	01:27:12
2	Be 313.107†	-853.3	272.1	0.1598 µg/L	0.1598 ppb	01:26:52
2	Cd 226.502†	-178.2	-14.5	-0.3471 µg/L	-0.3471 ppb	01:27:12
2	Co 228.616†	50.3	4.2	0.1811 µg/L	0.1811 ppb	01:27:12
2	Cr 267.716†	73.4	-4.0	-0.0870 µg/L	-0.0870 ppb	01:26:52
2	Cu 324.752†	4264.4	54.6	0.3592 µg/L	0.3592 ppb	01:26:52
2	Mn 257.610†	-693.1	-33.3	-0.1018 µg/L	-0.1018 ppb	01:27:12
2	Mo 202.031†	32.0	28.1	2.7816 µg/L	2.7816 ppb	01:27:12
2	Ni 231.604†	366.6	4.1	0.2275 µg/L	0.2275 ppb	01:27:12
2	P 214.914†	267.1	5.1	8.4532 µg/L	8.4532 ppb	01:27:12
2	Pb 220.353†	32.3	3.4	0.8942 µg/L	0.8942 ppb	01:27:12

2	S 181.975 Axial†	20.9	-0.9	-2.7633 µg/L	-2.7633 ppb	01:27:12
2	Sb 206.836†	20.6	-1.4	-1.1645 µg/L	-1.1645 ppb	01:27:12
2	Se 196.026†	18.5	-8.1	-7.5553 µg/L	-7.5553 ppb	01:27:12
2	SiO2†	2795.3	124.9	22.548 µg/L	22.548 ppb	01:26:52
2	Si 251.611†	490.9	86.0	5.8479 µg/L	5.8479 ppb	01:27:12
2	Sn 189.927†	-3.1	4.3	1.6560 µg/L	1.6560 ppb	01:27:12
2	Ti 334.940†	-441.1	118.8	0.2747 µg/L	0.2747 ppb	01:26:52
2	Tl 190.801†	-32.5	0.4	0.3737 µg/L	0.3737 ppb	01:27:12
2	U 409.014†	-17.0	-11.8	-1.0738 µg/L	-1.0738 ppb	01:26:52
2	V 292.402†	48.0	-62.4	-0.7183 µg/L	-0.7183 ppb	01:26:52
2	Zn 213.857†	721.8	-258.8	-5.9621 µg/L	-5.9621 ppb	01:27:12
3	Sc RADIAL	95485.2	95485.2	98.7 %		01:25:44
3	Al 396.153Radial†	-149.3	-32.0	-15.345 µg/L	-15.345 ppb	01:25:44
3	Ca 317.933Radial†	355.5	-25.0	-9.0913 µg/L	-9.0913 ppb	01:26:04
3	Fe 238.204 Radial†	13.4	1.6	18.998 µg/L	18.998 ppb	01:26:04
3	K 766.490 Radial†	472.8	-6.0	-2.8231 µg/L	-2.8231 ppb	01:25:44
3	Mg 279.077 IEC†	11.7	3.9	51.557 µg/L	51.557 ppb	01:26:04
3	Na 589.592 Radial†	179.4	1.2	0.6180 µg/L	0.6180 ppb	01:25:44
3	Sr 421.552†	108.0	-29.9	-0.1778 µg/L	-0.1778 ppb	01:25:44
3	Sc 361.383	2050472.2	2050472.2	97.963 %		01:27:18
3	Y 371.029	1402994.9	1402994.9	97.915 %		01:27:18
3	Ag 328.068†	-525.7	-76.5	-0.6141 µg/L	-0.6141 ppb	01:27:24
3	As 188.979†	-1.2	2.1	3.0560 µg/L	3.0560 ppb	01:27:44
3	B 249.677†	300.6	7.5	0.3291 µg/L	0.3291 ppb	01:27:24
3	Ba 233.527†	-1.4	7.0	0.1531 µg/L	0.1531 ppb	01:27:44
3	Be 313.107†	-1025.6	112.0	0.0656 µg/L	0.0656 ppb	01:27:24
3	Cd 226.502†	-168.9	-1.8	-0.0464 µg/L	-0.0464 ppb	01:27:44
3	Co 228.616†	48.2	1.1	0.0483 µg/L	0.0483 ppb	01:27:44
3	Cr 267.716†	78.7	0.1	0.0011 µg/L	0.0011 ppb	01:27:24
3	Cu 324.752†	4321.8	35.0	0.2324 µg/L	0.2324 ppb	01:27:24
3	Mn 257.610†	-706.7	-34.4	-0.1059 µg/L	-0.1059 ppb	01:27:44
3	Mo 202.031†	30.0	25.5	2.5200 µg/L	2.5200 ppb	01:27:44
3	Ni 231.604†	364.1	-5.2	-0.2907 µg/L	-0.2907 ppb	01:27:44
3	P 214.914†	271.9	5.1	8.4813 µg/L	8.4813 ppb	01:27:44
3	Pb 220.353†	30.6	1.1	0.2909 µg/L	0.2909 ppb	01:27:44
3	S 181.975 Axial†	26.8	4.8	15.379 µg/L	15.379 ppb	01:27:44
3	Sb 206.836†	28.3	6.1	5.5065 µg/L	5.5065 ppb	01:27:44
3	Se 196.026†	28.8	2.1	2.0228 µg/L	2.0228 ppb	01:27:44
3	SiO2†	2801.2	79.7	14.388 µg/L	14.388 ppb	01:27:24
3	Si 251.611†	484.1	70.1	4.7648 µg/L	4.7648 ppb	01:27:44
3	Sn 189.927†	-5.2	2.1	0.8325 µg/L	0.8325 ppb	01:27:44
3	Ti 334.940†	-378.3	191.1	0.4426 µg/L	0.4426 ppb	01:27:24
3	Tl 190.801†	-32.5	0.9	0.9214 µg/L	0.9214 ppb	01:27:44
3	U 409.014†	0.5	6.3	0.5720 µg/L	0.5720 ppb	01:27:24
3	V 292.402†	89.5	-20.9	-0.2296 µg/L	-0.2296 ppb	01:27:24
3	Zn 213.857†	731.7	-261.9	-6.0328 µg/L	-6.0328 ppb	01:27:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035362.4	97.241 %	0.8990			0.92%
Sc RADIAL	94860.4	98.0 %	0.68			0.69%
Y 371.029	1393253.4	97.235 %	0.9131			0.94%
Ag 328.068†	-27.0	-0.2163 µg/L	0.58175	-0.2163 ppb	0.58175	268.96%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.1	-0.5830 µg/L	13.49106	-0.5830 ppb	13.49106	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.1	3.0937 µg/L	1.33169	3.0937 ppb	1.33169	43.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	12.1	0.5359 µg/L	0.62760	0.5359 ppb	0.62760	117.11%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.7	0.1252 µg/L	0.02447	0.1252 ppb	0.02447	19.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	193.0	0.1133 µg/L	0.04710	0.1133 ppb	0.04710	41.58%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-22.3	-8.1213 µg/L	2.28712	-8.1213 ppb	2.28712	28.16%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-9.3	-0.2225 µg/L	0.15681	-0.2225 ppb	0.15681	70.48%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.2	0.0981 µg/L	0.07241	0.0981 ppb	0.07241	73.85%

Cr	267.716†	-21.8	-0.4741 µg/L	0.74802	-0.4741 ppb	0.74802	157.78%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	61.5	0.4061 µg/L	0.20125	0.4061 ppb	0.20125	49.56%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.9	22.321 µg/L	11.0302	22.321 ppb	11.0302	49.42%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-56.1	-26.176 µg/L	28.8479	-26.176 ppb	28.8479	110.21%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.7	22.953 µg/L	38.5135	22.953 ppb	38.5135	167.80%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-31.6	-0.0952 µg/L	0.01507	-0.0952 ppb	0.01507	15.83%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	25.0	2.4768 µg/L	0.32849	2.4768 ppb	0.32849	13.26%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	1.7	0.8318 µg/L	11.35556	0.8318 ppb	11.35556	>999.9%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	0.6	0.0361 µg/L	0.28440	0.0361 ppb	0.28440	787.18%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	1.2	1.9362 µg/L	11.31205	1.9362 ppb	11.31205	584.23%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	3.1	0.8206 µg/L	0.49702	0.8206 ppb	0.49702	60.57%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-0.3	-0.8319 µg/L	15.33698	-0.8319 ppb	15.33698	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	2.4	2.1939 µg/L	3.33575	2.1939 ppb	3.33575	152.04%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.1	-1.0089 µg/L	5.67453	-1.0089 ppb	5.67453	562.47%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		98.9	17.855 µg/L	4.2157	17.855 ppb	4.2157	23.61%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	74.8	5.0845 µg/L	0.66409	5.0845 ppb	0.66409	13.06%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	3.6	1.4006 µg/L	0.49288	1.4006 ppb	0.49288	35.19%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-9.2	-0.0545 µg/L	0.11225	-0.0545 ppb	0.11225	205.80%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	148.5	0.3452 µg/L	0.08711	0.3452 ppb	0.08711	25.23%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	2.1	2.0495 µg/L	2.44353	2.0495 ppb	2.44353	119.23%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-9.9	-0.8985 µg/L	1.39110	-0.8985 ppb	1.39110	154.83%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-13.0	-0.1388 µg/L	0.62990	-0.1388 ppb	0.62990	453.94%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-261.0	-6.0115 µg/L	0.04296	-6.0115 ppb	0.04296	0.71%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, March 17, 2010 20:03:29

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100313\Sample.214

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		1980.1		1980.137		49.444		2.5
Mg	24.0		32848.9		32848.926		313.690		1.0
Co	58.9		33849.3		33849.262		515.362		1.5
Rh	102.9		60853.6		60853.555		838.505		1.4
In	114.9		73198.9		73198.856		280.778		0.4
Pb	208.0		38710.4		38710.383		483.888		1.3
[> Ba	137.9		69136.1		69136.146		744.699		1.1
[Ba++	69.0		2219.6		0.032		0.001		2.4
[> Ce	139.9		89897.0		89896.984		836.144		0.9
[CeO	155.9		1421.7		0.016		0.000		2.7
Bkgd	220.0		13.4		13.400		1.294		9.7

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	6.3	2627.9
Co	59	21	7.0	34475.9
In	115	21	7.8	68173.9

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	599	2080	0.636
Be	9.0	9.1	2061	2080	0.669
Mg	24.0	24.0	5680	2120	0.624
Mg	25.0	25.0	5912	2080	0.669
Mg	26.0	26.0	6166	2120	0.685
Co	58.9	58.9	14166	2170	0.648
Rh	102.9	102.9	24874	2230	0.717
In	114.9	114.8	27765	2260	0.692
Ce	139.9	139.9	33851	2280	0.756
Pb	206.0	206.0	49924	2420	0.668
Pb	207.0	207.0	50171	2385	0.722
Pb	208.0	208.0	50415	2430	0.721
U	238.1	238.0	57723	2470	0.709

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 18, 2010 14:02:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\Blank.282

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9		ug/L		8	
| > Sc 45		ug/L		1002716	
[Ni 60		ug/L		148	
[> Ge 74		ug/L		277564	
| As 75		ug/L		59	
| Se 77		ug/L		8162	
| Se 82		ug/L		-17	
[Kr 83		ug/L		110	
[> Lu 175		ug/L		175442	
[Tl 205		ug/L		357	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Simple Linear	
Sc	45Simple Linear	
Ni	60Simple Linear	
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Lu	175Simple Linear	
Tl	205Simple 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					
[> Lu 175					
[Tl 205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 18, 2010 14:06:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\Standard 1.283

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	3.952	3371	0.003
> Sc	45		ug/L		987346	987346.180
[Ni	60	10.000	ug/L	1.731	9977	0.010
[> Ge	74		ug/L		275210	275210.424
| As	75	10.000	ug/L	5.621	8120	0.029
| Se	77		ug/L		7301	-0.003
| Se	82	10.000	ug/L	2.291	689	0.003
[Kr	83		ug/L		101	-0.000
[> Lu	175		ug/L		172314	172314.215
[Tl	205	10.000	ug/L	1.072	61654	0.356

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

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					
[> Lu	175					
[Tl	205					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Thursday, March 18, 2010 14:06:45

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 18, 2010 14:10:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\Standard 2.284

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.000 ug/L	2.296	32655	0.034
>	Sc	45	ug/L		957721	957720.781
[	Ni	60	100.010 ug/L	0.838	96498	0.101
>	Ge	74	ug/L		264920	264919.592
|	As	75	99.986 ug/L	0.491	76579	0.289
|	Se	77	ug/L		11430	0.014
|	Se	82	100.021 ug/L	1.963	6930	0.026
[	Kr	83	ug/L		115	0.000
>	Lu	175	ug/L		168447	168447.407
[	Tl	205	99.966 ug/L	1.012	579886	3.441

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
[	Be	9									
>	Sc	45									
[	Ni	60									
>	Ge	74									
|	As	75									
|	Se	77									
|	Se	82									
[	Kr	83									
>	Lu	175									
[	Tl	205									

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, March 18, 2010 14:10:46

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 18, 2010 14:14:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 1.285

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.029 ug/L	0.792	16672	0.017
[>	Sc	45	ug/L		977155	977154.643
[	Ni	60	50.155 ug/L	1.836	49439	0.050
[>	Ge	74	ug/L		266135	266134.595
|	As	75	50.672 ug/L	2.887	39009	0.146
|	Se	77	ug/L		8835	0.004
|	Se	82	52.198 ug/L	4.589	3626	0.014
[	Kr	83	ug/L		113	0.000
[>	Lu	175	ug/L		166872	166872.336
[	Tl	205	51.104 ug/L	2.157	293870	1.759

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	100.058			
[>	Sc	45		97.5		
[	Ni	60	100.310			
[>	Ge	74		95.9		
|	As	75	101.344			
|	Se	77				
|	Se	82	104.397			
[	Kr	83				
[>	Lu	175		95.1		
[	Tl	205	102.207			

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, March 18, 2010 14:18:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniaset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 2.286

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.006	ug/L	72.283	6	-0.000
|>	Sc 45		ug/L		1013403	1013403.114
[	Ni 60	0.011	ug/L	25.879	160	0.000
[>	Ge 74		ug/L		271516	271516.411
|	As 75	0.366	ug/L	55.933	344	0.001
|	Se 77		ug/L		7812	-0.001
|	Se 82	0.146	ug/L	86.989	-6	0.000
[	Kr 83		ug/L		102	-0.000
[>	Lu 175		ug/L		173339	173338.740
[	Tl 205	0.093	ug/L	10.393	910	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
|>	Sc 45	101.1			
[	Ni 60				
[>	Ge 74	97.8			
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				
[>	Lu 175	98.8			
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Thursday, March 18, 2010 14:18:52

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 18, 2010 14:22:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasse11.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 3.287

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.582	ug/L	1.932	203	0.000
[> Sc	45		ug/L		983708	983708.129
[Ni	60	2.199	ug/L	2.510	2321	0.002
[> Ge	74		ug/L		270365	270365.104
[As	75	6.195	ug/L	5.713	4898	0.018
[Se	77		ug/L		6869	-0.004
[Se	82	6.251	ug/L	3.776	427	0.002
[Kr	83		ug/L		96	-0.000
[> Lu	175		ug/L		169529	169528.998
[Tl	205	1.142	ug/L	0.755	7010	0.039

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	116.401					
[> Sc	45		98.1				
[Ni	60	109.960					
[> Ge	74		97.4				
[As	75	123.909					
[Se	77						
[Se	82	125.019					
[Kr	83						
[> Lu	175		96.6				
[Tl	205	114.215					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 18, 2010 14:26:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 4.288

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.108	ug/L	35.436	40	0.000
|>	Sc 45		ug/L		903134	903133.967
[	Ni 60	3.012	ug/L	0.772	2870	0.003
|>	Ge 74		ug/L		248637	248636.874
|	As 75	0.472	ug/L	174.096	392	0.001
|	Se 77		ug/L		6176	-0.005
|	Se 82	-1.408	ug/L	11.884	-107	-0.000
[	Kr 83		ug/L		230	0.001
|>	Lu 175		ug/L		162592	162591.657
[	Tl 205	0.006	ug/L	47.112	366	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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
|>	Sc 45		90.1		
[	Ni 60	111.569			
|>	Ge 74		89.6		
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				
|>	Lu 175		92.7		
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, March 18, 2010 14:30:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlasset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 5.289

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	20.971	ug/L	2.697	6445	0.007
> Sc	45		ug/L		900634	900634.257
Ni	60	23.189	ug/L	2.248	21141	0.023
> Ge	74		ug/L		244909	244909.097
As	75	22.818	ug/L	1.654	16199	0.066
Se	77		ug/L		7101	-0.000
Se	82	21.803	ug/L	2.853	1385	0.006
Kr	83		ug/L		217	0.000
> Lu	175		ug/L		161232	161232.417
Tl	205	20.594	ug/L	1.739	114618	0.709

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
Be	9	104.853					
> Sc	45		89.8				
Ni	60	102.156					
> Ge	74		88.2				
As	75	114.090					
Se	77						
Se	82	109.017					
Kr	83						
> Lu	175		91.9				
Tl	205	102.971					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Thursday, March 18, 2010 14:30:57

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 14:34:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.290

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	48.980	ug/L	1.108	15690	0.017
[> Sc	45		ug/L		939341	939341.400
[Ni	60	51.066	ug/L	1.100	48395	0.051
[> Ge	74		ug/L		260049	260048.866
[As	75	50.284	ug/L	3.076	37832	0.145
[Se	77		ug/L		8540	0.003
[Se	82	52.347	ug/L	1.691	3553	0.014
[Kr	83		ug/L		99	-0.000
[> Lu	175		ug/L		166354	166353.978
[Tl	205	50.518	ug/L	1.757	289630	1.739

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9	97.961				
[> Sc	45		93.7			
[Ni	60	102.133				
[> Ge	74		93.7			
[As	75	100.569				
[Se	77					
[Se	82	104.694				
[Kr	83					
[> Lu	175		94.8			
[Tl	205	101.037				

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: Thursday, March 18, 2010 14:34:58

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 14:38:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317QC Std 7.291

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.006	ug/L	114.463	6	-0.000
[> Sc	45		ug/L		1029057	1029057.313
[Ni	60	0.006	ug/L	520.310	156	0.000
[> Ge	74		ug/L		264785	264784.527
[As	75	0.312	ug/L	75.357	294	0.001
[Se	77		ug/L		7594	-0.001
[Se	82	0.159	ug/L	100.200	-5	0.000
[Kr	83		ug/L		96	-0.000
[> Lu	175		ug/L		168539	168539.079
[Tl	205	0.095	ug/L	10.218	893	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		102.6			
[Ni	60					
[> Ge	74		95.4			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		96.1			
[Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202047715

Sample Date/Time: Thursday, March 18, 2010 14:42:27

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: c:\elandata\Dataset\100317\1202047715.292

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.005	ug/L	135.911	6	-0.000
[>	Sc 45		ug/L		1029197	1029197.141
[	Ni 60	0.017	ug/L	24.915	170	0.000
[>	Ge 74		ug/L		276249	276248.748
|	As 75	0.383	ug/L	26.272	365	0.001
|	Se 77		ug/L		4656	-0.013
|	Se 82	0.289	ug/L	122.824	4	0.000
[	Kr 83		ug/L		88	-0.000
[>	Lu 175		ug/L		181702	181702.410
[	Tl 205	0.047	ug/L	6.102	664	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be 9				
[>	Sc 45		102.6		
[	Ni 60				
[>	Ge 74		99.5		
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				
[>	Lu 175		103.6		
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202047715

Report Date/Time: Thursday, March 18, 2010 14:43:06

ICPMS#6 - Summary Report

Sample ID: 1202047720

Sample Date/Time: Thursday, March 18, 2010 14:46:30

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 955138|40|rmj

Method File: c:\elandata\Method\benlassettl.mth

Dataset File: c:\elandata\Dataset\100317\1202047720.293

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	16.529	ug/L	14.067	6250	0.006
[>	Sc 45		ug/L		1120721	1120720.978
[	Ni 60	29.688	ug/L	13.474	33257	0.030
[>	Ge 74		ug/L		263292	263291.658
[	As 75	27.426	ug/L	2.694	20919	0.079
[	Se 77		ug/L		9713	0.007
[	Se 82	72.579	ug/L	3.992	4990	0.019
[	Kr 83		ug/L		107	0.000
[>	Lu 175		ug/L		168700	168699.847
[	Tl 205	31.764	ug/L	1.534	184741	1.093

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9					
[>	Sc 45		111.8			
[	Ni 60					
[>	Ge 74		94.9			
[	As 75					
[	Se 77					
[	Se 82					
[	Kr 83					
[>	Lu 175		96.2			
[	Tl 205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 14:50:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlasset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.294

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	49.224	ug/L	0.722	15806	0.017
[>	Sc 45		ug/L		941372	941371.857
[	Ni 60	51.309	ug/L	0.734	48732	0.052
[>	Ge 74		ug/L		258211	258211.473
[	As 75	51.545	ug/L	0.496	38507	0.149
[	Se 77		ug/L		8484	0.003
[	Se 82	52.088	ug/L	1.673	3510	0.014
[	Kr 83		ug/L		102	-0.000
[>	Lu 175		ug/L		166085	166084.849
[	Tl 205	51.195	ug/L	3.198	292897	1.762

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be 9	98.448					
[>	Sc 45		93.9				
[	Ni 60	102.619					
[>	Ge 74		93.0				
[	As 75	103.091					
[	Se 77						
[	Se 82	104.176					
[	Kr 83						
[>	Lu 175		94.7				
[	Tl 205	102.391					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 14:54:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 7.295

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.002	ug/L	463.078	7	-0.000
[>	Sc 45		ug/L		1048580	1048579.705
[	Ni 60	-0.014	ug/L	214.183	137	-0.000
[>	Ge 74		ug/L		265932	265932.363
[	As 75	-0.128	ug/L	82.139	-42	-0.000
[	Se 77		ug/L		7458	-0.001
[	Se 82	0.271	ug/L	40.845	3	0.000
[	Kr 83		ug/L		85	-0.000
[>	Lu 175		ug/L		167257	167256.764
[	Tl 205	0.100	ug/L	4.295	915	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
[	Be 9					
[>	Sc 45		104.6			
[	Ni 60					
[>	Ge 74		95.8			
[	As 75					
[	Se 77					
[	Se 82					
[	Kr 83					
[>	Lu 175		95.3			
[	Tl 205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, March 18, 2010 14:55:15

ICPMS#6 - Summary Report

Sample ID: 1202047716

Sample Date/Time: Thursday, March 18, 2010 15:02:43

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\1202047716.297

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.394	ug/L	2.962	1199	0.001
Sc	45		ug/L		1029681	1029680.668
Ni	60	32.084	ug/L	2.472	33379	0.032
Ge	74		ug/L		255283	255283.128
As	75	7.762	ug/L	4.900	5776	0.022
Se	77		ug/L		3486	-0.016
Se	82	-0.346	ug/L	145.648	-39	-0.000
Kr	83		ug/L		262	0.001
Lu	175		ug/L		178608	178608.114
Tl	205	0.652	ug/L	2.171	4371	0.022

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
Sc	45		102.7				
Ni	60						
Ge	74		92.0				
As	75						
Se	77						
Se	82						
Kr	83						
Lu	175		101.8				
Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202047716

Report Date/Time: Thursday, March 18, 2010 15:03:22

ICPMS#6 - Summary Report

Sample ID: 1202047718

Sample Date/Time: Thursday, March 18, 2010 15:06:47

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 955138|2|rm|

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\1202047718.298

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	25.304	ug/L	0.359	8858	0.009
> Sc	45		ug/L		1025948	1025948.053
Ni	60	47.663	ug/L	3.177	49334	0.048
> Ge	74		ug/L		254779	254778.918
As	75	40.835	ug/L	1.848	30106	0.118
Se	77		ug/L		3764	-0.015
Se	82	7.276	ug/L	3.120	471	0.002
Kr	83		ug/L		250	0.001
> Lu	175		ug/L		177507	177506.806
Tl	205	44.550	ug/L	2.081	272580	1.533

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		102.3			
Ni	60					
> Ge	74		91.8			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		101.2			
Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202047719

Sample Date/Time: Thursday, March 18, 2010 15:10:51

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\1202047719.299

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	25.519	ug/L	1.902	9028	0.009
[> Sc	45		ug/L		1036898	1036897.889
[Ni	60	65.590	ug/L	1.971	68562	0.066
[> Ge	74		ug/L		254159	254158.585
[As	75	42.116	ug/L	1.505	30982	0.122
[Se	77		ug/L		3770	-0.015
[Se	82	7.293	ug/L	3.796	471	0.002
[Kr	83		ug/L		283	0.001
[> Lu	175		ug/L		176490	176490.131
[Tl	205	45.077	ug/L	0.772	274191	1.552

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		103.4				
[Ni	60						
[> Ge	74		91.6				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		100.6				
[Tl	205						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202047717

Sample Date/Time: Thursday, March 18, 2010 15:14:55

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 955138|10|rmj

Method File: c:\elandata\Method\beniasetl.mth

Dataset File: c:\elandata\Dataset\100317\1202047717.300

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.874	ug/L	3.910	287	0.000
> Sc	45		ug/L		937778	937778.412
Ni	60	7.163	ug/L	1.146	6896	0.007
> Ge	74		ug/L		252073	252073.002
As	75	1.826	ug/L	20.744	1381	0.005
Se	77		ug/L		4301	-0.012
Se	82	0.142	ug/L	179.585	-6	0.000
Kr	83		ug/L		119	0.000
> Lu	175		ug/L		166565	166565.498
Tl	205	0.212	ug/L	2.332	1554	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		93.5			
Ni	60					
> Ge	74		90.8			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		94.9			
Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 15:31:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.304

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.940		ug/L	2.058	16483	0.018
>	Sc	45			ug/L		930545	930545.133
[	Ni	60	50.485		ug/L	2.380	47392	0.051
>	Ge	74			ug/L		253699	253699.479
|	As	75	51.066		ug/L	1.445	37479	0.148
|	Se	77			ug/L		7560	0.000
|	Se	82	51.482		ug/L	2.025	3408	0.013
[	Kr	83			ug/L		99	-0.000
>	Lu	175			ug/L		165998	165998.153
|	Tl	205	51.398		ug/L	0.793	293994	1.769

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	103.880					
[> Sc	45		92.8				
[Ni	60	100.971					
[> Ge	74		91.4				
[As	75	102.131					
[Se	77						
[Se	82	102.963					
[Kr	83						
[> Lu	175		94.6				
[Tl	205	102.795					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 15:35:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 7.305

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.002	ug/L	210.089	7	-0.000
[>	Sc 45		ug/L		969201	969200.534
[	Ni 60	-0.010	ug/L	98.208	133	-0.000
[>	Ge 74		ug/L		260178	260178.472
[	As 75	0.086	ug/L	382.340	120	0.000
[	Se 77		ug/L		6466	-0.005
[	Se 82	0.178	ug/L	137.789	-4	0.000
[	Kr 83		ug/L		94	-0.000
[>	Lu 175		ug/L		167160	167159.622
[	Tl 205	0.059	ug/L	9.020	679	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
[>	Sc 45		96.7		
[	Ni 60				
[>	Ge 74		93.7		
[	As 75				
[	Se 77				
[	Se 82				
[	Kr 83				
[>	Lu 175		95.3		
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, March 18, 2010 15:35:53

ICPMS#6 - Summary Report

Sample ID: 247347001

Sample Date/Time: Thursday, March 18, 2010 15:55:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\247347001.310

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	1.488	ug/L	13.987	585	0.001
>	Sc 45		ug/L		1148522	1148522.335
[	Ni 60	2.057	ug/L	12.881	2521	0.002
>	Ge 74		ug/L		260490	260490.468
|	As 75	1.665	ug/L	13.401	1307	0.005
|	Se 77		ug/L		3263	-0.017
|	Se 82	1.433	ug/L	38.882	82	0.000
[	Kr 83		ug/L		206	0.000
>	Lu 175		ug/L		185747	185746.944
[	Tl 205	0.019	ug/L	12.738	497	0.001

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[	Be 9				
>	Sc 45		114.5		
[	Ni 60				
>	Ge 74		93.8		
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				
>	Lu 175		105.9		
[	Tl 205				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347002

Sample Date/Time: Thursday, March 18, 2010 15:59:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\247347002.311

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	1.346	ug/L	12.752	537	0.000
[> Sc 45		ug/L		1162583	1162583.188
[Ni 60	1.631	ug/L	12.519	2060	0.002
[> Ge 74		ug/L		264587	264587.070
[As 75	1.028	ug/L	5.515	842	0.003
[Se 77		ug/L		3349	-0.017
[Se 82	1.085	ug/L	40.409	59	0.000
[Kr 83		ug/L		199	0.000
[> Lu 175		ug/L		189208	189208.285
[Tl 205	0.014	ug/L	24.495	477	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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be 9					
[> Sc 45		115.9			
[Ni 60					
[> Ge 74		95.3			
[As 75					
[Se 77					
[Se 82					
[Kr 83					
[> Lu 175		107.8			
[Tl 205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347003

Sample Date/Time: Thursday, March 18, 2010 16:03:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\247347003.312

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.529	ug/L	5.585	527	0.001
[> Sc	45		ug/L		996223	996222.737
[Ni	60	3.624	ug/L	2.326	3779	0.004
[> Ge	74		ug/L		264253	264252.802
[As	75	1.251	ug/L	21.637	1014	0.004
[Se	77		ug/L		3449	-0.016
[Se	82	1.290	ug/L	17.352	73	0.000
[Kr	83		ug/L		233	0.000
[> Lu	175		ug/L		192454	192454.480
[Tl	205	0.030	ug/L	13.642	592	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		99.4				
[Ni	60						
[> Ge	74		95.2				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		109.7				
[Tl	205						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347004

Sample Date/Time: Thursday, March 18, 2010 16:07:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\247347004.313

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.855	ug/L	17.384	676	0.001
> Sc	45		ug/L		1070047	1070047.387
[Ni	60	3.043	ug/L	11.401	3404	0.003
> Ge	74		ug/L		264514	264514.030
[As	75	1.439	ug/L	26.385	1157	0.004
[Se	77		ug/L		3420	-0.016
[Se	82	1.402	ug/L	16.633	81	0.000
[Kr	83		ug/L		247	0.001
> Lu	175		ug/L		192700	192700.060
[Tl	205	0.042	ug/L	17.303	669	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
> Sc	45		106.7			
[Ni	60					
> Ge	74		95.3			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
> Lu	175		109.8			
[Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 16:11:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.314

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.372	ug/L	11.945	16609	0.017
Sc	45		ug/L		996869	996869.230
Ni	60	47.646	ug/L	13.436	47377	0.048
Ge	74		ug/L		254220	254219.675
As	75	50.912	ug/L	2.140	37440	0.147
Se	77		ug/L		7437	-0.000
Se	82	52.010	ug/L	2.148	3450	0.014
Kr	83		ug/L		103	0.000
Lu	175		ug/L		169300	169300.043
Tl	205	50.598	ug/L	1.155	295187	1.742

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	98.744				
Sc	45		99.4			
Ni	60	95.292				
Ge	74		91.6			
As	75	101.825				
Se	77					
Se	82	104.020				
Kr	83					
Lu	175		96.5			
Tl	205	101.197				

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: Thursday, March 18, 2010 16:12:30

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 16:15:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 7.315

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.001	ug/L	565.864	9	0.000
[> Sc	45		ug/L		1101326	1101326.234
[Ni	60	-0.015	ug/L	240.358	141	-0.000
[> Ge	74		ug/L		259395	259394.510
[As	75	0.219	ug/L	171.544	222	0.001
[Se	77		ug/L		6277	-0.005
[Se	82	0.200	ug/L	150.270	-2	0.000
[Kr	83		ug/L		90	-0.000
[> Lu	175		ug/L		171246	171246.051
[Tl	205	0.049	ug/L	7.986	638	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		109.8				
[Ni	60						
[> Ge	74		93.5				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		97.6				
[Tl	205						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347005

Sample Date/Time: Thursday, March 18, 2010 16:19:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138[2]rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\247347005.316

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.066	ug/L	9.547	427	0.000
[> Sc	45		ug/L		1159355	1159354.820
[Ni	60	2.833	ug/L	14.391	3433	0.003
[> Ge	74		ug/L		265255	265255.146
[As	75	2.098	ug/L	1.542	1664	0.006
[Se	77		ug/L		3762	-0.015
[Se	82	1.711	ug/L	22.698	103	0.000
[Kr	83		ug/L		232	0.000
[> Lu	175		ug/L		190427	190426.842
[Tl	205	0.087	ug/L	3.666	960	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		115.6			
[Ni	60					
[> Ge	74		95.6			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		108.5			
[Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247347005

Report Date/Time: Thursday, March 18, 2010 16:20:39

ICPMS#6 - Summary Report

Sample ID: 247347006

Sample Date/Time: Thursday, March 18, 2010 16:24:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\247347006.317

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	1.772	ug/L	10.526	665	0.001
|>	Sc 45		ug/L		1096401	1096400.794
[	Ni 60	6.675	ug/L	12.760	7449	0.007
[>	Ge 74		ug/L		263853	263853.262
|	As 75	2.735	ug/L	5.266	2140	0.008
|	Se 77		ug/L		3673	-0.015
|	Se 82	1.337	ug/L	5.283	76	0.000
[	Kr 83		ug/L		227	0.000
[>	Lu 175		ug/L		190813	190812.913
[	Tl 205	0.096	ug/L	5.600	1019	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9					
|>	Sc 45		109.3			
[	Ni 60					
[>	Ge 74		95.1			
|	As 75					
|	Se 77					
|	Se 82					
[	Kr 83					
[>	Lu 175		108.8			
[	Tl 205					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347007

Sample Date/Time: Thursday, March 18, 2010 16:28:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: c:\elandata\Dataset\100317\247347007.318

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.194	ug/L	3.281	754	0.001
> Sc	45		ug/L		997800	997799.999
Ni	60	2.530	ug/L	2.624	2686	0.003
> Ge	74		ug/L		269566	269566.118
As	75	1.429	ug/L	14.950	1170	0.004
Se	77		ug/L		3552	-0.016
Se	82	1.154	ug/L	8.282	65	0.000
Kr	83		ug/L		222	0.000
> Lu	175		ug/L		192098	192098.195
Tl	205	0.029	ug/L	6.807	582	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		99.5			
Ni	60					
> Ge	74		97.1			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		109.5			
Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247347007

Report Date/Time: Thursday, March 18, 2010 16:28:49

ICPMS#6 - Summary Report

Sample ID: 247347008

Sample Date/Time: Thursday, March 18, 2010 16:32:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\beniaset1.mth

Dataset File: c:\elandata\Dataset\100317\247347008.319

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.154	ug/L	8.725	463	0.000
Sc	45		ug/L		1161045	1161045.294
Ni	60	2.603	ug/L	11.348	3186	0.003
Ge	74		ug/L		263363	263362.803
As	75	1.669	ug/L	15.709	1326	0.005
Se	77		ug/L		3411	-0.016
Se	82	1.533	ug/L	29.578	90	0.000
Kr	83		ug/L		252	0.001
Lu	175		ug/L		193801	193800.989
Tl	205	0.052	ug/L	2.934	742	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		115.8			
Ni	60					
Ge	74		94.9			
As	75					
Se	77					
Se	82					
Kr	83					
Lu	175		110.5			
Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 16:36:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.320

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	46.066	ug/L	13.590	16583	0.016
[> Sc	45		ug/L		1066805	1066805.322
[Ni	60	44.073	ug/L	12.640	46988	0.044
[> Ge	74		ug/L		254554	254553.940
[As	75	52.010	ug/L	1.584	38299	0.150
[Se	77		ug/L		7472	-0.000
[Se	82	52.721	ug/L	3.082	3503	0.014
[Kr	83		ug/L		103	0.000
[> Lu	175		ug/L		167936	167936.112
[Tl	205	51.030	ug/L	1.389	295311	1.757

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9	92.133				
[> Sc	45		106.4			
[Ni	60	88.146				
[> Ge	74		91.7			
[As	75	104.020				
[Se	77					
[Se	82	105.442				
[Kr	83					
[> Lu	175		95.7			
[Tl	205	102.061				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 6	Ni	60CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Thursday, March 18, 2010 16:36:55

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 16:40:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 7.321

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.004	ug/L	225.058	9	0.000
Sc	45		ug/L		1007942	1007941.523
Ni	60	-0.002	ug/L	1289.579	144	-0.000
Ge	74		ug/L		258804	258803.852
As	75	0.260	ug/L	191.556	246	0.001
Se	77		ug/L		6173	-0.006
Se	82	0.366	ug/L	36.321	9	0.000
Kr	83		ug/L		85	-0.000
Lu	175		ug/L		170649	170648.596
Tl	205	0.054	ug/L	0.877	665	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		100.5			
Ni	60					
Ge	74		93.2			
As	75					
Se	77					
Se	82					
Kr	83					
Lu	175		97.3			
Tl	205					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, March 18, 2010 16:41:00

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, March 18, 2010 20:21:27

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100317\Sample.360

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	2821.5	2821.479	68.261	2.4
Mg	24.0	35758.7	35758.749	1346.655	3.8
Co	58.9	42116.8	42116.798	437.016	1.0
Rh	102.9	80986.7	80986.732	877.014	1.1
In	114.9	91362.8	91362.829	588.581	0.6
Pb	208.0	47432.4	47432.415	230.141	0.5
[> Ba	137.9	86048.3	86048.319	1038.425	1.2
[Ba++	69.0	2584.9	0.030	0.001	1.7
[> Ce	139.9	107922.7	107922.731	572.785	0.5
[CeO	155.9	1790.4	0.017	0.000	1.4
Bkgd	220.0	15.7	15.700	1.565	10.0

Current Optimization File Data

Current Value	Description
0.81	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	6.0	2940.3
Co	59	21	6.8	44782.1
In	115	21	7.5	88589.8

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	591	2080	0.637
Be	9.0	8.9	2030	2080	0.651
Mg	24.0	24.0	5678	2120	0.637
Mg	25.0	25.0	5910	2080	0.705
Mg	26.0	26.1	6188	2120	0.598
Co	58.9	58.9	14164	2170	0.636
Rh	102.9	102.8	24855	2230	0.722
In	114.9	115.0	27783	2260	0.687
Ce	139.9	139.9	33856	2280	0.756
Pb	206.0	206.0	49936	2420	0.666
Pb	207.0	206.9	50159	2385	0.719
Pb	208.0	208.0	50415	2430	0.719
U	238.1	238.1	57729	2470	0.710

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 18, 2010 23:28:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Ni.mth

Dataset File: c:\elandata\dataset\100318\Blank.045

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc 45		ug/L		1197751	
[Ni 60		ug/L		123	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Simple Linear	
Ni	60Simple Linear	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Sc 45					
[Ni 60					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 18, 2010 23:31:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\Standard 1.046

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1195525	1195525.246
[	Ni	60	10.000 ug/L	1.469	10024	0.008

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45				
[Ni	60				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 18, 2010 23:33:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\Standard 2.047

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1206142	1206142.125
[	Ni	60	99.975 ug/L	0.959	97532	0.081

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45				
[Ni	60				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 18, 2010 23:36:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\m1.mth

Dataset File: c:\elandata\dataset\100318\QC Std 1.048

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1214280	1214280.139
[	Ni	60	50.456 ug/L	0.403	49620	0.041

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		101.4		
[Ni	60	100.911			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, March 18, 2010 23:39:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\QC Std 2.049

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1205948	1205948.104
[	Ni	60	-0.008	ug/L	111.446	116	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[>	Sc	45		100.7			
[	Ni	60					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 18, 2010 23:41:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\QC Std 3.050

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1203567	1203566.989
[	Ni	60	2.156 ug/L	0.098	2220	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		100.5		
[	Ni	60	107.812			

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 18, 2010 23:44:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\vi.mth

Dataset File: c:\elandata\dataset\100318\QC Std 4.051

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45	ug/L		1118411	1118410.782
L	Ni	60	ug/L	3.041	2419	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel. % Difference
>	Sc	45		93.4		
L	Ni	60	77.032			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, March 18, 2010 23:46:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\QC Std 5.052

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1130848	1130847.856
[	Ni	60	22.254 ug/L	0.374	20447	0.018

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		94.4			
[Ni	60	98.035				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 23:49:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ni.mth

Dataset File: c:\elandata\dataset\100318\QC Std 6.053

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1170794	1170793.771
[	Ni	60	51.353 ug/L	0.356	48694	0.041

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		97.7		
[Ni	60	102.707			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 23:51:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\vl.mth

Dataset File: c:\elandata\dataset\100318\QC Std 7.054

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1189318	1189317.637
[	Ni	60	ug/L	208.085	115	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		99.3			
[	Ni	60					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347005

Sample Date/Time: Thursday, March 18, 2010 23:54:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\vi.mth

Dataset File: c:\elandata\dataset\100318\247347005.055

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1250281	1250280.930
[	Ni	60	3.302 ug/L	3.416	3464	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		104.4		
[	Ni	60				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347006

Sample Date/Time: Thursday, March 18, 2010 23:57:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\247347006.056

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1234176	1234175.693
[	Ni	60	7.584 ug/L	0.389	7688	0.006

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		103.0		
[Ni	60				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347007

Sample Date/Time: Thursday, March 18, 2010 23:59:47

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138|2|rmj

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\247347007.057

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1215648	1215647.946
[	Ni	60	ug/L	4.194	2640	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		101.5		
[	Ni	60				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247347008

Sample Date/Time: Friday, March 19, 2010 00:02:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955138[2]rmj

Method File: c:\elandata\Method\vl.mth

Dataset File: c:\elandata\dataset\100318\247347008.058

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1256271	1256271.159
[	Ni	60	ug/L	1.927	3292	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		104.9		
[	Ni	60				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 19, 2010 00:05:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ni.mth

Dataset File: c:\elandata\dataset\100318\QC Std 6.059

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45	ug/L		1193970	1193970.376
[	Ni	60	51.062 ug/L	1.263	49368	0.041

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		99.7		
[	Ni	60	102.124			

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 19, 2010 00:07:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mi.mth

Dataset File: c:\elandata\dataset\100318\QC Std 7.060

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45	ug/L		1219887	1219886.926
[	Ni	60	-0.005 ug/L	164.294	120	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		101.8		
[	Ni	60				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\030310S1.SIF

Batch ID:

Results Data Set: 030310S2

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: SOIL

Method Last Saved: 3/3/2010 10:11:36

Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 3/3/2010 10:13:42

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0003	0.0015	0.0003	10:14:33	Yes
2		[0.00]	0.0004	0.0024	0.0004	10:15:03	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0000				
%RSD:		0.00	10.19				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 3/3/2010 10:15:22

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0024	0.0159	0.0028	10:16:12	Yes
2		[0.2]	0.0024	0.0153	0.0027	10:16:42	Yes
Mean:		[0.2]	0.0024				
SD:		0.0	0.0000				
%RSD:		0.0	1.30				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01199 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 3/3/2010 10:17:01

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0061	0.0370	0.0065	10:17:51	Yes
2		[0.5]	0.0060	0.0364	0.0064	10:18:21	Yes
Mean:		[0.5]	0.0061				
SD:		0.0	0.0000				
%RSD:		0.0	0.79				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999984 Slope: 0.01215 Intercept: -0.00001

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 3/3/2010 10:18:41

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0247	0.1425	0.0250	10:19:33	Yes
2		[2.0]	0.0247	0.1419	0.0250	10:20:02	Yes
Mean:		[2.0]	0.0247				
SD:		0.0	0.0000				
%RSD:		0.0	0.09				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999991 Slope: 0.01236 Intercept: -0.00006

=====

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 3/3/2010 10:20:22

Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0611	0.3501	0.0614	10:21:14	Yes
2		[5.0]	0.0613	0.3482	0.0616	10:21:44	Yes
Mean:		[5.0]	0.0612				
SD:		0.0	0.0002				
%RSD:		0.0	0.27				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999992 Slope: 0.01225 Intercept: 0.00001

=====

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

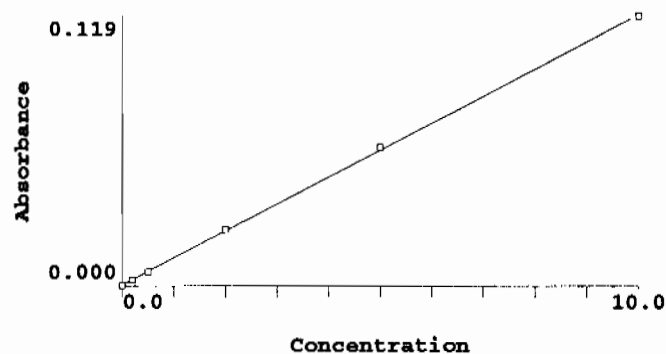
Date Collected: 3/3/2010 10:22:04

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1193	0.6832	0.1197	10:22:54	Yes
2		[10.0]	0.1180	0.6676	0.1183	10:23:24	Yes
Mean:		[10.0]	0.1186				
SD:		0.0	0.0010				
%RSD:		0.0	0.82				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999871 Slope: 0.01190 Intercept: 0.00040

-----
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	-0.034	0.00	10.2
S0.2	0.0024	0.2	0.168	0.00	1.3
S0.5	0.0061	0.5	0.477	0.00	0.8
S2.0	0.0247	2.0	2.041	0.00	0.1

S5.0	0.0612	5.0	5.109	0.00	0.3
S10.0	0.1186	10.0	9.939	0.00	0.8
Correlation Coef.: 0.999871 Slope: 0.01190 Intercept: 0.00040					

Sequence No.: 7	Autosampler Location: 9
Sample ID: ICV	Date Collected: 3/3/2010 10:23:43
Analyst:	Data Type: Original

Replicate Data: ICV

Rep#	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.247	5.247	0.0628	0.3568	0.0632	10:24:34	Yes
2	5.221	5.221	0.0625	0.3522	0.0629	10:25:04	Yes
Mean:	5.234	5.234	0.0627				
SD:	0.018	0.018	0.0002				
%RSD:	0.349	0.349	0.35				

QC value within limits for Hg 253.7 Recovery = 104.68%
All analyte(s) passed QC.

Sequence No.: 8 Autosampler Location: 10
Sample ID: ICB Date Collected: 3/3/2010 10:25:24
Analyst: Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0002	0.0031	0.0005	10:26:15	Yes
2	-0.018	-0.018	0.0002	0.0031	0.0005	10:26:45	Yes
Mean:	-0.019	-0.019	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	2.119	2.119	2.61				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9	Autosampler Location: 11
Sample ID: CRDL	Date Collected: 3/3/2010 10:27:05
Analyst:	Data Type: Original

Replicate Data: CRDL

Repl	SampleConc	StdConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.181	0.181	0.0026	0.0161	0.0029	10:27:57	Yes
2	0.184	0.184	0.0026	0.0166	0.0029	10:28:27	Yes
Mean:	0.182	0.182	0.0026				
SD:	0.002	0.002	0.0000				
%RSD:	0.919	0.919	0.78				

QC value within limits for Hg 253.7 Recovery = 91.22%
All analyte(s) passed QC.

Sequence No.: 10	Autosampler Location: 7
Sample ID: CCV	Date Collected: 3/3/2010 10:28:47
Analyst:	Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.204	5.204	0.0623	0.3526	0.0627	10:29:37	Yes
2	5.190	5.190	0.0621	0.3480	0.0625	10:30:07	Yes
Mean:	5.197	5.197	0.0622				
SD:	0.011	0.011	0.0001				
%RSD:	0.202	0.202	0.20				

QC value within limits for Hg 253.7 Recovery = 103.94%
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/3/2010 10:30:26

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	0.0001	0.0021	0.0004	10:31:17	Yes
2	-0.028	-0.028	0.0001	0.0023	0.0004	10:31:47	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.065	2.065	10.10				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202056217|958773|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 3/3/2010 10:32:06

Data Type: Original

Replicate Data: 1202056217|958773|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	0.0000	0.0021	0.0004	10:32:58	Yes
2	-0.035	-0.035	-0.0000	0.0018	0.0003	10:33:28	Yes
Mean:	-0.034	-0.034	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.031	5.031	>999.9%				

Sequence No.: 13

Sample ID: 1202056218|958773|1

Analyst: JXL

Autosampler Location: 13

Date Collected: 3/3/2010 10:33:48

Data Type: Original

Replicate Data: 1202056218|958773|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.121	2.121	0.0256	0.1448	0.0260	10:34:39	Yes
2	2.111	2.111	0.0255	0.1431	0.0259	10:35:09	Yes
Mean:	2.116	2.116	0.0256				
SD:	0.007	0.007	0.0001				
%RSD:	0.328	0.328	0.32				

Sequence No.: 14

Sample ID: 246960001|958773|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 3/3/2010 10:35:29

Data Type: Original

Replicate Data: 246960001|958773|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.944	0.944	0.0116	0.0670	0.0120	10:36:20	Yes
2	0.929	0.929	0.0115	0.0650	0.0118	10:36:50	Yes
Mean:	0.937	0.937	0.0115				
SD:	0.011	0.011	0.0001				
%RSD:	1.137	1.137	1.10				

Sequence No.: 15

Sample ID: 1202056219|958773|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 3/3/2010 10:37:09

Data Type: Original

Replicate Data: 1202056219|958773|1

Repl #	SampleConc	StdConc	BlkCorr	Peak Area	Peak Height	Time	Peak
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Replicate Data: 246960003|958773|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.376	0.376	0.0049	0.0290	0.0052	10:46:16	Yes
2	0.374	0.374	0.0048	0.0286	0.0052	10:46:46	Yes
Mean:	0.375	0.375	0.0049				
SD:	0.002	0.002	0.0000				
%RSD:	0.430	0.430	0.39				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 246960004|958773|1

Date Collected: 3/3/2010 10:47:05

Analyst: JXL

Data Type: Original

Replicate Data: 246960004|958773|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.263	0.263	0.0035	0.0213	0.0039	10:47:56	Yes
2	0.264	0.264	0.0035	0.0215	0.0039	10:48:26	Yes
Mean:	0.264	0.264	0.0035				
SD:	0.001	0.001	0.0000				
%RSD:	0.260	0.260	0.23				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 10:48:45

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.389	5.389	0.0645	0.3604	0.0649	10:49:35	Yes
2	5.345	5.345	0.0640	0.3545	0.0643	10:50:05	Yes
Mean:	5.367	5.367	0.0642				
SD:	0.031	0.031	0.0004				
%RSD:	0.580	0.580	0.58				

QC value within limits for Hg 253.7 Recovery = 107.34%
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/3/2010 10:50:24

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.031	-0.031	0.0000	0.0019	0.0004	10:51:15	Yes
2	-0.033	-0.033	0.0000	0.0015	0.0003	10:51:45	Yes
Mean:	-0.032	-0.032	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.469	4.469	93.69				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 246960005|958773|1

Date Collected: 3/3/2010 10:52:04

Analyst: JXL

Data Type: Original

Replicate Data: 246960005|958773|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.488	0.488	0.0062	0.0362	0.0065	10:52:55	Yes
2	0.482	0.482	0.0061	0.0353	0.0065	10:53:25	Yes

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.192	1.192	0.0146	0.0820	0.0149	11:01:20	Yes
2	1.179	1.179	0.0144	0.0812	0.0148	11:01:50	Yes
Mean:	1.186	1.186	0.0145				
SD:	0.009	0.009	0.0001				
%RSD:	0.760	0.760	0.74				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 246960011|958773|1

Date Collected: 3/3/2010 11:02:09

Analyst: JXL

Data Type: Original

Replicate Data: 246960011|958773|1

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.441	0.441	0.0057	0.0327	0.0060	11:03:00	Yes
2	0.436	0.436	0.0056	0.0321	0.0059	11:03:29	Yes
Mean:	0.439	0.439	0.0056				
SD:	0.004	0.004	0.0000				
%RSD:	0.803	0.803	0.75				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 246960012|958773|1

Date Collected: 3/3/2010 11:03:49

Analyst: JXL

Data Type: Original

Replicate Data: 246960012|958773|1

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.718	0.718	0.0089	0.0511	0.0093	11:04:40	Yes
2	0.713	0.713	0.0089	0.0507	0.0092	11:05:09	Yes
Mean:	0.716	0.716	0.0089				
SD:	0.003	0.003	0.0000				
%RSD:	0.483	0.483	0.46				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 246960013|958773|1

Date Collected: 3/3/2010 11:05:29

Analyst: JXL

Data Type: Original

Replicate Data: 246960013|958773|1

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.647	0.647	0.0081	0.0460	0.0084	11:06:20	Yes
2	0.637	0.637	0.0080	0.0452	0.0083	11:06:50	Yes
Mean:	0.642	0.642	0.0080				
SD:	0.007	0.007	0.0001				
%RSD:	1.135	1.135	1.08				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 246960014|958773|1

Date Collected: 3/3/2010 11:07:09

Analyst: JXL

Data Type: Original

Replicate Data: 246960014|958773|1

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.707	0.707	0.0088	0.0501	0.0092	11:07:59	Yes
2	0.710	0.710	0.0088	0.0496	0.0092	11:08:29	Yes
Mean:	0.708	0.708	0.0088				
SD:	0.002	0.002	0.0000				
%RSD:	0.247	0.247	0.24				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 11:08:48

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.271	5.271	0.0631	0.3492	0.0634	11:09:38	Yes
2	5.231	5.231	0.0626	0.3449	0.0630	11:10:08	Yes
Mean:	5.251	5.251	0.0629				
SD:	0.028	0.028	0.0003				
%RSD:	0.539	0.539	0.54				

QC value within limits for Hg 253.7 Recovery = 105.01%
All analyte(s) passed QC.

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/3/2010 11:10:27

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.036	-0.036	-0.0000	0.0014	0.0003	11:11:18	Yes
2	-0.039	-0.039	-0.0001	0.0012	0.0003	11:11:48	Yes
Mean:	-0.037	-0.037	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.352	5.352	59.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36

Autosampler Location: 32

Sample ID: 1202056583|958957|1

Date Collected: 3/3/2010 11:12:07

Analyst: JXL

Data Type: Original

Replicate Data: 1202056583|958957|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.032	-0.032	0.0000	0.0016	0.0004	11:12:58	Yes
2	-0.038	-0.038	-0.0000	0.0014	0.0003	11:13:28	Yes
Mean:	-0.035	-0.035	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	11.21	11.21	341.06				

Sequence No.: 37

Autosampler Location: 33

Sample ID: 1202056584|958957|1

Date Collected: 3/3/2010 11:13:47

Analyst: JXL

Data Type: Original

Replicate Data: 1202056584|958957|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.237	2.237	0.0270	0.1503	0.0274	11:14:38	Yes
2	2.230	2.230	0.0269	0.1479	0.0273	11:15:08	Yes
Mean:	2.233	2.233	0.0270				
SD:	0.005	0.005	0.0001				
%RSD:	0.229	0.229	0.23				

Sequence No.: 38

Autosampler Location: 34

Sample ID: 248088001|958957|1

Date Collected: 3/3/2010 11:15:28

Analyst: JXL

Data Type: Original

Replicate Data: 248088001|958957|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.409	0.409	0.0053	0.0306	0.0056	11:16:19	Yes

Replicate Data: 1202056586|958957|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.433	2.433	0.0293	0.1633	0.0297	11:24:46	Yes
2	2.411	2.411	0.0291	0.1600	0.0294	11:25:16	Yes
Mean:	2.422	2.422	0.0292				
SD:	0.016	0.016	0.0002				
%RSD:	0.643	0.643	0.63				

Sequence No.: 44

Sample ID: 1202056588|958957|1

Analyst: JXL

Autosampler Location: 40

Date Collected: 3/3/2010 11:25:36

Data Type: Original

Replicate Data: 1202056588|958957|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.412	2.412	0.0291	0.1622	0.0294	11:26:27	Yes
2	2.422	2.422	0.0292	0.1620	0.0296	11:26:57	Yes
Mean:	2.417	2.417	0.0292				
SD:	0.007	0.007	0.0001				
%RSD:	0.294	0.294	0.29				

Sequence No.: 45

Sample ID: 1202056587|958957|5

Analyst: JXL

Autosampler Location: 41

Date Collected: 3/3/2010 11:27:16

Data Type: Original

Replicate Data: 1202056587|958957|5

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.022	0.022	0.0007	0.0050	0.0010	11:28:07	Yes
2	0.023	0.023	0.0007	0.0049	0.0010	11:28:37	Yes
Mean:	0.023	0.023	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	2.240	2.240	0.90				

Sequence No.: 46

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/3/2010 11:28:56

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.342	5.342	0.0640	0.3540	0.0643	11:29:47	Yes
2	5.306	5.306	0.0635	0.3490	0.0639	11:30:17	Yes
Mean:	5.324	5.324	0.0637				
SD:	0.026	0.026	0.0003				
%RSD:	0.483	0.483	0.48				

QC value within limits for Hg 253.7 Recovery = 106.48%

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/3/2010 11:30:36

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.037	-0.037	-0.0000	0.0009	0.0003	11:31:27	Yes
2	-0.037	-0.037	-0.0000	0.0010	0.0003	11:31:57	Yes
Mean:	-0.037	-0.037	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.764	0.764	9.47				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 247123004|958623|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.024	-0.024	0.0001	0.0025	0.0005	11:48:14	Yes
2	-0.027	-0.027	0.0001	0.0022	0.0004	11:48:44	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	8.103	8.103	25.24				

Sequence No.: 58

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 11:49:04

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.438	5.438	0.0651	0.3542	0.0654	11:49:55	Yes
2	5.431	5.431	0.0650	0.3514	0.0654	11:50:25	Yes
Mean:	5.435	5.435	0.0651				
SD:	0.005	0.005	0.0001				
%RSD:	0.086	0.086	0.09				

QC value within limits for Hg 253.7 Recovery = 108.69%
All analyte(s) passed QC.

Sequence No.: 59

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/3/2010 11:50:43

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	0.0001	0.0028	0.0004	11:51:34	Yes
2	-0.033	-0.033	0.0000	0.0019	0.0004	11:52:04	Yes
Mean:	-0.029	-0.029	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	18.63	18.63	115.75				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Autosampler Location: 52

Sample ID: 247249001|958623|1

Date Collected: 3/3/2010 11:52:23

Analyst: JXL

Data Type: Original

Replicate Data: 247249001|958623|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.114	0.114	0.0018	0.0116	0.0021	11:53:15	Yes
2	0.106	0.106	0.0017	0.0107	0.0020	11:53:44	Yes
Mean:	0.110	0.110	0.0017				
SD:	0.006	0.006	0.0001				
%RSD:	5.589	5.589	4.28				

Sequence No.: 61

Autosampler Location: 53

Sample ID: 247249002|958623|1

Date Collected: 3/3/2010 11:54:04

Analyst: JXL

Data Type: Original

Replicate Data: 247249002|958623|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.208	1.208	0.0148	0.0816	0.0151	11:54:55	Yes
2	1.203	1.203	0.0147	0.0804	0.0151	11:55:25	Yes
Mean:	1.205	1.205	0.0147				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.420	0.420	0.0054	0.0307	0.0057	12:03:18	Yes
2	0.418	0.418	0.0054	0.0306	0.0057	12:03:48	Yes
Mean:	0.419	0.419	0.0054				
SD:	0.002	0.002	0.0000				
%RSD:	0.365	0.365	0.34				

Sequence No.: 67
Sample ID: 247255003|958623|1
Analyst: JXL

Autosampler Location: 59
Date Collected: 3/3/2010 12:04:08
Data Type: Original

Replicate Data: 247255003|958623|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.687	0.687	0.0086	0.0477	0.0089	12:05:00	Yes
2	0.674	0.674	0.0084	0.0470	0.0088	12:05:29	Yes
Mean:	0.680	0.680	0.0085				
SD:	0.009	0.009	0.0001				
%RSD:	1.348	1.348	1.28				

Sequence No.: 68
Sample ID: 247255004|958623|1
Analyst: JXL

Autosampler Location: 60
Date Collected: 3/3/2010 12:05:49
Data Type: Original

Replicate Data: 247255004|958623|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.034	0.034	0.0008	0.0058	0.0012	12:06:41	Yes
2	0.031	0.031	0.0008	0.0058	0.0011	12:07:11	Yes
Mean:	0.033	0.033	0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	6.599	6.599	3.25				

Sequence No.: 69
Sample ID: 247255005|958623|1
Analyst: JXL

Autosampler Location: 61
Date Collected: 3/3/2010 12:07:31
Data Type: Original

Replicate Data: 247255005|958623|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.513	0.513	0.0065	0.0365	0.0068	12:08:23	Yes
2	0.500	0.500	0.0064	0.0351	0.0067	12:08:53	Yes
Mean:	0.507	0.507	0.0064				
SD:	0.009	0.009	0.0001				
%RSD:	1.750	1.750	1.64				

Sequence No.: 70
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/3/2010 12:09:13
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.604	5.604	0.0671	0.3553	0.0674	12:10:04	Yes
2	5.551	5.551	0.0664	0.3504	0.0668	12:10:34	Yes
Mean:	5.578	5.578	0.0668				
SD:	0.037	0.037	0.0004				
%RSD:	0.666	0.666	0.66				

QC value within limits for Hg 253.7 Recovery = 111.55%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 3/3/2010 12:10:52
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	-0.0000	0.0008	0.0003	12:11:44	Yes
2	-0.033	-0.033	0.0000	0.0018	0.0004	12:12:14	Yes
Mean:	-0.035	-0.035	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.653	8.653	249.98				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 1202055914|958626|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 3/3/2010 12:12:33
Data Type: Original

Replicate Data: 1202055914|958626|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	0.0001	0.0024	0.0005	12:13:24	Yes
2	-0.028	-0.028	0.0001	0.0019	0.0004	12:13:54	Yes
Mean:	-0.025	-0.025	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	13.83	13.83	42.41				

=====

Sequence No.: 73
Sample ID: 1202055915|958626|10
Analyst: JXL

Autosampler Location: 63
Date Collected: 3/3/2010 12:14:13
Data Type: Original

Replicate Data: 1202055915|958626|10

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.194	4.194	0.0503	0.2680	0.0506	12:15:05	Yes
2	4.192	4.192	0.0503	0.2651	0.0506	12:15:35	Yes
Mean:	4.193	4.193	0.0503				
SD:	0.001	0.001	0.0000				
%RSD:	0.026	0.026	0.03				

=====

Sequence No.: 74
Sample ID: 247321001|958626|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 3/3/2010 12:15:55
Data Type: Original

Replicate Data: 247321001|958626|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0009	0.0063	0.0012	12:16:46	Yes
2	0.035	0.035	0.0008	0.0059	0.0012	12:17:16	Yes
Mean:	0.037	0.037	0.0008				
SD:	0.003	0.003	0.0000				
%RSD:	8.751	8.751	4.59				

=====

Sequence No.: 75
Sample ID: 1202055916|958626|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 3/3/2010 12:17:36
Data Type: Original

Replicate Data: 1202055916|958626|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0008	0.0061	0.0011	12:18:27	Yes
2	0.035	0.035	0.0008	0.0064	0.0012	12:18:57	Yes

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.285	0.285	0.0038	0.0218	0.0041	12:26:51	Yes
2	0.289	0.289	0.0038	0.0225	0.0042	12:27:21	Yes
Mean:	0.287	0.287	0.0038				
SD:	0.003	0.003	0.0000				
%RSD:	0.970	0.970	0.87				

Sequence No.: 81

Autosampler Location: 71

Sample ID: 247321004|958626|1

Date Collected: 3/3/2010 12:27:41

Analyst: JXL

Data Type: Original

Replicate Data: 247321004|958626|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	19.20	19.20	0.2288	1.2520	0.2292	12:28:32	Yes
Sample concentration is greater than that of the highest standard.							
2	19.15	19.15	0.2282	1.2390	0.2285	12:29:02	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	19.17	19.17	0.2285				
SD:	0.038	0.038	0.0005				
%RSD:	0.199	0.199	0.20				

Sample concentration is greater than that of the highest standard.

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 12:29:22

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.568	5.568	0.0666	0.3581	0.0670	12:30:13	Yes
2	5.585	5.585	0.0668	0.3573	0.0672	12:30:43	Yes
Mean:	5.577	5.577	0.0667				
SD:	0.012	0.012	0.0001				
%RSD:	0.210	0.210	0.21				

QC value within limits for Hg 253.7 Recovery = 111.53%
All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/3/2010 12:31:01

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	0.0000	0.0014	0.0004	12:31:52	Yes
2	-0.026	-0.026	0.0001	0.0020	0.0004	12:32:22	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	10.40	10.40	49.44				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 247321005|958626|1

Date Collected: 3/3/2010 12:32:41

Analyst: JXL

Data Type: Original

Replicate Data: 247321005|958626|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.149	0.149	0.0022	0.0133	0.0025	12:33:32	Yes
2	0.154	0.154	0.0022	0.0139	0.0026	12:34:02	Yes

Sequence No.: 94
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/3/2010 12:49:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.221	5.221	0.0625	0.3390	0.0629	12:50:25	Yes
2	5.141	5.141	0.0616	0.3320	0.0619	12:50:55	Yes
Mean:	5.181	5.181	0.0620				
SD:	0.056	0.056	0.0007				
%RSD:	1.087	1.087	1.08				

QC value within limits for Hg 253.7 Recovery = 103.62%
All analyte(s) passed QC.

Sequence No.: 95
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/3/2010 12:51:14
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.032	-0.032	0.0000	0.0012	0.0004	12:52:05	Yes
2	-0.036	-0.036	-0.0000	0.0009	0.0003	12:52:35	Yes
Mean:	-0.034	-0.034	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.131	8.131	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96
Sample ID: 247336007|958626|1
Analyst: JXL

Autosampler Location: 82
Date Collected: 3/3/2010 12:52:54
Data Type: Original

Replicate Data: 247336007|958626|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.308	0.308	0.0041	0.0236	0.0044	12:53:45	Yes
2	0.307	0.307	0.0041	0.0236	0.0044	12:54:15	Yes
Mean:	0.307	0.307	0.0041				
SD:	0.000	0.000	0.0000				
%RSD:	0.083	0.083	0.07				

Sequence No.: 97
Sample ID: 1202055930|958634|1
Analyst: JXL

Autosampler Location: 83
Date Collected: 3/3/2010 12:54:35
Data Type: Original

Replicate Data: 1202055930|958634|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	-0.0001	0.0010	0.0003	12:55:27	Yes
2	-0.041	-0.041	-0.0001	0.0008	0.0003	12:55:57	Yes
Mean:	-0.040	-0.040	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.047	4.047	25.57				

Sequence No.: 98
Sample ID: 1202055931|958634|10
Analyst: JXL

Autosampler Location: 84
Date Collected: 3/3/2010 12:56:17
Data Type: Original

Replicate Data: 1202055931|958634|10

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.702	3.702	0.0444	0.2405	0.0448	12:57:08	Yes
2	3.661	3.661	0.0440	0.2379	0.0443	12:57:38	Yes
Mean:	3.682	3.682	0.0442				
SD:	0.029	0.029	0.0003				
%RSD:	0.781	0.781	0.77				

Sequence No.: 99

Autosampler Location: 85

Sample ID: 247338001|958634|1

Date Collected: 3/3/2010 12:57:58

Analyst: JXL

Data Type: Original

Replicate Data: 247338001|958634|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0006	0.0040	0.0009	12:58:49	Yes
2	0.015	0.015	0.0006	0.0044	0.0009	12:59:19	Yes
Mean:	0.014	0.014	0.0006				
SD:	0.001	0.001	0.0000				
%RSD:	9.613	9.613	2.87				

Sequence No.: 100

Autosampler Location: 86

Sample ID: 1202055932|958634|1

Date Collected: 3/3/2010 12:59:40

Analyst: JXL

Data Type: Original

Replicate Data: 1202055932|958634|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0002	0.0026	0.0006	13:00:31	Yes
2	-0.013	-0.013	0.0002	0.0028	0.0006	13:01:01	Yes
Mean:	-0.014	-0.014	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	7.545	7.545	5.22				

Sequence No.: 101

Autosampler Location: 87

Sample ID: 1202055933|958634|1

Date Collected: 3/3/2010 13:01:21

Analyst: JXL

Data Type: Original

Replicate Data: 1202055933|958634|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.399	2.399	0.0289	0.1582	0.0293	13:02:12	Yes
2	2.400	2.400	0.0290	0.1575	0.0293	13:02:42	Yes
Mean:	2.400	2.400	0.0290				
SD:	0.001	0.001	0.0000				
%RSD:	0.038	0.038	0.04				

Sequence No.: 102

Autosampler Location: 88

Sample ID: 1202055935|958634|1

Date Collected: 3/3/2010 13:03:02

Analyst: JXL

Data Type: Original

Replicate Data: 1202055935|958634|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.408	2.408	0.0290	0.1592	0.0294	13:03:53	Yes
2	2.410	2.410	0.0291	0.1576	0.0294	13:04:23	Yes
Mean:	2.409	2.409	0.0291				
SD:	0.001	0.001	0.0000				
%RSD:	0.061	0.061	0.06				

Sequence No.: 103

Autosampler Location: 89

Sample ID: 1202055934|958634|5

Date Collected: 3/3/2010 13:04:43

Analyst: JXL

Data Type: Original

Replicate Data: 1202055934|958634|5

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.028	-0.028	0.0001	0.0018	0.0004	13:05:35	Yes
2	-0.023	-0.023	0.0001	0.0023	0.0005	13:06:05	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	12.66	12.66	39.33				

Sequence No.: 104

Autosampler Location: 90

Sample ID: 247338002|958634|1

Date Collected: 3/3/2010 13:06:25

Analyst: JXL

Data Type: Original

Replicate Data: 247338002|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	-0.0000	0.0011	0.0003	13:07:17	Yes
2	-0.037	-0.037	-0.0000	0.0012	0.0003	13:07:47	Yes
Mean:	-0.038	-0.038	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.186	1.186	11.68				

Sequence No.: 105

Autosampler Location: 91

Sample ID: 247338003|958634|1

Date Collected: 3/3/2010 13:08:07

Analyst: JXL

Data Type: Original

Replicate Data: 247338003|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.024	-0.024	0.0001	0.0022	0.0005	13:08:59	Yes
2	-0.027	-0.027	0.0001	0.0019	0.0004	13:09:28	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	9.144	9.144	29.16				

Sequence No.: 106

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 13:09:49

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.198	5.198	0.0622	0.3356	0.0626	13:10:39	Yes
2	5.200	5.200	0.0623	0.3332	0.0626	13:11:09	Yes
Mean:	5.199	5.199	0.0622				
SD:	0.001	0.001	0.0000				
%RSD:	0.029	0.029	0.03				

QC value within limits for Hg 253.7 Recovery = 103.97%
All analyte(s) passed QC.

Sequence No.: 107

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/3/2010 13:11:27

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	-0.0000	0.0008	0.0003	13:12:19	Yes
2	-0.035	-0.035	-0.0000	0.0010	0.0003	13:12:49	Yes
Mean:	-0.036	-0.036	-0.0000				

SD: 0.002 0.002 0.0000
%RSD: 4.590 4.590 62.09

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108

Sample ID: 247338004|958634|1

Analyst: JXL

Autosampler Location: 92

Date Collected: 3/3/2010 13:13:08

Data Type: Original

Replicate Data: 247338004|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	0.0002	0.0027	0.0005	13:13:59	Yes
2	-0.023	-0.023	0.0001	0.0020	0.0005	13:14:29	Yes
Mean:	-0.021	-0.021	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	12.64	12.64	19.98				

Sequence No.: 109

Sample ID: 247338005|958634|1

Analyst: JXL

Autosampler Location: 93

Date Collected: 3/3/2010 13:14:49

Data Type: Original

Replicate Data: 247338005|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.035	-0.035	-0.0000	0.0017	0.0003	13:15:40	Yes
2	-0.041	-0.041	-0.0001	0.0007	0.0003	13:16:10	Yes
Mean:	-0.038	-0.038	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.78	10.78	96.78				

Sequence No.: 110

Sample ID: 247338006|958634|1

Analyst: JXL

Autosampler Location: 94

Date Collected: 3/3/2010 13:16:30

Data Type: Original

Replicate Data: 247338006|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	-0.0001	0.0012	0.0003	13:17:22	Yes
2	-0.037	-0.037	-0.0000	0.0015	0.0003	13:17:52	Yes
Mean:	-0.037	-0.037	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.918	2.918	29.66				

Sequence No.: 111

Sample ID: 247338007|958634|1

Analyst: JXL

Autosampler Location: 95

Date Collected: 3/3/2010 13:18:12

Data Type: Original

Replicate Data: 247338007|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0018	0.0004	13:19:04	Yes
2	-0.028	-0.028	0.0001	0.0019	0.0004	13:19:33	Yes
Mean:	-0.029	-0.029	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.926	3.926	21.67				

Sequence No.: 112

Sample ID: 247338008|958634|1

Analyst: JXL

Autosampler Location: 96

Date Collected: 3/3/2010 13:19:54

Data Type: Original

Replicate Data: 247338008|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.034	-0.034	-0.0000	0.0014	0.0003	13:20:46	Yes
2	-0.031	-0.031	0.0000	0.0022	0.0004	13:21:15	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	6.209	6.209	208.79				

Sequence No.: 113

Autosampler Location: 97

Sample ID: 247338009|958634|1

Date Collected: 3/3/2010 13:21:36

Analyst: JXL

Data Type: Original

Replicate Data: 247338009|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.039	-0.039	-0.0001	0.0010	0.0003	13:22:27	Yes
2	-0.037	-0.037	-0.0000	0.0016	0.0003	13:22:57	Yes
Mean:	-0.038	-0.038	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.685	3.685	32.18				

Sequence No.: 114

Autosampler Location: 98

Sample ID: 247338010|958634|1

Date Collected: 3/3/2010 13:23:17

Analyst: JXL

Data Type: Original

Replicate Data: 247338010|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.026	-0.026	0.0001	0.0026	0.0004	13:24:09	Yes
2	-0.030	-0.030	0.0000	0.0021	0.0004	13:24:39	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	11.12	11.12	55.06				

Sequence No.: 115

Autosampler Location: 99

Sample ID: 247338011|958634|1

Date Collected: 3/3/2010 13:24:59

Analyst: JXL

Data Type: Original

Replicate Data: 247338011|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0018	0.0004	13:25:51	Yes
2	-0.031	-0.031	0.0000	0.0021	0.0004	13:26:21	Yes
Mean:	-0.030	-0.030	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.472	4.472	38.04				

Sequence No.: 116

Autosampler Location: 100

Sample ID: 247347001|958634|1

Date Collected: 3/3/2010 13:26:41

Analyst: JXL

Data Type: Original

Replicate Data: 247347001|958634|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.034	-0.034	0.0000	0.0016	0.0003	13:27:33	Yes
2	-0.034	-0.034	-0.0000	0.0015	0.0003	13:28:03	Yes
Mean:	-0.034	-0.034	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.513	1.513	158.99				

Sequence No.: 117

Autosampler Location: 101

Sample ID: 247347002|958634|1
Analyst: JXL

Date Collected: 3/3/2010 13:28:24
Data Type: Original

Replicate Data: 247347002|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.028	-0.028	0.0001	0.0023	0.0004	13:29:16	Yes
2	-0.037	-0.037	-0.0000	0.0012	0.0003	13:29:46	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	18.62	18.62	541.97				

Sequence No.: 118

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 13:30:06

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.166	5.166	0.0619	0.3334	0.0622	13:30:56	Yes
2	5.169	5.169	0.0619	0.3315	0.0622	13:31:26	Yes
Mean:	5.168	5.168	0.0619				
SD:	0.002	0.002	0.0000				
%RSD:	0.045	0.045	0.04				

QC value within limits for Hg 253.7 Recovery = 103.36%

All analyte(s) passed QC.

Sequence No.: 119

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/3/2010 13:31:45

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0019	0.0004	13:32:36	Yes
2	-0.033	-0.033	0.0000	0.0015	0.0004	13:33:06	Yes
Mean:	-0.031	-0.031	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	7.780	7.780	88.32				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 120

Autosampler Location: 102

Sample ID: 247347003|958634|1

Date Collected: 3/3/2010 13:33:26

Analyst: JXL

Data Type: Original

Replicate Data: 247347003|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.030	-0.030	0.0000	0.0018	0.0004	13:34:18	Yes
2	-0.031	-0.031	0.0000	0.0018	0.0004	13:34:48	Yes
Mean:	-0.030	-0.030	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.375	2.375	20.27				

Sequence No.: 121

Autosampler Location: 103

Sample ID: 247347004|958634|1

Date Collected: 3/3/2010 13:35:08

Analyst: JXL

Data Type: Original

Replicate Data: 247347004|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

1	-0.032	-0.032	0.0000	0.0018	0.0004	13:36:00	Yes
2	-0.037	-0.037	-0.0000	0.0013	0.0003	13:36:30	Yes
Mean:	-0.035	-0.035	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	11.82	11.82	532.71				

Sequence No.: 122

Autosampler Location: 104

Sample ID: 247347005|958634|1

Date Collected: 3/3/2010 13:36:51

Analyst: JXL

Data Type: Original

Replicate Data: 247347005|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	0.0001	0.0024	0.0005	13:37:43	Yes
2	-0.022	-0.022	0.0001	0.0025	0.0005	13:38:12	Yes
Mean:	-0.023	-0.023	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.901	1.901	3.84				

Sequence No.: 123

Autosampler Location: 105

Sample ID: 247347006|958634|1

Date Collected: 3/3/2010 13:38:33

Analyst: JXL

Data Type: Original

Replicate Data: 247347006|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.068	0.068	0.0012	0.0081	0.0016	13:39:24	Yes
2	0.073	0.073	0.0013	0.0085	0.0016	13:39:54	Yes
Mean:	0.071	0.071	0.0012				
SD:	0.003	0.003	0.0000				
%RSD:	4.187	4.187	2.83				

Sequence No.: 124

Autosampler Location: 106

Sample ID: 247347007|958634|1

Date Collected: 3/3/2010 13:40:15

Analyst: JXL

Data Type: Original

Replicate Data: 247347007|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	0.0002	0.0030	0.0005	13:41:06	Yes
2	-0.029	-0.029	0.0001	0.0016	0.0004	13:41:36	Yes
Mean:	-0.025	-0.025	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	22.72	22.72	65.48				

Sequence No.: 125

Autosampler Location: 107

Sample ID: 247347008|958634|1

Date Collected: 3/3/2010 13:41:57

Analyst: JXL

Data Type: Original

Replicate Data: 247347008|958634|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	0.0002	0.0030	0.0005	13:42:48	Yes
2	-0.021	-0.021	0.0001	0.0028	0.0005	13:43:18	Yes
Mean:	-0.020	-0.020	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	7.815	7.815	11.85				

Sequence No.: 126

Autosampler Location: 108

Sample ID: 1202058472|959765|1

Date Collected: 3/3/2010 13:43:39

Analyst: JXL

Data Type: Original

Replicate Data: 1202058472|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.036	-0.036	-0.0000	0.0015	0.0003	13:44:30	Yes
2	-0.031	-0.031	0.0000	0.0024	0.0004	13:45:00	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	10.28	10.28	>999.9%				

Sequence No.: 127

Autosampler Location: 109

Sample ID: 1202058473|959765|1

Date Collected: 3/3/2010 13:45:21

Analyst: JXL

Data Type: Original

Replicate Data: 1202058473|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.395	2.395	0.0289	0.1557	0.0292	13:46:12	Yes
2	2.409	2.409	0.0291	0.1547	0.0294	13:46:42	Yes
Mean:	2.402	2.402	0.0290				
SD:	0.010	0.010	0.0001				
%RSD:	0.412	0.412	0.41				

Sequence No.: 128

Autosampler Location: 110

Sample ID: 247815001|959765|1

Date Collected: 3/3/2010 13:47:02

Analyst: JXL

Data Type: Original

Replicate Data: 247815001|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	0.0004	0.0043	0.0008	13:47:54	Yes
2	-0.013	-0.013	0.0002	0.0028	0.0006	13:48:24	Yes
Mean:	-0.005	-0.005	0.0003				
SD:	0.011	0.011	0.0001				
%RSD:	202.0	202.0	38.34				

Sequence No.: 129

Autosampler Location: 111

Sample ID: 247815002|959765|1

Date Collected: 3/3/2010 13:48:44

Analyst: JXL

Data Type: Original

Replicate Data: 247815002|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.278	0.278	0.0037	0.0217	0.0041	13:49:36	Yes
2	0.270	0.270	0.0036	0.0207	0.0040	13:50:06	Yes
Mean:	0.274	0.274	0.0037				
SD:	0.006	0.006	0.0001				
%RSD:	2.246	2.246	2.00				

Sequence No.: 130

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 13:50:27

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.547	5.547	0.0664	0.3514	0.0667	13:51:17	Yes
2	5.519	5.519	0.0661	0.3469	0.0664	13:51:47	Yes
Mean:	5.533	5.533	0.0662				
SD:	0.019	0.019	0.0002				
%RSD:	0.352	0.352	0.35				

QC value within limits for Hg 253.7 Recovery = 110.65%
All analyte(s) passed QC.

Sequence No.: 131
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/3/2010 13:52:06
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.037	-0.037	-0.0000	0.0008	0.0003	13:52:57	Yes
2	-0.025	-0.025	0.0001	0.0024	0.0004	13:53:27	Yes
Mean:	-0.031	-0.031	0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	27.15	27.15	373.41				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132
Sample ID: 247815003|959765|1
Analyst: JXL

Autosampler Location: 112
Date Collected: 3/3/2010 13:53:47
Data Type: Original

Replicate Data: 247815003|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.000	0.000	0.0004	0.0040	0.0007	13:54:39	Yes
2	-0.011	-0.011	0.0003	0.0030	0.0006	13:55:09	Yes
Mean:	-0.005	-0.005	0.0003				
SD:	0.008	0.008	0.0001				
%RSD:	149.1	149.1	27.80				

Sequence No.: 133
Sample ID: 247815004|959765|1
Analyst: JXL

Autosampler Location: 113
Date Collected: 3/3/2010 13:55:29
Data Type: Original

Replicate Data: 247815004|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	0.0002	0.0031	0.0006	13:56:22	Yes
2	-0.016	-0.016	0.0002	0.0029	0.0006	13:56:52	Yes
Mean:	-0.015	-0.015	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	13.82	13.82	10.87				

Sequence No.: 134
Sample ID: 247815005|959765|1
Analyst: JXL

Autosampler Location: 114
Date Collected: 3/3/2010 13:57:12
Data Type: Original

Replicate Data: 247815005|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.086	0.086	0.0014	0.0090	0.0018	13:58:05	Yes
2	0.083	0.083	0.0014	0.0090	0.0017	13:58:34	Yes
Mean:	0.085	0.085	0.0014				
SD:	0.002	0.002	0.0000				
%RSD:	2.119	2.119	1.52				

Sequence No.: 135
Sample ID: 1202058474|959765|1
Analyst: JXL

Autosampler Location: 115
Date Collected: 3/3/2010 13:58:55
Data Type: Original

Replicate Data: 1202058474|959765|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
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Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 955135.0
Analyst: Anthony Green
Method: SW/846 3050B
Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202047714	Metals Soil LCS SRM ICP/Hg	U1062540-I	.519	g
MS	1202047712	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202047712	Metals Spike Mix II	U1100205-06	.25	mL
MSD	1202047713	Metals Spike Mix I	U1100205-01	.25	mL
MSD	1202047713	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202047709 MB	25-FEB-2010 08:00:00	Soil	0.501	50	99.8004	
1202047714 LCS	25-FEB-2010 08:00:00	Soil	0.519	50	96.33911	
247325001	25-FEB-2010 08:00:00	Soil	0.53	50	94.33962	
1202047710 DUP (247325001)	25-FEB-2010 08:00:00	Soil	0.522	50	95.78544	
1202047711 SDILT (247325001)	25-FEB-2010 08:00:00	Soil	0.53	50	94.33962	
1202047712 MS (247325001)	25-FEB-2010 08:00:00	Soil	0.517	50	96.7118	
1202047713 MSD (247325001)	25-FEB-2010 08:00:00	Soil	0.508	50	98.4252	
247336001	25-FEB-2010 08:00:00	Soil	0.517	50	96.7118	
247336002	25-FEB-2010 08:00:00	Soil	0.515	50	97.08738	
247336003	25-FEB-2010 08:00:00	Soil	0.521	50	95.96929	
247336004	25-FEB-2010 08:00:00	Soil	0.511	50	97.84736	
247336005	25-FEB-2010 08:00:00	Soil	0.505	50	99.0099	
247336006	25-FEB-2010 08:00:00	Soil	0.519	50	96.33911	
247336007	25-FEB-2010 08:00:00	Soil	0.507	50	98.61933	
247347001	25-FEB-2010 08:00:00	Soil	0.542	50	92.25092	
247347002	25-FEB-2010 08:00:00	Soil	0.527	50	94.87666	
247347003	25-FEB-2010 08:00:00	Soil	0.513	50	97.46589	
247347004	25-FEB-2010 08:00:00	Soil	0.502	50	99.60159	
247347005	25-FEB-2010 08:00:00	Soil	0.517	50	96.7118	
247347006	25-FEB-2010 08:00:00	Soil	0.513	50	97.46589	
247347007	25-FEB-2010 08:00:00	Soil	0.506	50	98.81423	
247347008	25-FEB-2010 08:00:00	Soil	0.502	50	99.60159	

Reagent/Solvent Lot ID **Description** **Amount**
 Analytical Logbook version 1 11-04-2002 GEL Laboratories LLC

Prep Logbook

Batch ID: 955135.0

Analyst: Anthony Green

Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19

Instrument: BAL-001

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202047714	Metals Soil LCS SRM ICP/Hg	U1062540-1	.519	g
MS	1202047712	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202047712	Metals Spike Mix II	U1100205-06	.25	mL
MSD	1202047713	Metals Spike Mix I	U1100205-01	.25	mL
MSD	1202047713	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check	1
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1265209HYDROCHLORIC ACID10 mL

1274969Nitric Acid CONC.1.25 mL

Comments: Sample 247325001 consist of clumpy, mixed brown soil with rocks.

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 955137.0 Verified by: _____ Lab SOP: GL-MA-E-009 REV# 19
 Analyst: Anthony Green Instrument: BAL-001
 Method: SW846 3050B

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202047715 MB	25-FEB-2010 08:00:00	0.515	50	97.08738	
1202047720 LCS	25-FEB-2010 08:00:00	0.505	50	99.00099	
247325001	25-FEB-2010 08:00:00	0.505	50	99.00099	
1202047716 DUP (247325001)	25-FEB-2010 08:00:00	0.513	50	97.46589	
1202047717 SDILT (247325001)	25-FEB-2010 08:00:00	0.505	50	99.00099	
1202047718 MS (247325001)	25-FEB-2010 08:00:00	0.502	50	99.60159	
1202047719 MSD (247325001)	25-FEB-2010 08:00:00	0.52	50	96.15385	
247336001	25-FEB-2010 08:00:00	0.508	50	98.4252	
247336002	25-FEB-2010 08:00:00	0.506	50	98.81423	
247336003	25-FEB-2010 08:00:00	0.515	50	97.08738	
247336004	25-FEB-2010 08:00:00	0.508	50	98.4252	
247336005	25-FEB-2010 08:00:00	0.509	50	98.23183	
247336006	25-FEB-2010 08:00:00	0.513	50	97.46589	
247336007	25-FEB-2010 08:00:00	0.526	50	95.05703	
247347001	25-FEB-2010 08:00:00	0.527	50	94.87666	
247347002	25-FEB-2010 08:00:00	0.526	50	95.05703	
247347003	25-FEB-2010 08:00:00	0.513	50	97.46589	
247347004	25-FEB-2010 08:00:00	0.507	50	98.61933	
247347005	25-FEB-2010 08:00:00	0.511	50	97.84736	
247347006	25-FEB-2010 08:00:00	0.527	50	94.87666	
247347007	25-FEB-2010 08:00:00	0.502	50	99.60159	
247347008	25-FEB-2010 08:00:00	0.555	50	90.09009	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202047720	Metals Soil LCS SRM ICPMS	U062540-MS	.505	g	
MS	1202047718	ICP-MS Spike for soil products.	U090827-A	.5	mL	Sample 247325001 consist of clumpy, mixed brown soil with rocks.
MS	1202047718	ICP-MS Spike for Soil Products	U090827-B	.5	mL	
MSD	1202047719	ICP-MS Spike for soil products.	U090827-A	.5	mL	
MSD	1202047719	ICP-MS Spike for Soil Products	U090827-B	.5	mL	
REGNT All		Hydrogen Peroxide 30%	1250038-02	1.5	mL	
REGNT All		Nitric Acid CONC.	1274969	5	mL	

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID:	958630.0	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Tara Griffin			LCS	1202055931	Metals LCS Soil SRM	UI031809A	.201	g
Method:	SW846 7471A Prep			MS	1202055933	Mercury soil working intermediate standard for MS	WHG100302-14	.3	mL
Lab SOP:	GL-MA-E-010 REV# 23			MSD	1202055935	Mercury soil working intermediate standard for MS	WHG100302-14	.3	mL
Instrument:	BAL-002								

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check	I
1202055930 MB	02-MAR-2010 19:10:00	Soil	0.507	30	59.1716		
1202055931 LCS	02-MAR-2010 19:10:00	Soil	0.201	30	149.25373		
247338001	02-MAR-2010 19:10:00	Soil	0.595	30	50.42017		
1202055932 DUP (247338001)	02-MAR-2010 19:10:00	Soil	0.515	30	58.25243		
1202055933 MS (247338001)	02-MAR-2010 19:10:00	Soil	0.508	30	59.05512		
1202055935 MSD (247338001)	02-MAR-2010 19:10:00	Soil	0.505	30	59.40594		
1202055934 SDILT (247338001)	02-MAR-2010 19:10:00	Soil	0.595	30	50.42017		
247338002	02-MAR-2010 19:10:00	Soil	0.583	30	51.45798		
247338003	02-MAR-2010 19:10:00	Soil	0.571	30	52.5394		
247338004	02-MAR-2010 19:10:00	Soil	0.57	30	52.63158		
247338005	02-MAR-2010 19:10:00	Soil	0.521	30	57.58157		
247338006	02-MAR-2010 19:10:00	Soil	0.506	30	59.28854		
247338007	02-MAR-2010 19:10:00	Soil	0.529	30	56.71078		
247338008	02-MAR-2010 19:10:00	Soil	0.524	30	57.25191		
247338009	02-MAR-2010 19:10:00	Soil	0.511	30	58.70841		
247338010	02-MAR-2010 19:10:00	Soil	0.561	30	53.47594		
247338011	02-MAR-2010 19:10:00	Soil	0.518	30	57.91506		
247347001	02-MAR-2010 19:10:00	Soil	0.555	30	54.05405		
247347002	02-MAR-2010 19:10:00	Soil	0.536	30	55.97015		
247347003	02-MAR-2010 19:10:00	Soil	0.518	30	57.91506		
247347004	02-MAR-2010 19:10:00	Soil	0.537	30	55.86592		
247347005	02-MAR-2010 19:10:00	Soil	0.53	30	56.60377		
247347006	02-MAR-2010 19:10:00	Soil	0.576	30	52.08333		
247347007	02-MAR-2010 19:10:00	Soil	0.5	30	60		
247347008	02-MAR-2010 19:10:00	Soil	0.588	30	51.02041		

Reagent/Solvent Lot ID	Description	Amount
	Analytical Logbook version 1 11-04-2002	
	GEL Laboratories LLC	

Prep Logbook

Batch ID: 958630.0

Analyst: Tara Griffin

Method: SW846 7471A Prep

Lab SOP: GL-MA-E-010 REV# 23

Instrument: BAL-002

Verified by:

Type

Sample Id

Description

Serial Number

Spike Amount

Spike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
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125532-C	Hg reducing agent	2 mL				
1274391-I	NITRIC ACID	.375 mL				
1277235-A	Hydrochloric Acid Conc.	1.125 mL				
1277238-C	5% KMnO4 solution	7.5 mL				
WHG100302-07	Mercury Working Standard 1st Source CAL S	30 uL				
WHG100302-08	0.2/CRA Mercury Working Standard 1st Source CAL S	75 uL				
WHG100302-09	Mercury Working 1st Source CAL S 2.0	300 uL				
WHG100302-10	Mercury Working 1st Source CAL S 5.0/CCV	750 uL				
WHG100302-11	Mercury Working 1st Source CAL S 10.0	1.5 mL				
WHG100302-12	Mercury Working 2nd Source S 5.0/ICV	750 uL				

Comments:

Sample 247338001 is a rocky dry brown soil.
 Digestion Start Date: 02-MAR-10 19:10
 Digestion End Date: 02-MAR-10 19:40

DATA EXCEPTION REPORT

Mo.Day Yr.
17-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:
955136

Sample Numbers:
See Below

Potentially affected work order(s)(SDG): 247325(10-1896),247336(10-1906-1),247347(10-1912)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:

QC 1202047712MS

2. Failed RPD for DUP:

QC 1202047710DUP

3. Failed Recovery for MSD/PSD:

QC 1202047713MSD

DER Disposition:

1. The matrix spike recovery failed outside of the control limits for antimony, barium, magnesium, manganese, potassium and zinc due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for antimony, barium, magnesium, manganese and calcium 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 antimony, barium, magnesium, manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jerry Wigfall 17-MAR-10

Data Validator/Group Leader:

Christopher Louviere 17-MAR-10

DATA EXCEPTION REPORT

Mo. Day Yr. 19-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 955138	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 247325(10-1896),247336(10-1906-1),247347(10-1912)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:

QC 1202047718MS

2. Failed RPD for MS/MSD, or PS/PSD:

QC 1202047719MSD

3. Failed Recovery for MSD/PSD:

QC 1202047719MSD

DER Disposition:

The matrix spike and matrix spike duplicate recovery failed outside of the control limits for Ni and Se due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Ni due to possible matrix interference and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Rose Jenkins

19-MAR-10

Data Validator/Group Leader:

Samantha Jacobs

19-MAR-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090421-40 **Opened:** 09-OCT-09 **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 21-APR-09 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 09-OCT-10 **Lot Number :** 0830227
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSEA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSEA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090827-A **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090827-B **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount:** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number:** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number:** 1017581
Employee: Helen Camello **Solvent:** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount:** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number:** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number:** 0930215
Employee: Helen Camello **Solvent:** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount:** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number:** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number:** 0930216
Employee: Helen Camello **Solvent:** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100205-06 **Opened:** 05-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI100217-48 **Opened:** 04-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 17-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-10 **Lot Number :** 1018878
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: UI100310-49.1 **Opened:** 16-MAR-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 12-MAR-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 17-MAR-10 **Lot Number :** 1019142
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI100312-40 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Standard Logbook

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: UI100312-41 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Standard Logbook

Serial ID: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 18-MAR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMSCaSPIKEB **Received:** 26-FEB-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-104JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS100226-02 **Opened:** 26-FEB-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCaSPIKEA **Received:** 26-FEB-10 **Lot Number :** 21-103JB
Type: Source Material **Expires:** 26-FEB-11
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCaSPIKEC **Received:** 26-FEB-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-102JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C

Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100302-01 **Opened:** 02-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 02-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 03-MAR-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100302-02 **Opened:** 02-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 03-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100302-07 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALSO.2CRA **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100302-08 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALSO.5 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Standard Logbook

Description: Mercury Working Standard 1st Source CAL S 0.5

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100302-09 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL S 2.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100302-10 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL S 5.0/CCV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100302-11 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expres:** 09-MAR-10
Employee: Tara Griffin
Supplier: GEL

Description: Mercury Working 1st Source CAL S 10.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100302-12 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expres:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 2nd Source S 5.0/ICV

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100302-14 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury soil working intermediate standard for MS

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100316-42 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
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.
WI100316-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100316-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100316-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100316-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100316-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100316-43 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1%HNO3 --1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100316-44 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1285629
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100316-45 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L

Serial ID: WI100316-46 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: W100316-47 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL & 1%HNO3-1285629
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100317-04AB **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 17-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100317-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100317-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100317-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100317-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100317-04B **Opened:** 17-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 17-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 18-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1285348
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100317-05B **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 17-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100317-06B **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 17-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins **Verified:** 06-MAR-10
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100317-07B **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 17-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 18-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1285348
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100317-08B **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 17-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100318-04AB **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 18-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100318-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100318-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100318-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100318-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100318-04B **Opened:** 18-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 18-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 19-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1285348
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100318-05B

Opened: 18-MAR-10

Balance Id :

40245216

Name: ICPMS ICV

Received: 18-MAR-10

Pipet Id :

1758088

Type: Working

Expires: 19-MAR-10

Solvent :

2%HNO3/1%HCl - 1285348

Employee: Rose Jenkins

Supplier: GEL

Description: ICPMS ICV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100318-06B **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 18-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins **Verified:** 06-MAR-10
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100318-07B **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 18-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 19-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1285348
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100318-08B **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 18-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
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
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: 100202 Opened: 02-FEB-10 Lot Number : 200930201
Name: I-HCL Received: 02-FEB-10
Type: Reagent/Solvent Expires: 02-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1100721TCLP Opened: 16-APR-09 Lot Number : H02026 L
Name: I-HNO3 Received: 02-APR-09
Type: Reagent/Solvent Expires: 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

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

Standard Logbook

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 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: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1274969 **Opened:** 24-FEB-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1277235-A **Opened:** 01-MAR-10 **Lot Number :** J02039
Name: B-HCl-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 01-MAR-11
Employee: Tara Griffin
Supplier: J T Baker
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1285348 **Opened:** 15-MAR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 15-MAR-10
Type: Reagent/Solvent **Expires:** 22-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: 1285629 **Opened:** 15-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 05-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 21-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1912-1**

Sample Analysis

Sample ID	Client ID
247350001	RE15-10-8270
1202047699	Method Blank (MB) ICP
1202047700	Laboratory Control Sample (LCS)
1202047703	247350001(RE15-10-8270L) Serial Dilution (SD)
1202047701	247350001(RE15-10-8270D) Sample Duplicate (DUP)
1202047702	247350001(RE15-10-8270S) Matrix Spike (MS)
1202047704	Method Blank (MB) ICP-MS
1202075029	Method Blank (MB) ICP-MS
1202047705	Laboratory Control Sample (LCS)
1202075030	Laboratory Control Sample (LCS)
1202047708	247350001(RE15-10-8270L) Serial Dilution (SD)
1202075033	247350001(RE15-10-8270L) Serial Dilution (SD)
1202047706	247350001(RE15-10-8270D) Sample Duplicate (DUP)
1202075031	247350001(RE15-10-8270D) Sample Duplicate (DUP)
1202047707	247350001(RE15-10-8270S) Matrix Spike (MS)
1202075032	247350001(RE15-10-8270S) Matrix Spike (MS)
1202052034	Method Blank (MB) CVAA
1202052035	Laboratory Control Sample (LCS)
1202052041	247548001(RE46-10-13373L) Serial Dilution (SD)
1202052036	247548001(RE46-10-13373D) Sample Duplicate (DUP)

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

Method/Analysis Information

Analytical Batch:	955132, 955134, 966864 and 957034
Prep Batch :	955131, 955133, 966863 and 957032
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits with the exceptions of antimony and zinc, 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 for all applicable analytes with the exception of thallium. The CCB failed high for thallium, however, the samples did not contain thallium above the client's RDL.

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: 247350001 (RE15-10-8270) and 247548001 (RE46-10-13373).

Matrix Spike (MS) Recovery Statement

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

Duplicate Relative Percent Difference (RPD) Statement

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

Serial Dilution % Difference Statement

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

Technical Information**Holding Time Specifications**

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

Sample Dilutions

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

Preparation Information

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

Miscellaneous Information**Electronic Packaging Comment**

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

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

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: 806408. 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 Ranson Date: 3/22/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1912-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247350001

BASIS: As Received

DATE COLLECTED 13-FEB-10

CLIENT ID: RE15-10-8270

LEVEL: Low

DATE RECEIVED 18-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	RMJ	03/20/10 04:58	100319-6	966864
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/16/10 15:01	031610B-1	955132
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/16/10 15:01	031610B-1	955132
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/16/10 15:01	031610B-1	955132
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/16/10 05:44	100315-5	955134
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JX1.1	02/25/10 13:16	022510W1-7	957034
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-09-7	Potassium	324	ug/L		50	150	150	1	P	HSC	03/16/10 15:01	031610B-1	955132
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-23-5	Sodium	234	ug/L	J	100	300	300	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-28-0	Thallium	1	ug/L	UN	0.3	1	1	1	MS	PRB	03/18/10 13:50	100318-4	955134
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/16/10 15:01	031610B-1	955132
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/16/10 15:01	031610B-1	955132

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
955132	955131	SW846 3005A	50	mL	50	mL	02/24/10	FGA
955134	955133	SW846 3005A	50	mL	50	mL	02/24/10	FGA
957034	957032	SW846 7470A Prep	20	mL	20	mL	02/24/10	TXB3
966864	966863	SW846 3005A	25	mL	25	mL	03/19/10	AXG2

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,ICPMS6,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.12	ug/L	5	ug/L	102.5	90.0 – 110.0	AV	25-FEB-10 11:07	022510W1-7
	Beryllium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	16-MAR-10 04:25	100315-5
	Cadmium	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	16-MAR-10 04:25	100315-5
	Lead	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	16-MAR-10 04:25	100315-5
	Manganese	53.5	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	16-MAR-10 04:25	100315-5
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Arsenic	464	ug/L	500	ug/L	92.7	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Cobalt	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Copper	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Nickel	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Potassium	2370	ug/L	2500	ug/L	94.8	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Selenium	2490	ug/L	2500	ug/L	99.5	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Silver	253	ug/L	250	ug/L	101.1	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Sodium	2410	ug/L	2500	ug/L	96.5	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	16-MAR-10 13:56	031610B-1
	Thallium	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	17-MAR-10 20:27	100317-2
	Thallium	49.2	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	18-MAR-10 13:26	100318-4
	Antimony	46.5	ug/L	50	ug/L	93	90.0 – 110.0	MS	20-MAR-10 03:46	100319-6
CCV01										
	Mercury	4.94	ug/L	5	ug/L	98.7	80.0 – 120.0	AV	25-FEB-10 11:13	022510W1-7
	Beryllium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	16-MAR-10 04:45	100315-5
	Cadmium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	16-MAR-10 04:45	100315-5
	Lead	55.2	ug/L	50	ug/L	110.4	90.0 – 110.0	MS	16-MAR-10 04:45	100315-5
	Manganese	54.5	ug/L	50	ug/L	108.9	90.0 – 110.0	MS	16-MAR-10 04:45	100315-5

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,ICPMS6,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Aluminum	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Arsenic	525	ug/L	500	ug/L	105	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Barium	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Calcium	5360	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Chromium	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Cobalt	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Copper	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Iron	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Magnesium	5400	ug/L	5000	ug/L	107.9	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Nickel	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Potassium	5710	ug/L	5000	ug/L	114.1	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Selenium	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Silver	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Sodium	10700	ug/L	10000	ug/L	106.6	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Vanadium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Zinc	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	16-MAR-10 14:19	031610B-1
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	17-MAR-10 20:39	100317-2
	Thallium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	18-MAR-10 13:38	100318-4
	Antimony	47.9	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	20-MAR-10 04:03	100319-6
CCV02	Mercury	5.03	ug/L	5	ug/L	100.6	80.0 – 120.0	AV	25-FEB-10 11:37	022510W1-7
	Beryllium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	16-MAR-10 05:24	100315-5
	Cadmium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	16-MAR-10 05:24	100315-5
	Lead	53.5	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	16-MAR-10 05:24	100315-5
	Manganese	53.4	ug/L	50	ug/L	106.7	90.0 – 110.0	MS	16-MAR-10 05:24	100315-5
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Arsenic	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Barium	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Calcium	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Chromium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,ICPMS6,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Iron	4850	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Magnesium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Nickel	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Potassium	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Selenium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Silver	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Vanadium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	16-MAR-10 14:36	031610B-1
	Thallium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	17-MAR-10 21:10	100317-2
	Thallium	48.7	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	18-MAR-10 13:59	100318-4
	Antimony	45.2	ug/L	50	ug/L	90.4	90.0 – 110.0	MS	20-MAR-10 04:16	100319-6
CCV03										
	Mercury	5.3	ug/L	5	ug/L	106.1	80.0 – 120.0	AV	25-FEB-10 12:00	022510W1-7
	Beryllium	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	16-MAR-10 06:00	100315-5
	Cadmium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	16-MAR-10 06:00	100315-5
	Lead	54.6	ug/L	50	ug/L	109.2	90.0 – 110.0	MS	16-MAR-10 06:00	100315-5
	Manganese	53.6	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	16-MAR-10 06:00	100315-5
	Aluminum	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Arsenic	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Barium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Calcium	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Copper	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Magnesium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1
	Nickel	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-MAR-10 14:46	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 1CPMS3,1CPMS5,1CPMS6,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	4830	ug/L	5000	ug/L	96.6	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Selenium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Silver	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Sodium	9740	ug/L	10000	ug/L	97.4	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	16-MAR-10 14:46	031610B-1
	Thallium	47.7	ug/L	50	ug/L	95.3	90.0 - 110.0	MS	17-MAR-10 21:37	100317-2
	Antimony	47.9	ug/L	50	ug/L	95.7	90.0 - 110.0	MS	20-MAR-10 04:48	100319-6
CCV04										
	Mercury	5.03	ug/L	5	ug/L	100.7	80.0 - 120.0	AV	25-FEB-10 12:24	022510W1-7
	Aluminum	4790	ug/L	5000	ug/L	95.8	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Arsenic	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Barium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Calcium	4820	ug/L	5000	ug/L	96.4	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Chromium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Cobalt	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Copper	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Iron	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Magnesium	4860	ug/L	5000	ug/L	97.3	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Nickel	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Potassium	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Selenium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Silver	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Zinc	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	16-MAR-10 15:15	031610B-1
	Antimony	47.1	ug/L	50	ug/L	94.1	90.0 - 110.0	MS	20-MAR-10 05:10	100319-6
CCV05										
	Mercury	5.08	ug/L	5	ug/L	101.7	80.0 - 120.0	AV	25-FEB-10 12:48	022510W1-7
	Arsenic	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	16-MAR-10 15:54	031610B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,ICPMS6,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	16-MAR-10 15:54	031610B-1
	Silver	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	16-MAR-10 15:54	031610B-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	16-MAR-10 15:54	031610B-1
CCV06										
	Mercury	5.19	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	25-FEB-10 13:12	022510W1-7
CCV07										
	Mercury	5.54	ug/L	5	ug/L	110.8	80.0 – 120.0	AV	25-FEB-10 13:35	022510W1-7

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS3,ICPMS5,ICPMS6,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.257	ug/L	.2	ug/L	128.7	70.0 – 130.0	AV	25-FEB-10 11:11	022510W1-7
	Lead	2.45	ug/L	2	ug/L	122.6	70.0 – 130.0	MS	16-MAR-10 04:33	100315-5
	Manganese	5.86	ug/L	5	ug/L	117.1	70.0 – 130.0	MS	16-MAR-10 04:33	100315-5
	Beryllium	.544	ug/L	.5	ug/L	108.8	70.0 – 130.0	MS	16-MAR-10 04:33	100315-5
	Cadmium	1.13	ug/L	1	ug/L	112.8	70.0 – 130.0	MS	16-MAR-10 04:33	100315-5
	Thallium	1.17	ug/L	1	ug/L	117	70.0 – 130.0	MS	17-MAR-10 20:31	100317-2
	Thallium	1.16	ug/L	1	ug/L	116	70.0 – 130.0	MS	18-MAR-10 13:31	100318-4
	Antimony	2.01	ug/L	3	ug/L	67	70.0 – 130.0	MS	20-MAR-10 03:53	100319-6
PQL01										
	Aluminum	207	ug/L	200	ug/L	103.3	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Iron	85.9	ug/L	100	ug/L	85.9	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Magnesium	323	ug/L	300	ug/L	107.8	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Nickel	4.97	ug/L	5	ug/L	99.4	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Potassium	136	ug/L	150	ug/L	90.6	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Silver	4.67	ug/L	5	ug/L	93.5	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Sodium	292	ug/L	300	ug/L	97.4	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Arsenic	30.6	ug/L	30	ug/L	102	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Barium	5.08	ug/L	5	ug/L	101.7	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Chromium	4.43	ug/L	5	ug/L	88.5	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Cobalt	4.31	ug/L	5	ug/L	86.3	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Copper	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Vanadium	4.72	ug/L	5	ug/L	94.5	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Zinc	6.89	ug/L	10	ug/L	68.9	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Calcium	205	ug/L	200	ug/L	102.6	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1
	Selenium	29.6	ug/L	30	ug/L	98.6	70.0 – 130.0	P	16-MAR-10 14:04	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	25-FEB-10 11:09	022510W1-7
	Beryllium	0.1	+/- .5	U	0.1	0.5	LIQ	MS	16-MAR-10 04:29	100315-5
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	16-MAR-10 04:29	100315-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	16-MAR-10 04:29	100315-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	16-MAR-10 04:29	100315-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	16-MAR-10 14:00	031610B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	16-MAR-10 14:00	031610B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	16-MAR-10 14:00	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	16-MAR-10 14:00	031610B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	16-MAR-10 14:00	031610B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	16-MAR-10 14:00	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Zinc	-7.4	+/-10	J	3.3	10.0	LIQ	P	16-MAR-10 14:00	031610B-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	17-MAR-10 20:29	100317-2
	Thallium	0.346	+/-1	J	0.3	1.0	LIQ	MS	18-MAR-10 13:28	100318-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-MAR-10 03:50	100319-6
CCB01										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	25-FEB-10 11:15	022510W1-7
	Beryllium	0.1	+/- .5	U	0.1	0.5	LIQ	MS	16-MAR-10 04:49	100315-5
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	16-MAR-10 04:49	100315-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	16-MAR-10 04:49	100315-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	16-MAR-10 04:49	100315-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	16-MAR-10 14:22	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	16-MAR-10 14:22	031610B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Copper	4.17	+/-10	J	3.0	10.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	16-MAR-10 14:22	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	16-MAR-10 14:22	031610B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Potassium	127.57	+/-150	J	50.0	150	LIQ	P	16-MAR-10 14:22	031610B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	16-MAR-10 14:22	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	16-MAR-10 14:22	031610B-1
	Thallium	0.385	+/-1	J	0.3	1.0	LIQ	MS	17-MAR-10 20:41	100317-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	18-MAR-10 13:40	100318-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-MAR-10 04:06	100319-6
CCB02										
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	25-FEB-10 11:39	022510W1-7
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	16-MAR-10 05:28	100315-5
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	16-MAR-10 05:28	100315-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	16-MAR-10 05:28	100315-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	16-MAR-10 05:28	100315-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	16-MAR-10 14:39	031610B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	16-MAR-10 14:39	031610B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	16-MAR-10 14:39	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	16-MAR-10 14:39	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	16-MAR-10 14:39	031610B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	16-MAR-10 14:39	031610B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	16-MAR-10 14:39	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Zinc	-7.61	+/-10	J	3.3	10.0	LIQ	P	16-MAR-10 14:39	031610B-1
	Thallium	0.335	+/-1	J	0.3	1.0	LIQ	MS	17-MAR-10 21:12	100317-2
	Thallium	1.16	+/-1		0.3	1.0	LIQ	MS	18-MAR-10 14:01	100318-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-MAR-10 04:19	100319-6
CCB03										
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	25-FEB-10 12:02	022510W1-7
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	16-MAR-10 06:04	100315-5
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	16-MAR-10 06:04	100315-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	16-MAR-10 06:04	100315-5
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	16-MAR-10 06:04	100315-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	16-MAR-10 14:50	031610B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	16-MAR-10 14:50	031610B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	16-MAR-10 14:50	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	16-MAR-10 14:50	031610B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	16-MAR-10 14:50	031610B-1
	Selenium	-7.96	+/-30	J	5.0	30.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:50	031610B-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Sodium	100	+/-300	U	100	300	LIQ	P	16-MAR-10 14:50	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Zinc	-7.64	+/-10	J	3.3	10.0	LIQ	P	16-MAR-10 14:50	031610B-1
	Thallium	0.41	+/-1	J	0.3	1.0	LIQ	MS	17-MAR-10 21:39	100317-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-MAR-10 04:51	100319-6
CCB04	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	25-FEB-10 12:26	022510W1-7
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	16-MAR-10 15:19	031610B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	16-MAR-10 15:19	031610B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	16-MAR-10 15:19	031610B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	16-MAR-10 15:19	031610B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	16-MAR-10 15:19	031610B-1
	Selenium	-7.07	+/-30	J	5.0	30.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	16-MAR-10 15:19	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Zinc	-7.87	+/-10	J	3.3	10.0	LIQ	P	16-MAR-10 15:19	031610B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-MAR-10 05:14	100319-6
CCB05	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	25-FEB-10 12:50	022510W1-7
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	16-MAR-10 15:58	031610B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	16-MAR-10 15:58	031610B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	16-MAR-10 15:58	031610B-1
	Zinc	-7.84	+/-10	J	3.3	10.0	LIQ	P	16-MAR-10 15:58	031610B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB06	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	25-FEB-10 13:14	022510W1-7
CCB07	Mercury	-0.069	+/- .2	J	0.066	0.2	LIQ	AV	25-FEB-10 13:37	022510W1-7

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1912-1
Contract: LANL01004
Matrix: WATER

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202047699	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30	U	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	-7.28	ug/L	+/-10	J	P	3.3	10
1202047704	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
1202052034	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202075029	Antimony	1	ug/L	+/-3	U	MS	1	3

METALS
-4-
Interference Check Sample

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	521000	ug/L	500000	ug/L	104	80.0 - 120.0	16-MAR-10 14:07	031610B-1
	Arsenic	-39.9	ug/L					16-MAR-10 14:07	031610B-1
	Barium	7.2	ug/L					16-MAR-10 14:07	031610B-1
	Calcium	491000	ug/L	500000	ug/L	98.3	80.0 - 120.0	16-MAR-10 14:07	031610B-1
	Chromium	-2.06	ug/L					16-MAR-10 14:07	031610B-1
	Cobalt	3.0	ug/L					16-MAR-10 14:07	031610B-1
	Copper	1.49	ug/L					16-MAR-10 14:07	031610B-1
	Iron	190000	ug/L	200000	ug/L	94.9	80.0 - 120.0	16-MAR-10 14:07	031610B-1
	Magnesium	501000	ug/L	500000	ug/L	100	80.0 - 120.0	16-MAR-10 14:07	031610B-1
	Nickel	-1.37	ug/L					16-MAR-10 14:07	031610B-1
	Potassium	-117.0	ug/L					16-MAR-10 14:07	031610B-1
	Selenium	-20.1	ug/L					16-MAR-10 14:07	031610B-1
	Silver	0.397	ug/L					16-MAR-10 14:07	031610B-1
	Sodium	8.24	ug/L					16-MAR-10 14:07	031610B-1
	Vanadium	-5.16	ug/L					16-MAR-10 14:07	031610B-1
	Zinc	-5.14	ug/L					16-MAR-10 14:07	031610B-1
ICSAB01									
	Aluminum	527000	ug/L	500000	ug/L	105	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Arsenic	488	ug/L	500	ug/L	97.7	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Barium	507	ug/L	500	ug/L	101	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Calcium	495000	ug/L	500000	ug/L	99.1	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Chromium	491	ug/L	500	ug/L	98.1	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Cobalt	452	ug/L	500	ug/L	90.4	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Copper	563	ug/L	500	ug/L	113	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Iron	190000	ug/L	200000	ug/L	95	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Magnesium	504000	ug/L	500000	ug/L	101	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Nickel	451	ug/L	500	ug/L	90.1	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Potassium	5300	ug/L	5000	ug/L	106	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Selenium	2490	ug/L	2500	ug/L	99.5	80.0 - 120.0	16-MAR-10 14:10	031610B-1

METALS
-4-
Interference Check Sample

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	268	ug/L	250	ug/L	107	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Sodium	5270	ug/L	5000	ug/L	105	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Vanadium	523	ug/L	500	ug/L	105	80.0 - 120.0	16-MAR-10 14:10	031610B-1
	Zinc	477	ug/L	500	ug/L	95.5	80.0 - 120.0	16-MAR-10 14:10	031610B-1

METALS
-4-
Interference Check Sample

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	0.052	ug/L					17-MAR-10 20:34	100317-2
ICSAB01	Thallium	21.0	ug/L	20	ug/L	105	80.0 - 120.0	17-MAR-10 20:36	100317-2

METALS

-4-

Interference Check Sample

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	0.073	ug/L					18-MAR-10 13:33	100318-4
ICSAB01	Thallium	21.3	ug/L	20	ug/L	106	80.0 - 120.0	18-MAR-10 13:35	100318-4

METALS

-4-

Interference Check Sample

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (% R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Beryllium	0.111	ug/L					16-MAR-10 04:37	100315-5
	Cadmium	0.58	ug/L					16-MAR-10 04:37	100315-5
	Lead	0.234	ug/L					16-MAR-10 04:37	100315-5
	Manganese	6.32	ug/L					16-MAR-10 04:37	100315-5
ICSAB01									
	Beryllium	19.5	ug/L	20	ug/L	97.5	80.0 - 120.0	16-MAR-10 04:41	100315-5
	Cadmium	20.6	ug/L	20.44	ug/L	101	80.0 - 120.0	16-MAR-10 04:41	100315-5
	Lead	22.4	ug/L	20.19	ug/L	111	80.0 - 120.0	16-MAR-10 04:41	100315-5
	Manganese	28.7	ug/L	25.8	ug/L	111	80.0 - 120.0	16-MAR-10 04:41	100315-5

METALS

-4-

Interference Check Sample

SDG No: 10-1912-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Antimony	0.003	ug/L					20-MAR-10 03:56	100319-6
ICSAB01	Antimony	21.6	ug/L	20	ug/L	108	80.0 - 120.0	20-MAR-10 03:59	100319-6

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912-1 Client ID RE15-10-8270S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 247350001 Spike ID: 1202047702

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	4880		68	U	5000	97.6		P
Arsenic	ug/L	75-125	508		5	U	500	101		P
Barium	ug/L	75-125	510		1	U	500	102		P
Calcium	ug/L	75-125	4910		50	U	5000	97.6		P
Chromium	ug/L	75-125	511		1	U	500	102		P
Cobalt	ug/L	75-125	482		1	U	500	96.3		P
Copper	ug/L	75-125	522		3	U	500	104		P
Iron	ug/L	75-125	4950		30	U	5000	99		P
Magnesium	ug/L	75-125	4970		85	U	5000	99.3		P
Nickel	ug/L	75-125	498		1.5	U	500	99.6		P
Potassium	ug/L	75-125	5180		324		5000	97.1		P
Selenium	ug/L	75-125	495		5	U	500	99.1		P
Silver	ug/L	75-125	500		1	U	500	99.9		P
Sodium	ug/L	75-125	5200		234	J	5000	99.3		P
Vanadium	ug/L	75-125	516		1	U	500	103		P
Zinc	ug/L	75-125	494		3.3	U	500	98.7		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912-1 Client ID. RE15-10-8270S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 247350001 Spike ID: 1202047707

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	75-125	48		0.1	U	50	95.9		MS
Cadmium	ug/L	75-125	11		0.11	U	10	110		MS
Lead	ug/L	75-125	44.3		0.5	U	40	111		MS
Manganese	ug/L	75-125	50.8		1	U	50	101		MS
Thallium	ug/L	75-125	71.8		0.3	U	100	71.8	N	MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912-1 Client ID RE46-10-13373S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 247548001 Spike ID: 1202052037

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	2.25		0.066	U	2	113		AV

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1912-1 Client ID RE15-10-8270S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 247350001 Spike ID: 1202075032

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	208		1	U	200	104		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8270D

Sample ID: 247350001

Duplicate ID: 1202047701

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L		50 U		50 U				P
Chromium	ug/L		1 U		1 U				P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L		30 U		30 U				P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	324		354		9.07		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	234 J		212 J		9.56		P
Vanadium	ug/L		1 U		1 U				P
Zinc	ug/L		3.3 U		3.3 U				P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8270D

Sample ID: 247350001

Duplicate ID: 1202047706

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.3	U	0.3	U			MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-13373D

Sample ID: 247548001

Duplicate ID: 1202052036

Percent Solids for Dup: N/A

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

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1912-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8270D

Sample ID: 247350001

Duplicate ID: 1202075031

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1912-1

Contract: LANL01004

Aqueous LCS Source:OS2I

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202047700								
	Aluminum	ug/L	5000	4870		97.5	80-120	P
	Arsenic	ug/L	500	501		100	80-120	P
	Barium	ug/L	500	502		100	80-120	P
	Calcium	ug/L	5000	4860		97.2	80-120	P
	Chromium	ug/L	500	501		100	80-120	P
	Cobalt	ug/L	500	468		93.6	80-120	P
	Copper	ug/L	500	511		102	80-120	P
	Iron	ug/L	5000	4900		98	80-120	P
	Magnesium	ug/L	5000	4900		98	80-120	P
	Nickel	ug/L	500	484		96.9	80-120	P
	Potassium	ug/L	5000	4820		96.5	80-120	P
	Selenium	ug/L	500	496		99.2	80-120	P
	Silver	ug/L	500	493		98.6	80-120	P
	Sodium	ug/L	5000	4960		99.1	80-120	P
	Vanadium	ug/L	500	506		101	80-120	P
	Zinc	ug/L	500	486		97.2	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1912-1

Contract: LANL01004

Aqueous LCS Source: O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202047705								
	Beryllium	ug/L	50	53.6		107	80-120	MS
	Cadmium	ug/L	50	55.9		112	80-120	MS
	Lead	ug/L	50	59.1		118	80-120	MS
	Manganese	ug/L	50	57		114	80-120	MS
	Thallium	ug/L	50	50.2		100	80-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1912-1

Contract: LANL01004

Aqueous LCS Source:GEL

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202052035	Mercury	ug/L	2	2.34		117	80-120	AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1912-1

Contract: LANL01004

Aqueous LCS Source: O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202075030	Antimony	ug/L	50	54.1		108	80-120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1912-1 **Client ID** RE15-10-8270L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 247350001 **Serial Dilution ID:** 1202047703

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	324		250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	234	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1912-1 Client ID RE15-10-8270L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247350001 Serial Dilution ID: 1202047708

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	15.9					MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1912-1 Client ID RE46-10-13373L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247548001 Serial Dilution ID: 1202052041

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

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1912-1 Client ID RE15-10-8270L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247350001 Serial Dilution ID: 1202075033

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Antimony	1	U	5	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1912-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	955131						
1202047699	MB for batch 955131	MB	W	24-FEB-10	50mL	50mL	
1202047699	MB for batch 955131	MB	W	24-FEB-10	50mL	50mL	
1202047700	LCS for batch 955131	LCS	W	24-FEB-10	50mL	50mL	
1202047702	RE15-10-8270S	MS	W	24-FEB-10	50mL	50mL	
1202047702	RE15-10-8270S	MS	W	24-FEB-10	50mL	50mL	
1202047701	RE15-10-8270D	DUP	W	24-FEB-10	50mL	50mL	
247250001	RE46-10-12683	SAMPLE	W	24-FEB-10	50mL	50mL	
247250002	RE46-10-12686	SAMPLE	W	24-FEB-10	50mL	50mL	
247350001	RE15-10-8270	SAMPLE	W	24-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1912-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 955133							
1202047704	MB for batch 955133	MB	W	24-FEB-10	50mL	50mL	
1202047705	LCS for batch 955133	LCS	W	24-FEB-10	50mL	50mL	
1202047707	RE15-10-8270S	MS	W	24-FEB-10	50mL	50mL	
1202047706	RE15-10-8270D	DUP	W	24-FEB-10	50mL	50mL	
247350001	RE15-10-8270	SAMPLE	W	24-FEB-10	50mL	50mL	
Batch Number 966863							
1202075029	MB for batch 966863	MB	W	19-MAR-10	25mL	25mL	
1202075030	LCS for batch 966863	LCS	W	19-MAR-10	25mL	25mL	
1202075032	RE15-10-8270S	MS	W	19-MAR-10	25mL	25mL	
1202075031	RE15-10-8270D	DUP	W	19-MAR-10	25mL	25mL	
247350001	RE15-10-8270	SAMPLE	W	19-MAR-10	25mL	25mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1912-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 957032							
1202052034	MB for batch 957032	MB	W	24-FEB-10	20mL	20mL	
1202052035	LCS for batch 957032	LCS	W	24-FEB-10	20mL	20mL	
1202052037	RE46-10-13373S	MS	W	24-FEB-10	20mL	20mL	
1202052036	RE46-10-13373D	DUP	W	24-FEB-10	20mL	20mL	
247350001	RE15-10-8270	SAMPLE	W	24-FEB-10	20mL	20mL	

SW846

Metals
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Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 16-MAR-10**End Date:** 16-MAR-10**Client Sdg:** 10-1912-1**Method:** MS**Data File:** 100315-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	04:13					X	X						X		X									
S10	1	04:17					X	X						X		X									
S100	1	04:21					X	X						X		X									
ICV01	1	04:25					X	X						X		X									
ICB01	1	04:29					X	X						X		X									
CRDL01	1	04:33					X	X						X		X									
ICSA01	1	04:37					X	X						X		X									
ICSAB01	1	04:41					X	X						X		X									
CCV01	1	04:45					X	X						X		X									
CCB01	1	04:49					X	X						X		X									
1202047704	1	04:53					X	X						X		X									
1202047705	1	04:57					X	X						X		X									
ZZZZZZ	1	05:01																							
ZZZZZZ	1	05:05																							
ZZZZZZ	1	05:08																							
ZZZZZZ	1	05:12																							
ZZZZZZ	1	05:16																							
ZZZZZZ	1	05:20																							
CCV02	1	05:24					X	X						X		X									
CCB02	1	05:28					X	X						X		X									
ZZZZZZ	1	05:32																							
ZZZZZZ	1	05:36																							
ZZZZZZ	1	05:40																							
247350001	1	05:44					X	X						X		X									
1202047706	1	05:48					X	X						X		X									
1202047707	1	05:52					X	X						X		X									
1202047708	5	05:56					X	X						X		X									
CCV03	1	06:00					X	X						X		X									
CCB03	1	06:04					X	X						X		X									

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 20-MAR-10

End Date: 20-MAR-10

Client Sdg: 10-1912-1

Method MS

Data File: 100319-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	03:37		X																					
S10	1	03:40		X																					
S100	1	03:43		X																					
ICV01	1	03:46		X																					
ICB01	1	03:50		X																					
CRDL01	1	03:53		X																					
ICSA01	1	03:56		X																					
ICSAB01	1	03:59		X																					
CCV01	1	04:03		X																					
CCB01	1	04:06		X																					
1202075029	1	04:09		X																					
1202075030	1	04:12		X																					
CCV02	1	04:16		X																					
CCB02	1	04:19		X																					
ZZZZZZ	1	04:22																							
ZZZZZZ	1	04:25																							
ZZZZZZ	1	04:28																							
ZZZZZZ	1	04:32																							
ZZZZZZ	1	04:35																							
ZZZZZZ	1	04:38																							
ZZZZZZ	1	04:41																							
ZZZZZZ	1	04:45																							
CCV03	1	04:48		X																					
CCB03	1	04:51		X																					
ZZZZZZ	1	04:54																							
247350001	1	04:58		X																					
1202075031	1	05:01		X																					
1202075032	1	05:04		X																					
1202075033	5	05:07		X																					
CCV04	1	05:10		X																					
CCB04	1	05:14		X																					

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1912-1

Method: AV

Data File: 022510W1-7

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	10:55															X								
S0.2	1	10:57															X								
S0.5	1	10:59															X								
S2.0	1	11:01															X								
S5.0	1	11:03															X								
S10	1	11:05															X								
ICV01	1	11:07															X								
ICB01	1	11:09															X								
CRDL01	1	11:11															X								
CCV01	1	11:13															X								
CCB01	1	11:15															X								
ZZZZZZ	1	11:17																							
ZZZZZZ	1	11:19																							
ZZZZZZ	1	11:21																							
ZZZZZZ	1	11:23																							
ZZZZZZ	1	11:25																							
ZZZZZZ	5	11:27																							
ZZZZZZ	1	11:29																							
ZZZZZZ	1	11:31																							
ZZZZZZ	1	11:33																							
ZZZZZZ	1	11:35																							
CCV02	1	11:37															X								
CCB02	1	11:39															X								
ZZZZZZ	1	11:41																							
ZZZZZZ	1	11:43																							
ZZZZZZ	1	11:45																							
ZZZZZZ	1	11:46																							
ZZZZZZ	1	11:48																							
ZZZZZZ	1	11:50																							
ZZZZZZ	1	11:52																							
ZZZZZZ	1	11:54																							
ZZZZZZ	1	11:56																							
ZZZZZZ	1	11:58																							
CCV03	1	12:00															X								
CCB03	1	12:02															X								
ZZZZZZ	1	12:04																							
ZZZZZZ	1	12:06																							
ZZZZZZ	1	12:08																							
ZZZZZZ	1	12:10																							
ZZZZZZ	1	12:12																							

SW846

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
ZZZZZZ	1	13:33																							
CCV07	1	13:35															X								
CCB07	1	13:37															X								

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 17-MAR-10

End Date: 17-MAR-10

Client Sdg: 10-1912-1

Method: MS

Data File: 100317-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Ti	V	Zn
S0.0	1	20:19																					X		
S10	1	20:22																					X		
S100	1	20:24																					X		
ICV01	1	20:27																					X		
ICB01	1	20:29																					X		
CRDL01	1	20:31																					X		
ICSA01	1	20:34																					X		
ICSAB01	1	20:36																					X		
CCV01	1	20:39																					X		
CCB01	1	20:41																					X		
ZZZZZZ	10	20:45																							
ZZZZZZ	50	20:48																							
ZZZZZZ	10	20:50																							
ZZZZZZ	50	20:53																							
ZZZZZZ	10	20:55																							
ZZZZZZ	10	20:58																							
ZZZZZZ	10	21:00																							
ZZZZZZ	10	21:03																							
ZZZZZZ	10	21:05																							
ZZZZZZ	10	21:08																							
CCV02	1	21:10																					X		
CCB02	1	21:12																					X		
1202047704	1	21:15																					X		
1202047705	1	21:17																					X		
ZZZZZZ	1	21:20																							
ZZZZZZ	1	21:22																							
ZZZZZZ	1	21:24																							
ZZZZZZ	1	21:27																							
ZZZZZZ	1	21:29																							
ZZZZZZ	1	21:32																							
ZZZZZZ	1	21:34																							
CCV03	1	21:37																					X		
CCB03	1	21:39																					X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 18-MAR-10

End Date: 18-MAR-10

Client Sdg: 10-1912-1

Method MS

Data File: 100318-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	13:19																					X		
S10	1	13:21																					X		
S100	1	13:24																					X		
ICV01	1	13:26																					X		
ICB01	1	13:28																					X		
CRDL01	1	13:31																					X		
ICSA01	1	13:33																					X		
ICSAB01	1	13:35																					X		
CCV01	1	13:38																					X		
CCB01	1	13:40																					X		
ZZZZZZ	1	13:42																							
ZZZZZZ	1	13:45																							
ZZZZZZ	1	13:47																							
247350001	1	13:50																					X		
1202047706	1	13:52																					X		
1202047707	1	13:54																					X		
1202047708	5	13:57																					X		
CCV02	1	13:59																					X		
CCB02	1	14:01																					X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 16-MAR-10

End Date: 16-MAR-10

Client Sdg: 10-1912-1

Method: P

Data File: 031610B-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	V	Zn
S0.0	1	13:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
S0.1	1	13:44			X	X				X	X	X						X	X	X	X			X	X
S0.5	1	13:47	X		X	X			X	X	X	X			X			X	X	X	X			X	X
SCAL	1	13:50	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
S10	1	13:54	X						X				X		X							X			
ICV01	1	13:56	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICB01	1	14:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
PQL01	1	14:04	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICSA01	1	14:07	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICSAB01	1	14:10	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR01	1	14:13	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR02	1	14:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV01	1	14:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB01	1	14:22	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV02	1	14:36	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB02	1	14:39	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR03	1	14:43	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV03	1	14:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB03	1	14:50	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202047699	1	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202047700	1	14:57	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
247350001	1	15:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202047701	1	15:04	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202047702	1	15:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202047703	5	15:11	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV04	1	15:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB04	1	15:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1912-1**Contract: **LANL01004**Instrument: **OPTIMA1**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	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1912-1**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Boron	Cadmium	Chromium	Cobalt	Copper
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1912-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1912-1**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interement Correction Factors

Lab Code: GELGEL Job No: **10-1912-1**

Contract: LANL01004

Instrument: OPTIMA1

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

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1912-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Vanadium	Zinc
Parmname	Wavelength		
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS6

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-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
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS3

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1912-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA1

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

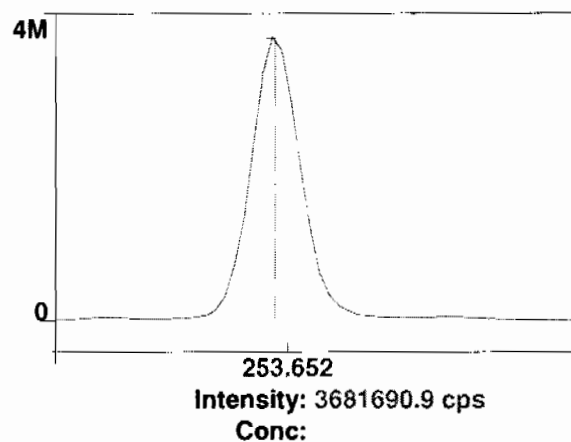
Raw Data

Method: Hg_ReAlign
Result: 032110A

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

=====
Analysis Begun

Start Time: 3/16/2010 13:41:04

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610A.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb
=====

Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 3/16/2010 10:34:08

IEC File: 011510.iec

MSF File:

Method Description:

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

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/16/2010 13:41:07

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	96310.1	96310.1	99.5 %	13:41:44
1	Al 396.153Radial†	-113.6	-114.1	[0.00] µg/L	13:41:44
1	Ca 317.933Radial†	391.5	393.5	[0.00] µg/L	13:42:04
1	Fe 238.204 Radial†	11.9	12.0	[0.00] µg/L	13:42:04

1	K 766.490 Radial†	454.1	456.3	[0.00] µg/L	13:41:44
1	Mg 279.077 IEC†	9.1	9.1	[0.00] µg/L	13:42:04
1	Na 589.592 Radial†	168.2	169.0	[0.00] µg/L	13:41:44
1	Sr 421.552†	145.4	146.2	[0.00] µg/L	13:41:44
1	Sc 361.383	2092200.5	2092200.5	99.957 %	13:43:06
1	Y 371.029	1431573.2	1431573.2	99.909 %	13:43:06
1	Ag 328.068†	-464.1	-464.3	[0.00] µg/L	13:43:12
1	As 188.979†	-7.3	-7.3	[0.00] µg/L	13:43:32
1	B 249.677†	288.8	288.9	[0.00] µg/L	13:43:12
1	Ba 233.527†	-11.7	-11.7	[0.00] µg/L	13:43:32
1	Be 313.107†	-1126.7	-1127.2	[0.00] µg/L	13:43:12
1	Cd 226.502†	-174.7	-174.8	[0.00] µg/L	13:43:32
1	Co 228.616†	46.1	46.2	[0.00] µg/L	13:43:32
1	Cr 267.716†	105.5	105.6	[0.00] µg/L	13:43:12
1	Cu 324.752†	4384.9	4386.8	[0.00] µg/L	13:43:12
1	Mn 257.610†	-689.4	-689.7	[0.00] µg/L	13:43:32
1	Mo 202.031†	4.1	4.1	[0.00] µg/L	13:43:32
1	Ni 231.604†	375.1	375.3	[0.00] µg/L	13:43:32
1	P 214.914†	275.1	275.3	[0.00] µg/L	13:43:32
1	Pb 220.353†	24.9	25.0	[0.00] µg/L	13:43:32
1	S 181.975 Axial†	22.5	22.6	[0.00] µg/L	13:43:32
1	Sb 206.836†	23.7	23.7	[0.00] µg/L	13:43:32
1	Se 196.026†	28.4	28.4	[0.00] µg/L	13:43:32
1	SiO2†	2772.9	2774.1	[0.00] µg/L	13:43:12
1	Si 251.611†	421.5	421.7	[0.00] µg/L	13:43:32
1	Sn 189.927†	-10.0	-10.0	[0.00] µg/L	13:43:32
1	Ti 334.940†	-613.0	-613.3	[0.00] µg/L	13:43:12
1	Tl 190.801†	-35.5	-35.5	[0.00] µg/L	13:43:32
1	U 409.014†	3.8	3.8	[0.00] µg/L	13:43:12
1	V 292.402†	86.7	86.7	[0.00] µg/L	13:43:12
1	Zn 213.857†	1026.4	1026.9	[0.00] µg/L	13:43:32
2	Sc RADIAL	96813.2	96813.2	100 %	13:42:10
2	Al 396.153Radial†	-133.0	-132.9	[0.00] µg/L	13:42:10
2	Ca 317.933Radial†	378.8	378.7	[0.00] µg/L	13:42:30
2	Fe 238.204 Radial†	12.4	12.4	[0.00] µg/L	13:42:30
2	K 766.490 Radial†	490.3	490.2	[0.00] µg/L	13:42:10
2	Mg 279.077 IEC†	8.0	8.0	[0.00] µg/L	13:42:30
2	Na 589.592 Radial†	213.5	213.4	[0.00] µg/L	13:42:10
2	Sr 421.552†	120.7	120.7	[0.00] µg/L	13:42:10
2	Sc 361.383	2084241.1	2084241.1	99.576 %	13:43:38
2	Y 371.029	1427836.1	1427836.1	99.649 %	13:43:38
2	Ag 328.068†	-405.9	-407.7	[0.00] µg/L	13:43:44
2	As 188.979†	-0.6	-0.6	[0.00] µg/L	13:44:04
2	B 249.677†	309.9	311.2	[0.00] µg/L	13:43:44
2	Ba 233.527†	-8.2	-8.2	[0.00] µg/L	13:44:04
2	Be 313.107†	-1135.5	-1140.3	[0.00] µg/L	13:43:44
2	Cd 226.502†	-167.9	-168.6	[0.00] µg/L	13:44:04
2	Co 228.616†	47.5	47.7	[0.00] µg/L	13:44:04
2	Cr 267.716†	80.4	80.7	[0.00] µg/L	13:43:44
2	Cu 324.752†	4400.5	4419.2	[0.00] µg/L	13:43:44
2	Mn 257.610†	-687.2	-690.2	[0.00] µg/L	13:44:04
2	Mo 202.031†	11.2	11.3	[0.00] µg/L	13:44:04
2	Ni 231.604†	375.1	376.7	[0.00] µg/L	13:44:04
2	P 214.914†	273.4	274.6	[0.00] µg/L	13:44:04
2	Pb 220.353†	35.0	35.2	[0.00] µg/L	13:44:04
2	S 181.975 Axial†	24.5	24.6	[0.00] µg/L	13:44:04
2	Sb 206.836†	23.8	23.9	[0.00] µg/L	13:44:04
2	Se 196.026†	28.3	28.5	[0.00] µg/L	13:44:04
2	SiO2†	2774.9	2786.7	[0.00] µg/L	13:43:44
2	Si 251.611†	424.0	425.8	[0.00] µg/L	13:44:04
2	Sn 189.927†	-8.3	-8.4	[0.00] µg/L	13:44:04
2	Ti 334.940†	-620.9	-623.6	[0.00] µg/L	13:43:44
2	Tl 190.801†	-34.2	-34.3	[0.00] µg/L	13:44:04
2	U 409.014†	-6.4	-6.5	[0.00] µg/L	13:43:44
2	V 292.402†	143.8	144.4	[0.00] µg/L	13:43:44
2	Zn 213.857†	1021.1	1025.5	[0.00] µg/L	13:44:04
3	Sc RADIAL	97241.5	97241.5	100 %	13:42:36
3	Al 396.153Radial†	-111.4	-110.8	[0.00] µg/L	13:42:36
3	Ca 317.933Radial†	385.6	383.8	[0.00] µg/L	13:42:56
3	Fe 238.204 Radial†	11.5	11.4	[0.00] µg/L	13:42:56
3	K 766.490 Radial†	511.9	509.5	[0.00] µg/L	13:42:36

3	Mg 279.077 IEC†	6.9	6.9	[0.00]	µg/L	13:42:56
3	Na 589.592 Radial†	160.0	159.3	[0.00]	µg/L	13:42:36
3	Sr 421.552†	152.1	151.4	[0.00]	µg/L	13:42:36
3	Sc 361.383	2102883.6	2102883.6	100.47	%	13:44:10
3	Y 371.029	1439201.5	1439201.5	100.44	%	13:44:10
3	Ag 328.068†	-511.0	-508.7	[0.00]	µg/L	13:44:16
3	As 188.979†	-1.9	-1.9	[0.00]	µg/L	13:44:36
3	B 249.677†	299.4	298.0	[0.00]	µg/L	13:44:16
3	Ba 233.527†	-5.3	-5.3	[0.00]	µg/L	13:44:36
3	Be 313.107†	-1214.7	-1209.0	[0.00]	µg/L	13:44:16
3	Cd 226.502†	-169.1	-168.3	[0.00]	µg/L	13:44:36
3	Co 228.616†	50.5	50.3	[0.00]	µg/L	13:44:36
3	Cr 267.716†	54.7	54.4	[0.00]	µg/L	13:44:16
3	Cu 324.752†	4344.2	4324.0	[0.00]	µg/L	13:44:16
3	Mn 257.610†	-684.2	-681.1	[0.00]	µg/L	13:44:36
3	Mo 202.031†	-0.0	-0.0	[0.00]	µg/L	13:44:36
3	Ni 231.604†	380.5	378.7	[0.00]	µg/L	13:44:36
3	P 214.914†	268.6	267.4	[0.00]	µg/L	13:44:36
3	Pb 220.353†	30.5	30.4	[0.00]	µg/L	13:44:36
3	S 181.975 Axial†	20.6	20.5	[0.00]	µg/L	13:44:36
3	Sb 206.836†	20.6	20.5	[0.00]	µg/L	13:44:36
3	Se 196.026†	25.2	25.1	[0.00]	µg/L	13:44:36
3	SiO2†	2791.5	2778.5	[0.00]	µg/L	13:44:16
3	Si 251.611†	426.8	424.8	[0.00]	µg/L	13:44:36
3	Sn 189.927†	-4.0	-4.0	[0.00]	µg/L	13:44:36
3	Ti 334.940†	-497.2	-494.9	[0.00]	µg/L	13:44:16
3	Tl 190.801†	-32.7	-32.6	[0.00]	µg/L	13:44:36
3	U 409.014†	-14.9	-14.8	[0.00]	µg/L	13:44:16
3	V 292.402†	106.3	105.8	[0.00]	µg/L	13:44:16
3	Zn 213.857†	978.8	974.2	[0.00]	µg/L	13:44:36

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2093108.4	9354.33	0.45%	100.00	%
Sc RADIAL	96788.3	466.20	0.48%	100	%
Y 371.029	1432870.2	5792.65	0.40%	100.00	%
Ag 328.068†	-460.2	50.62	11.00%	[0.00]	µg/L
Al 396.153Radial†	-119.3	11.92	9.99%	[0.00]	µg/L
As 188.979†	-3.3	3.57	109.72%	[0.00]	µg/L
B 249.677†	299.4	11.22	3.75%	[0.00]	µg/L
Ba 233.527†	-8.4	3.24	38.46%	[0.00]	µg/L
Be 313.107†	-1158.8	43.95	3.79%	[0.00]	µg/L
Ca 317.933Radial†	385.3	7.52	1.95%	[0.00]	µg/L
Cd 226.502†	-170.6	3.66	2.15%	[0.00]	µg/L
Co 228.616†	48.1	2.09	4.36%	[0.00]	µg/L
Cr 267.716†	80.2	25.59	31.89%	[0.00]	µg/L
Cu 324.752†	4376.7	48.39	1.11%	[0.00]	µg/L
Fe 238.204 Radial†	12.0	0.51	4.24%	[0.00]	µg/L
K 766.490 Radial†	485.3	26.93	5.55%	[0.00]	µg/L
Mg 279.077 IEC†	8.0	1.10	13.82%	[0.00]	µg/L
Mn 257.610†	-687.0	5.13	0.75%	[0.00]	µg/L
Mo 202.031†	5.1	5.73	111.70%	[0.00]	µg/L
Na 589.592 Radial†	180.6	28.84	15.97%	[0.00]	µg/L
Ni 231.604†	376.9	1.75	0.46%	[0.00]	µg/L
P 214.914†	272.4	4.38	1.61%	[0.00]	µg/L
Pb 220.353†	30.2	5.11	16.94%	[0.00]	µg/L
S 181.975 Axial†	22.5	2.05	9.11%	[0.00]	µg/L
Sb 206.836†	22.7	1.93	8.48%	[0.00]	µg/L
Se 196.026†	27.3	1.95	7.13%	[0.00]	µg/L
SiO2†	2779.7	6.41	0.23%	[0.00]	µg/L
Si 251.611†	424.1	2.16	0.51%	[0.00]	µg/L
Sn 189.927†	-7.4	3.11	41.86%	[0.00]	µg/L
Sr 421.552†	139.4	16.44	11.79%	[0.00]	µg/L
Ti 334.940†	-577.2	71.51	12.39%	[0.00]	µg/L
Tl 190.801†	-34.1	1.46	4.28%	[0.00]	µg/L
U 409.014†	-5.8	9.33	160.61%	[0.00]	µg/L
V 292.402†	112.3	29.35	26.13%	[0.00]	µg/L
Zn 213.857†	1008.9	29.99	2.97%	[0.00]	µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/16/2010 13:44:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	98715.8	98715.8	102 %	13:45:17
1	K 766.490 Radial†	2592.4	2056.4	[1000] µg/L	13:45:17
1	Sr 421.552†	17263.6	16787.1	[100] µg/L	13:45:17
1	Sc 361.383	2094721.1	2094721.1	100.08 %	13:45:39
1	Y 371.029	1434102.7	1434102.7	100.09 %	13:45:39
1	Ag 328.068†	12293.9	12744.6	[100] µg/L	13:45:44
1	As 188.979†	70.0	73.2	[100] µg/L	13:46:05
1	B 249.677†	2506.5	2205.2	[100] µg/L	13:45:44
1	Ba 233.527†	4749.0	4753.7	[100] µg/L	13:46:05
1	Be 313.107†	175330.6	176354.4	[100] µg/L	13:45:39
1	Cd 226.502†	4244.7	4412.1	[100] µg/L	13:46:05
1	Co 228.616†	2472.2	2422.2	[100] µg/L	13:46:05
1	Cr 267.716†	4944.8	4860.7	[100] µg/L	13:45:44
1	Cu 324.752†	20439.1	16046.7	[100] µg/L	13:45:44
1	Mn 257.610†	34361.8	35022.3	[100] µg/L	13:45:44
1	Mo 202.031†	1112.9	1106.9	[100] µg/L	13:46:05
1	Ni 231.604†	2269.8	1891.1	[100] µg/L	13:46:05
1	P 214.914†	594.3	321.5	[500] µg/L	13:46:05
1	Pb 220.353†	447.5	417.0	[100] µg/L	13:46:05
1	S 181.975 Axial†	92.0	69.4	[200] µg/L	13:46:05
1	Sb 206.836†	145.3	122.4	[100] µg/L	13:46:05
1	Se 196.026†	137.0	109.6	[100] µg/L	13:46:05
1	SiO2†	9003.6	6216.9	[1069.5] µg/L	13:45:44
1	Si 251.611†	8093.8	7663.5	[500] µg/L	13:45:44
1	Sn 189.927†	275.6	282.9	[100] µg/L	13:46:05
1	Ti 334.940†	42939.4	43483.5	[100] µg/L	13:45:44
1	Tl 190.801†	72.6	106.7	[100] µg/L	13:46:05
1	U 409.014†	1155.3	1160.3	[100] µg/L	13:45:44
1	V 292.402†	8861.3	8742.1	[100] µg/L	13:45:44
1	Zn 213.857†	5580.6	4567.5	[100] µg/L	13:46:05
2	Sc RADIAL	98746.9	98746.9	102 %	13:45:23
2	K 766.490 Radial†	2620.5	2083.2	[1000] µg/L	13:45:23
2	Sr 421.552†	17298.0	16815.5	[100] µg/L	13:45:23
2	Sc 361.383	2100226.4	2100226.4	100.34 %	13:46:11
2	Y 371.029	1439792.5	1439792.5	100.48 %	13:46:11
2	Ag 328.068†	12345.5	12763.8	[100] µg/L	13:46:17
2	As 188.979†	67.3	70.3	[100] µg/L	13:46:37
2	B 249.677†	2557.3	2249.3	[100] µg/L	13:46:17
2	Ba 233.527†	4728.4	4720.8	[100] µg/L	13:46:37
2	Be 313.107†	175386.8	175951.2	[100] µg/L	13:46:11
2	Cd 226.502†	4247.0	4403.2	[100] µg/L	13:46:37
2	Co 228.616†	2478.6	2422.1	[100] µg/L	13:46:37
2	Cr 267.716†	4958.6	4861.5	[100] µg/L	13:46:17
2	Cu 324.752†	20540.7	16094.4	[100] µg/L	13:46:17
2	Mn 257.610†	34546.6	35116.5	[100] µg/L	13:46:17
2	Mo 202.031†	1110.1	1101.2	[100] µg/L	13:46:37
2	Ni 231.604†	2257.9	1873.3	[100] µg/L	13:46:37
2	P 214.914†	593.4	319.0	[500] µg/L	13:46:37
2	Pb 220.353†	453.6	421.9	[100] µg/L	13:46:37
2	S 181.975 Axial†	98.5	75.6	[200] µg/L	13:46:37
2	Sb 206.836†	142.4	119.2	[100] µg/L	13:46:37
2	Se 196.026†	136.6	108.9	[100] µg/L	13:46:37
2	SiO2†	8990.1	6179.9	[1069.5] µg/L	13:46:17
2	Si 251.611†	8054.1	7602.7	[500] µg/L	13:46:17
2	Sn 189.927†	279.4	285.9	[100] µg/L	13:46:37
2	Ti 334.940†	43205.6	43636.4	[100] µg/L	13:46:17
2	Tl 190.801†	71.0	104.9	[100] µg/L	13:46:37
2	U 409.014†	1121.8	1123.8	[100] µg/L	13:46:17
2	V 292.402†	8955.3	8812.6	[100] µg/L	13:46:17

2	Zn 213.857†	5596.7	4568.9	[100] µg/L	13:46:37
3	Sc RADIAL	99227.6	99227.6	103 %	13:45:28
3	K 766.490 Radial†	2604.0	2054.7	[1000] µg/L	13:45:28
3	Sr 421.552†	17310.0	16745.0	[100] µg/L	13:45:28
3	Sc 361.383	2097900.5	2097900.5	100.23 %	13:46:44
3	Y 371.029	1438218.9	1438218.9	100.37 %	13:46:44
3	Ag 328.068†	12354.9	12786.9	[100] µg/L	13:46:49
3	As 188.979†	72.1	75.2	[100] µg/L	13:47:10
3	B 249.677†	2500.5	2195.5	[100] µg/L	13:46:49
3	Ba 233.527†	4717.5	4715.1	[100] µg/L	13:47:10
3	Be 313.107†	175589.1	176346.9	[100] µg/L	13:46:44
3	Cd 226.502†	4212.4	4373.3	[100] µg/L	13:47:10
3	Co 228.616†	2475.0	2421.3	[100] µg/L	13:47:10
3	Cr 267.716†	4959.0	4867.4	[100] µg/L	13:46:49
3	Cu 324.752†	20426.8	16003.5	[100] µg/L	13:46:49
3	Mn 257.610†	34298.5	34907.1	[100] µg/L	13:46:49
3	Mo 202.031†	1110.6	1103.0	[100] µg/L	13:47:10
3	Ni 231.604†	2254.1	1872.1	[100] µg/L	13:47:10
3	P 214.914†	602.9	329.1	[500] µg/L	13:47:10
3	Pb 220.353†	435.3	404.2	[100] µg/L	13:47:10
3	S 181.975 Axial†	83.4	60.6	[200] µg/L	13:47:10
3	Sb 206.836†	141.8	118.8	[100] µg/L	13:47:10
3	Se 196.026†	130.1	102.5	[100] µg/L	13:47:10
3	SiO2†	8943.3	6143.1	[1069.5] µg/L	13:46:49
3	Si 251.611†	8011.5	7569.1	[500] µg/L	13:46:49
3	Sn 189.927†	278.7	285.5	[100] µg/L	13:47:10
3	Ti 334.940†	42980.6	43459.6	[100] µg/L	13:46:49
3	Tl 190.801†	69.6	103.6	[100] µg/L	13:47:10
3	U 409.014†	1134.7	1137.9	[100] µg/L	13:46:49
3	V 292.402†	8902.5	8769.9	[100] µg/L	13:46:49
3	Zn 213.857†	5560.8	4539.2	[100] µg/L	13:47:10

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	2097616.0	2763.63	0.13%	100.22 %
Sc RADIAL	98896.7	286.93	0.29%	102 %
Y 371.029	1437371.4	2938.05	0.20%	100.31 %
Ag 328.068†	12765.1	21.16	0.17%	[100] µg/L
As 188.979†	72.9	2.47	3.39%	[100] µg/L
B 249.677†	2216.6	28.68	1.29%	[100] µg/L
Ba 233.527†	4729.9	20.84	0.44%	[100] µg/L
Be 313.107†	176217.5	230.67	0.13%	[100] µg/L
Cd 226.502†	4396.2	20.30	0.46%	[100] µg/L
Co 228.616†	2421.9	0.50	0.02%	[100] µg/L
Cr 267.716†	4863.2	3.65	0.08%	[100] µg/L
Cu 324.752†	16048.2	45.49	0.28%	[100] µg/L
K 766.490 Radial†	2064.8	15.99	0.77%	[1000] µg/L
Mn 257.610†	35015.3	104.84	0.30%	[100] µg/L
Mo 202.031†	1103.7	2.93	0.27%	[100] µg/L
Ni 231.604†	1878.8	10.66	0.57%	[100] µg/L
P 214.914†	323.2	5.29	1.64%	[500] µg/L
Pb 220.353†	414.4	9.14	2.21%	[100] µg/L
S 181.975 Axial†	68.5	7.51	10.96%	[200] µg/L
Sb 206.836†	120.1	2.01	1.68%	[100] µg/L
Se 196.026†	107.0	3.88	3.63%	[100] µg/L
SiO2†	6179.9	36.90	0.60%	[1069.5] µg/L
Si 251.611†	7611.8	47.81	0.63%	[500] µg/L
Sn 189.927†	284.7	1.65	0.58%	[100] µg/L
Sr 421.552†	16782.5	35.44	0.21%	[100] µg/L
Ti 334.940†	43526.5	95.91	0.22%	[100] µg/L
Tl 190.801†	105.0	1.56	1.48%	[100] µg/L
U 409.014†	1140.7	18.37	1.61%	[100] µg/L
V 292.402†	8774.9	35.49	0.40%	[100] µg/L
Zn 213.857†	4558.5	16.73	0.37%	[100] µg/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/16/2010 13:47:19

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	100074.7	100074.7	103	%	13:47:50
1	Al 396.153Radial†	10699.0	10467.0	[5000]	µg/L	13:47:50
1	Ca 317.933Radial†	14852.2	13979.2	[5000]	µg/L	13:47:50
1	K 766.490 Radial†	11694.6	10825.2	[5000]	µg/L	13:47:50
1	Mg 279.077 IEC†	407.4	386.1	[5000]	µg/L	13:48:10
1	Sr 421.552†	87389.5	84380.3	[500]	µg/L	13:47:50
1	Sc 361.383	2086321.5	2086321.5	99.676	%	13:49:14
1	Y 371.029	1422836.0	1422836.0	99.300	%	13:49:14
1	Ag 328.068†	62741.3	63405.6	[500]	µg/L	13:49:19
1	As 188.979†	358.5	363.0	[500]	µg/L	13:49:40
1	B 249.677†	11575.1	11313.4	[500]	µg/L	13:49:19
1	Ba 233.527†	23656.5	23741.9	[500]	µg/L	13:49:19
1	Be 313.107†	878338.7	882354.8	[500]	µg/L	13:49:14
1	Cd 226.502†	21751.7	21993.0	[500]	µg/L	13:49:19
1	Co 228.616†	12217.5	12209.2	[500]	µg/L	13:49:19
1	Cr 267.716†	24228.1	24226.7	[500]	µg/L	13:49:19
1	Cu 324.752†	83409.3	79304.0	[500]	µg/L	13:49:19
1	Mn 257.610†	173738.8	174991.0	[500]	µg/L	13:49:14
1	Mo 202.031†	5418.2	5430.7	[500]	µg/L	13:49:40
1	Ni 231.604†	9708.7	9363.4	[500]	µg/L	13:49:19
1	P 214.914†	1882.2	1615.9	[2500]	µg/L	13:49:40
1	Pb 220.353†	2060.0	2036.5	[500]	µg/L	13:49:40
1	S 181.975 Axial†	351.4	330.0	[1000]	µg/L	13:49:40
1	Sb 206.836†	613.4	592.6	[500]	µg/L	13:49:40
1	Se 196.026†	600.7	575.3	[500]	µg/L	13:49:40
1	SiO2†	33299.9	30628.5	[5347.5]	µg/L	13:49:19
1	Si 251.611†	38386.1	38086.9	[2500]	µg/L	13:49:19
1	Sn 189.927†	1373.2	1385.1	[500]	µg/L	13:49:40
1	Ti 334.940†	218890.7	220180.0	[500]	µg/L	13:49:14
1	Tl 190.801†	509.8	545.5	[500]	µg/L	13:49:40
1	U 409.014†	5659.3	5683.5	[500]	µg/L	13:49:19
1	V 292.402†	44006.7	44037.6	[500]	µg/L	13:49:19
1	Zn 213.857†	23916.7	22985.7	[500]	µg/L	13:49:19
2	Sc RADIAL	99306.2	99306.2	103	%	13:48:16
2	Al 396.153Radial†	10633.8	10483.5	[5000]	µg/L	13:48:16
2	Ca 317.933Radial†	14719.7	13961.2	[5000]	µg/L	13:48:16
2	K 766.490 Radial†	11489.6	10713.0	[5000]	µg/L	13:48:16
2	Mg 279.077 IEC†	411.2	392.8	[5000]	µg/L	13:48:36
2	Sr 421.552†	86575.3	84240.8	[500]	µg/L	13:48:16
2	Sc 361.383	2088104.0	2088104.0	99.761	%	13:49:47
2	Y 371.029	1424214.4	1424214.4	99.396	%	13:49:47
2	Ag 328.068†	62542.8	63152.9	[500]	µg/L	13:49:53
2	As 188.979†	350.4	354.5	[500]	µg/L	13:50:13
2	B 249.677†	11540.6	11268.9	[500]	µg/L	13:49:53
2	Ba 233.527†	23599.4	23664.4	[500]	µg/L	13:49:53
2	Be 313.107†	878324.6	881588.5	[500]	µg/L	13:49:47
2	Cd 226.502†	21731.5	21954.1	[500]	µg/L	13:49:53
2	Co 228.616†	12180.9	12162.1	[500]	µg/L	13:49:53
2	Cr 267.716†	24125.0	24102.6	[500]	µg/L	13:49:53
2	Cu 324.752†	83124.2	78946.8	[500]	µg/L	13:49:53
2	Mn 257.610†	174021.4	175125.4	[500]	µg/L	13:49:47
2	Mo 202.031†	5328.5	5336.1	[500]	µg/L	13:50:13
2	Ni 231.604†	9688.3	9334.6	[500]	µg/L	13:49:53
2	P 214.914†	1853.7	1585.7	[2500]	µg/L	13:50:13
2	Pb 220.353†	2027.1	2001.8	[500]	µg/L	13:50:13
2	S 181.975 Axial†	346.2	324.4	[1000]	µg/L	13:50:13
2	Sb 206.836†	596.8	575.5	[500]	µg/L	13:50:13
2	Se 196.026†	588.3	562.4	[500]	µg/L	13:50:13
2	SiO2†	33286.2	30586.2	[5347.5]	µg/L	13:49:53

2	Si 251.611†	38283.7	37951.4	[2500]	µg/L	13:49:53
2	Sn 189.927†	1350.6	1361.3	[500]	µg/L	13:50:13
2	Ti 334.940†	219123.4	220225.8	[500]	µg/L	13:49:47
2	Tl 190.801†	494.4	529.7	[500]	µg/L	13:50:13
2	U 409.014†	5782.8	5802.5	[500]	µg/L	13:49:53
2	V 292.402†	43961.3	43954.3	[500]	µg/L	13:49:53
2	Zn 213.857†	23783.8	22831.9	[500]	µg/L	13:49:53
3	Sc RADIAL	100050.4	100050.4	103	%	13:48:42
3	Al 396.153Radial†	10642.3	10414.6	[5000]	µg/L	13:48:42
3	Ca 317.933Radial†	14755.5	13889.1	[5000]	µg/L	13:48:42
3	K 766.490 Radial†	11490.7	10630.7	[5000]	µg/L	13:48:42
3	Mg 279.077 IEC†	404.2	383.1	[5000]	µg/L	13:49:02
3	Sr 421.552†	87086.2	84107.4	[500]	µg/L	13:48:42
3	Sc 361.383	2071228.8	2071228.8	98.955	%	13:50:21
3	Y 371.029	1409380.7	1409380.7	98.361	%	13:50:21
3	Ag 328.068†	58350.1	59426.7	[500]	µg/L	13:50:26
3	As 188.979†	297.3	303.7	[500]	µg/L	13:50:47
3	B 249.677†	10705.3	10519.0	[500]	µg/L	13:50:26
3	Ba 233.527†	21400.9	21635.4	[500]	µg/L	13:50:26
3	Be 313.107†	804451.5	814108.2	[500]	µg/L	13:50:21
3	Cd 226.502†	19505.4	19882.1	[500]	µg/L	13:50:26
3	Co 228.616†	10876.1	10943.0	[500]	µg/L	13:50:26
3	Cr 267.716†	20805.6	20945.1	[500]	µg/L	13:50:26
3	Cu 324.752†	75185.9	71603.4	[500]	µg/L	13:50:26
3	Mn 257.610†	160217.0	162596.4	[500]	µg/L	13:50:21
3	Mo 202.031†	4437.6	4479.4	[500]	µg/L	13:50:47
3	Ni 231.604†	8697.8	8412.8	[500]	µg/L	13:50:26
3	P 214.914†	1618.8	1363.5	[2500]	µg/L	13:50:47
3	Pb 220.353†	1745.4	1733.6	[500]	µg/L	13:50:47
3	S 181.975 Axial†	306.0	286.7	[1000]	µg/L	13:50:47
3	Sb 206.836†	524.6	507.4	[500]	µg/L	13:50:47
3	Se 196.026†	508.3	486.3	[500]	µg/L	13:50:47
3	SiO2†	30775.8	28321.1	[5347.5]	µg/L	13:50:26
3	Si 251.611†	35188.6	35136.2	[2500]	µg/L	13:50:26
3	Sn 189.927†	1102.7	1121.7	[500]	µg/L	13:50:47
3	Ti 334.940†	199565.5	202250.8	[500]	µg/L	13:50:21
3	Tl 190.801†	449.2	488.1	[500]	µg/L	13:50:47
3	U 409.014†	5033.3	5092.2	[500]	µg/L	13:50:26
3	V 292.402†	38957.9	39257.2	[500]	µg/L	13:50:26
3	Zn 213.857†	21411.0	20628.3	[500]	µg/L	13:50:26

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	2081884.7	9271.29	0.45%	99.464	%
Sc RADIAL	99810.4	436.87	0.44%	103	%
Y 371.029	1418810.4	8195.38	0.58%	99.019	%
Ag 328.068†	61995.1	2227.89	3.59%	[500]	µg/L
Al 396.153Radial†	10455.0	35.97	0.34%	[5000]	µg/L
As 188.979†	340.4	32.05	9.41%	[500]	µg/L
B 249.677†	11033.8	446.33	4.05%	[500]	µg/L
Ba 233.527†	23013.9	1194.42	5.19%	[500]	µg/L
Be 313.107†	859350.5	39182.84	4.56%	[500]	µg/L
Ca 317.933Radial†	13943.2	47.65	0.34%	[5000]	µg/L
Cd 226.502†	21276.4	1207.69	5.68%	[500]	µg/L
Co 228.616†	11771.4	717.85	6.10%	[500]	µg/L
Cr 267.716†	23091.4	1859.81	8.05%	[500]	µg/L
Cu 324.752†	76618.1	4346.48	5.67%	[500]	µg/L
K 766.490 Radial†	10723.0	97.65	0.91%	[5000]	µg/L
Mg 279.077 IEC†	387.3	4.96	1.28%	[5000]	µg/L
Mn 257.610†	170904.3	7195.12	4.21%	[500]	µg/L
Mo 202.031†	5082.1	524.08	10.31%	[500]	µg/L
Ni 231.604†	9036.9	540.71	5.98%	[500]	µg/L
P 214.914†	1521.7	137.85	9.06%	[2500]	µg/L
Pb 220.353†	1924.0	165.75	8.62%	[500]	µg/L
S 181.975 Axial†	313.7	23.60	7.52%	[1000]	µg/L
Sb 206.836†	558.5	45.06	8.07%	[500]	µg/L
Se 196.026†	541.3	48.09	8.88%	[500]	µg/L
SiO2†	29845.3	1320.12	4.42%	[5347.5]	µg/L
Si 251.611†	37058.1	1665.82	4.50%	[2500]	µg/L

Sn 189.927†	1289.4	145.66	11.30%	[500] µg/L
Sr 421.552†	84242.8	136.48	0.16%	[500] µg/L
Ti 334.940†	214218.9	10364.68	4.84%	[500] µg/L
Tl 190.801†	521.1	29.67	5.69%	[500] µg/L
U 409.014†	5526.1	380.40	6.88%	[500] µg/L
V 292.402†	42416.4	2736.26	6.45%	[500] µg/L
Zn 213.857†	22148.6	1318.91	5.95%	[500] µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/16/2010 13:50:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	99005.9	99005.9	102 %	13:51:27
1	Al 396.153Radial†	21396.9	21036.9	[10000] µg/L	13:51:27
1	Ca 317.933Radial†	28774.4	27744.6	[10000] µg/L	13:51:27
1	Fe 238.204 Radial†	886.3	854.5	[10000] µg/L	13:51:48
1	K 766.490 Radial†	22406.6	21419.4	[10000] µg/L	13:51:27
1	Mg 279.077 IEC†	796.2	770.3	[10000] µg/L	13:51:48
1	Na 589.592 Radial†	20579.8	19938.3	[10000] µg/L	13:51:27
1	Sr 421.552†	171886.5	167897.0	[1000] µg/L	13:51:27
1	Sc 361.383	2084281.9	2084281.9	99.578 %	13:52:51
1	Y 371.029	1417699.3	1417699.3	98.941 %	13:52:51
1	Ag 328.068†	127625.8	128626.5	[1000] µg/L	13:52:57
1	As 188.979†	716.7	723.0	[1000] µg/L	13:53:18
1	B 249.677†	23034.3	22832.5	[1000] µg/L	13:52:57
1	Ba 233.527†	47400.5	47609.6	[1000] µg/L	13:52:57
1	Be 313.107†	1736563.9	1745076.7	[1000] µg/L	13:52:51
1	Cd 226.502†	43541.3	43896.3	[1000] µg/L	13:52:57
1	Co 228.616†	24264.4	24319.0	[1000] µg/L	13:52:57
1	Cr 267.716†	48452.1	48577.0	[1000] µg/L	13:52:57
1	Cu 324.752†	163712.1	160028.7	[1000] µg/L	13:52:57
1	Mn 257.610†	343886.1	346029.4	[1000] µg/L	13:52:57
1	Mo 202.031†	10846.8	10887.6	[1000] µg/L	13:53:18
1	Ni 231.604†	18887.7	18590.8	[1000] µg/L	13:52:57
1	P 214.914†	3477.5	3219.9	[5000] µg/L	13:53:18
1	Pb 220.353†	4063.4	4050.5	[1000] µg/L	13:53:18
1	S 181.975 Axial†	685.2	665.6	[2000] µg/L	13:53:18
1	Sb 206.836†	1217.9	1200.4	[1000] µg/L	13:53:18
1	Se 196.026†	1145.3	1122.8	[1000] µg/L	13:53:18
1	SiO2†	63781.6	61271.9	[10695] µg/L	13:52:57
1	Si 251.611†	76182.5	76081.1	[5000] µg/L	13:52:57
1	Sn 189.927†	2763.0	2782.1	[1000] µg/L	13:53:18
1	Ti 334.940†	438415.6	440849.5	[1000] µg/L	13:52:51
1	Tl 190.801†	1032.2	1070.7	[1000] µg/L	13:53:18
1	U 409.014†	11613.3	11668.3	[1000] µg/L	13:52:57
1	V 292.402†	88724.4	88987.8	[1000] µg/L	13:52:57
1	Zn 213.857†	46062.2	45248.4	[1000] µg/L	13:52:57
2	Sc RADIAL	98878.3	98878.3	102 %	13:51:53
2	Al 396.153Radial†	21291.7	20961.0	[10000] µg/L	13:51:53
2	Ca 317.933Radial†	28704.1	27712.1	[10000] µg/L	13:51:53
2	Fe 238.204 Radial†	882.4	851.7	[10000] µg/L	13:52:13
2	K 766.490 Radial†	22391.6	21432.9	[10000] µg/L	13:51:53
2	Mg 279.077 IEC†	797.4	772.6	[10000] µg/L	13:52:13
2	Na 589.592 Radial†	20571.2	19955.8	[10000] µg/L	13:51:53
2	Sr 421.552†	171860.0	168088.0	[1000] µg/L	13:51:53
2	Sc 361.383	2086112.0	2086112.0	99.666 %	13:53:24
2	Y 371.029	1420463.0	1420463.0	99.134 %	13:53:24
2	Ag 328.068†	126833.0	127718.5	[1000] µg/L	13:53:30
2	As 188.979†	701.1	706.7	[1000] µg/L	13:53:51
2	B 249.677†	22869.1	22646.4	[1000] µg/L	13:53:30
2	Ba 233.527†	47051.7	47217.9	[1000] µg/L	13:53:30
2	Be 313.107†	1742218.7	1749220.6	[1000] µg/L	13:53:24
2	Cd 226.502†	43183.6	43499.0	[1000] µg/L	13:53:30
2	Co 228.616†	24100.7	24133.5	[1000] µg/L	13:53:30
2	Cr 267.716†	48201.6	48283.0	[1000] µg/L	13:53:30
2	Cu 324.752†	163007.4	159177.4	[1000] µg/L	13:53:30
2	Mn 257.610†	341756.3	343589.5	[1000] µg/L	13:53:30
2	Mo 202.031†	10599.6	10630.0	[1000] µg/L	13:53:51
2	Ni 231.604†	18831.1	18517.4	[1000] µg/L	13:53:30
2	P 214.914†	3401.5	3140.5	[5000] µg/L	13:53:51
2	Pb 220.353†	3993.0	3976.2	[1000] µg/L	13:53:51

2	S 181.975 Axial†	672.9	652.6	[2000]	µg/L	13:53:51
2	Sb 206.836†	1190.1	1171.4	[1000]	µg/L	13:53:51
2	Se 196.026†	1125.5	1102.0	[1000]	µg/L	13:53:51
2	SiO2†	63502.5	60935.8	[10695]	µg/L	13:53:30
2	Si 251.611†	75835.9	75666.1	[5000]	µg/L	13:53:30
2	Sn 189.927†	2693.2	2709.7	[1000]	µg/L	13:53:51
2	Ti 334.940†	439551.1	441602.5	[1000]	µg/L	13:53:24
2	Tl 190.801†	1022.7	1060.2	[1000]	µg/L	13:53:51
2	U 409.014†	11401.7	11445.7	[1000]	µg/L	13:53:30
2	V 292.402†	88057.2	88240.2	[1000]	µg/L	13:53:30
2	Zn 213.857†	45789.6	44934.3	[1000]	µg/L	13:53:30
3	Sc RADIAL	98949.7	98949.7	102	%	13:52:19
3	Al 396.153Radial†	21345.9	20999.0	[10000]	µg/L	13:52:19
3	Ca 317.933Radial†	28773.8	27759.9	[10000]	µg/L	13:52:19
3	Fe 238.204 Radial†	884.5	853.3	[10000]	µg/L	13:52:39
3	K 766.490 Radial†	22416.2	21441.2	[10000]	µg/L	13:52:19
3	Mg 279.077 IEC†	802.2	776.7	[10000]	µg/L	13:52:39
3	Na 589.592 Radial†	20655.3	20023.5	[10000]	µg/L	13:52:19
3	Sr 421.552†	172362.1	168457.6	[1000]	µg/L	13:52:19
3	Sc 361.383	2098634.1	2098634.1	100.26	%	13:53:57
3	Y 371.029	1431664.8	1431664.8	99.916	%	13:53:57
3	Ag 328.068†	117444.6	117595.6	[1000]	µg/L	13:54:03
3	As 188.979†	593.3	595.0	[1000]	µg/L	13:54:24
3	B 249.677†	20953.8	20599.3	[1000]	µg/L	13:54:03
3	Ba 233.527†	42175.0	42072.3	[1000]	µg/L	13:54:03
3	Be 313.107†	1600289.8	1597235.1	[1000]	µg/L	13:53:57
3	Cd 226.502†	38322.8	38392.5	[1000]	µg/L	13:54:03
3	Co 228.616†	21253.1	21149.1	[1000]	µg/L	13:54:03
3	Cr 267.716†	41031.4	40843.1	[1000]	µg/L	13:54:03
3	Cu 324.752†	144535.2	139778.0	[1000]	µg/L	13:54:03
3	Mn 257.610†	301338.4	301232.0	[1000]	µg/L	13:54:03
3	Mo 202.031†	8756.9	8728.7	[1000]	µg/L	13:54:24
3	Ni 231.604†	16588.3	16167.7	[1000]	µg/L	13:54:03
3	P 214.914†	2923.2	2643.2	[5000]	µg/L	13:54:24
3	Pb 220.353†	3418.8	3379.6	[1000]	µg/L	13:54:24
3	S 181.975 Axial†	590.2	566.1	[2000]	µg/L	13:54:24
3	Sb 206.836†	1017.2	991.8	[1000]	µg/L	13:54:24
3	Se 196.026†	983.1	953.2	[1000]	µg/L	13:54:24
3	SiO2†	58031.5	55098.9	[10695]	µg/L	13:54:03
3	Si 251.611†	68995.1	68389.4	[5000]	µg/L	13:54:03
3	Sn 189.927†	2196.1	2197.8	[1000]	µg/L	13:54:24
3	Ti 334.940†	400140.2	399663.8	[1000]	µg/L	13:53:57
3	Tl 190.801†	896.8	928.5	[1000]	µg/L	13:54:24
3	U 409.014†	9905.6	9885.3	[1000]	µg/L	13:54:03
3	V 292.402†	76998.0	76683.0	[1000]	µg/L	13:54:03
3	Zn 213.857†	40519.9	39404.4	[1000]	µg/L	13:54:03

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	2089676.0	7811.74	0.37%	99.836	%
Sc RADIAL	98944.6	63.99	0.06%	102	%
Y 371.029	1423275.7	7395.42	0.52%	99.330	%
Ag 328.068†	124646.9	6123.42	4.91%	[1000]	µg/L
Al 396.153Radial†	20998.9	37.98	0.18%	[10000]	µg/L
As 188.979†	674.9	69.69	10.33%	[1000]	µg/L
B 249.677†	22026.1	1239.12	5.63%	[1000]	µg/L
Ba 233.527†	45633.3	3090.08	6.77%	[1000]	µg/L
Be 313.107†	1697177.5	86577.45	5.10%	[1000]	µg/L
Ca 317.933Radial†	27738.9	24.43	0.09%	[10000]	µg/L
Cd 226.502†	41929.3	3069.39	7.32%	[1000]	µg/L
Co 228.616†	23200.5	1779.01	7.67%	[1000]	µg/L
Cr 267.716†	45901.0	4382.79	9.55%	[1000]	µg/L
Cu 324.752†	152994.7	11453.92	7.49%	[1000]	µg/L
Fe 238.204 Radial†	853.2	1.38	0.16%	[10000]	µg/L
K 766.490 Radial†	21431.2	10.99	0.05%	[10000]	µg/L
Mg 279.077 IEC†	773.2	3.23	0.42%	[10000]	µg/L
Mn 257.610†	330283.6	25189.03	7.63%	[1000]	µg/L
Mo 202.031†	10082.1	1179.12	11.70%	[1000]	µg/L
Na 589.592 Radial†	19972.5	45.03	0.23%	[10000]	µg/L

Ni 231.604†	17758.6	1378.29	7.76%	[1000]	µg/L
P 214.914†	3001.2	312.58	10.42%	[5000]	µg/L
Pb 220.353†	3802.1	367.77	9.67%	[1000]	µg/L
S 181.975 Axial†	628.1	54.07	8.61%	[2000]	µg/L
Sb 206.836†	1121.2	113.00	10.08%	[1000]	µg/L
Se 196.026†	1059.3	92.51	8.73%	[1000]	µg/L
SiO2†	59102.2	3471.01	5.87%	[10695]	µg/L
Si 251.611†	73378.9	4325.99	5.90%	[5000]	µg/L
Sn 189.927†	2563.2	318.50	12.43%	[1000]	µg/L
Sr 421.552†	168147.5	285.01	0.17%	[1000]	µg/L
Ti 334.940†	427371.9	23998.85	5.62%	[1000]	µg/L
Tl 190.801†	1019.8	79.22	7.77%	[1000]	µg/L
U 409.014†	10999.8	971.55	8.83%	[1000]	µg/L
V 292.402†	84637.0	6898.52	8.15%	[1000]	µg/L
Zn 213.857†	43195.7	3287.12	7.61%	[1000]	µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/16/2010 13:54:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	98789.2	98789.2	102 %		13:55:04
1	Al 396.153Radial†	107058.1	105009.0	[50000] µg/L		13:55:04
1	Ca 317.933Radial†	140672.7	137438.2	[50000] µg/L		13:55:04
1	Fe 238.204 Radial†	1738.5	1691.3	[20000] µg/L		13:55:24
1	Mg 279.077 IEC†	3867.4	3781.1	[50000] µg/L		13:55:24
1	Na 589.592 Radial†	41160.6	40146.4	[20000] µg/L		13:55:04
1	Sc 361.383	2092272.1	2092272.1	99.960 %		13:56:28
1	Y 371.029	1418049.8	1418049.8	98.966 %		13:56:28
2	Sc RADIAL	99260.5	99260.5	103 %		13:55:30
2	Al 396.153Radial†	107263.0	104710.8	[50000] µg/L		13:55:30
2	Ca 317.933Radial†	141368.5	137462.3	[50000] µg/L		13:55:30
2	Fe 238.204 Radial†	1735.4	1680.3	[20000] µg/L		13:55:50
2	Mg 279.077 IEC†	3879.3	3774.7	[50000] µg/L		13:55:50
2	Na 589.592 Radial†	41276.8	40068.2	[20000] µg/L		13:55:30
2	Sc 361.383	2104318.4	2104318.4	100.54 %		13:56:36
2	Y 371.029	1426757.5	1426757.5	99.573 %		13:56:36
3	Sc RADIAL	98790.7	98790.7	102 %		13:55:56
3	Al 396.153Radial†	106517.5	104477.8	[50000] µg/L		13:55:56
3	Ca 317.933Radial†	140287.9	137059.1	[50000] µg/L		13:55:56
3	Fe 238.204 Radial†	1736.9	1689.7	[20000] µg/L		13:56:16
3	Mg 279.077 IEC†	3898.1	3811.1	[50000] µg/L		13:56:16
3	Na 589.592 Radial†	41109.8	40096.0	[20000] µg/L		13:55:56
3	Sc 361.383	2096930.4	2096930.4	100.18 %		13:56:43
3	Y 371.029	1423055.3	1423055.3	99.315 %		13:56:43

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	2097840.3	6074.46	0.29%	100.23 %	
Sc RADIAL	98946.8	271.66	0.27%	102 %	
Y 371.029	1422620.9	4370.07	0.31%	99.285 %	
Al 396.153Radial†	104732.5	266.28	0.25%	[50000] µg/L	
Ca 317.933Radial†	137319.9	226.12	0.16%	[50000] µg/L	
Fe 238.204 Radial†	1687.1	5.98	0.35%	[20000] µg/L	
Mg 279.077 IEC†	3788.9	19.42	0.51%	[50000] µg/L	
Na 589.592 Radial†	40103.5	39.62	0.10%	[20000] µg/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	124.5	0.00000	0.999995	
Al 396.153Radial	3	Lin Thru 0	0.0	2.095	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	0.6765	0.00000	0.999970	
B 249.677	3	Lin Thru 0	0.0	22.04	0.00000	1.000000	
Ba 233.527	3	Lin Thru 0	0.0	45.72	0.00000	0.999989	
Be 313.107	3	Lin Thru 0	0.0	1702	0.00000	0.999982	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.748	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	42.07	0.00000	0.999974	
Co 228.616	3	Lin Thru 0	0.0	23.28	0.00000	0.999976	
Cr 267.716	3	Lin Thru 0	0.0	45.98	0.00000	0.999984	
Cu 324.752	3	Lin Thru 0	0.0	153.1	0.00000	0.999991	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0845	0.00000	0.999990	
K 766.490 Radial	3	Lin Thru 0	0.0	2.143	0.00000	0.999995	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0759	0.00000	0.999990	
Mn 257.610	3	Lin Thru 0	0.0	332.7	0.00000	0.999894	
Mo 202.031	3	Lin Thru 0	0.0	10.11	0.00000	0.999961	
Na 589.592 Radia	2	Lin Thru 0	0.0	2.004	0.00000	0.999999	

Ni 231.604	3	Lin Thru 0	0.0	17.83	0.00000	0.999964
P 214.914	3	Lin Thru 0	0.0	0.6023	0.00000	0.999963
Pb 220.353	3	Lin Thru 0	0.0	3.814	0.00000	0.999959
S 181.975 Axial	3	Lin Thru 0	0.0	0.3142	0.00000	0.999967
Sb 206.836	3	Lin Thru 0	0.0	1.121	0.00000	0.999978
Se 196.026	3	Lin Thru 0	0.0	1.064	0.00000	0.999962
SiO2	3	Lin Thru 0	0.0	5.539	0.00000	0.999985
Si 251.611	3	Lin Thru 0	0.0	14.71	0.00000	0.999987
Sn 189.927	3	Lin Thru 0	0.0	2.569	0.00000	0.999950
Sr 421.552	3	Lin Thru 0	0.0	168.2	0.00000	1.000000
Ti 334.940	3	Lin Thru 0	0.0	427.6	0.00000	0.999998
Tl 190.801	3	Lin Thru 0	0.0	1.024	0.00000	0.999960
U 409.014	3	Lin Thru 0	0.0	11.01	0.00000	0.999993
V 292.402	3	Lin Thru 0	0.0	84.70	0.00000	0.999994
Zn 213.857	3	Lin Thru 0	0.0	43.43	0.00000	0.999939

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/16/2010 13:56:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc RADIAL	99945.7	99945.7	103 %			13:57:23
1	Al 396.153Radial†	10634.7	10418.1	4961.7 µg/L		4961.7 ppb	13:57:23
1	Ca 317.933Radial†	14480.5	13637.8	4963.1 µg/L		4963.1 ppb	13:57:23
1	Fe 238.204 Radial†	451.0	424.8	5035.4 µg/L		5035.4 ppb	13:57:44
1	K 766.490 Radial†	5776.3	5108.5	2384.0 µg/L		2384.0 ppb	13:57:23
1	Mg 279.077 IEC†	410.2	389.2	5135.4 µg/L		5135.4 ppb	13:57:44
1	Na 589.592 Radial†	5193.0	4848.4	2419.9 µg/L		2419.9 ppb	13:57:23
1	Sr 421.552†	90141.5	87154.4	518.12 µg/L		518.12 ppb	13:57:23
1	Sc 361.383	2114320.9	2114320.9	101.01 %			13:58:48
1	Y 371.029	1441880.8	1441880.8	100.63 %			13:58:48
1	Ag 328.068†	31503.5	31647.7	257.94 µg/L		257.94 ppb	13:58:53
1	As 188.979†	333.9	333.8	491.09 µg/L		491.09 ppb	13:59:14
1	B 249.677†	11823.0	11405.0	515.75 µg/L		515.75 ppb	13:58:53
1	Ba 233.527†	23518.4	23290.9	510.31 µg/L		510.31 ppb	13:58:53
1	Be 313.107†	457938.9	454503.3	266.85 µg/L		266.85 ppb	13:58:48
1	Cd 226.502†	21241.4	21198.9	503.85 µg/L		503.85 ppb	13:58:53
1	Co 228.616†	12109.8	11940.2	512.43 µg/L		512.43 ppb	13:58:53
1	Cr 267.716†	23238.8	22925.4	498.94 µg/L		498.94 ppb	13:58:53
1	Cu 324.752†	83176.1	77964.9	510.18 µg/L		510.18 ppb	13:58:53
1	Mn 257.610†	177529.9	176435.7	530.22 µg/L		530.22 ppb	13:58:48
1	Mo 202.031†	5774.7	5711.7	565.37 µg/L		565.37 ppb	13:59:14
1	Ni 231.604†	9654.4	9180.7	514.37 µg/L		514.37 ppb	13:58:53
1	P 214.914†	1866.2	1575.1	2567.3 µg/L		2567.3 ppb	13:59:14
1	Pb 220.353†	2014.0	1963.6	515.56 µg/L		515.56 ppb	13:59:14
1	S 181.975 Axial†	841.6	810.7	2579.9 µg/L		2579.9 ppb	13:59:14
1	Sb 206.836†	616.5	587.6	527.70 µg/L		527.70 ppb	13:59:14
1	Se 196.026†	2837.8	2782.1	2626.3 µg/L		2626.3 ppb	13:59:14
1	SiO2†	61735.1	58336.0	10532 µg/L		10532 ppb	13:58:53
1	Si 251.611†	73401.3	72240.8	4911.2 µg/L		4911.2 ppb	13:58:53
1	Sn 189.927†	1479.9	1472.4	573.76 µg/L		573.76 ppb	13:59:14
1	Ti 334.940†	217908.1	216299.1	505.46 µg/L		505.46 ppb	13:58:48
1	Tl 190.801†	523.1	552.0	543.97 µg/L		543.97 ppb	13:59:14
1	U 409.014†	5561.7	5511.7	499.45 µg/L		499.45 ppb	13:58:53
1	V 292.402†	44746.7	44185.4	526.97 µg/L		526.97 ppb	13:58:53
1	Zn 213.857†	23850.3	22602.2	516.77 µg/L		516.77 ppb	13:58:53
2	Sc RADIAL	100715.7	100715.7	104 %			13:57:49
2	Al 396.153Radial†	10725.7	10426.7	4966.0 µg/L		4966.0 ppb	13:57:49
2	Ca 317.933Radial†	14488.3	13538.0	4926.8 µg/L		4926.8 ppb	13:57:49
2	Fe 238.204 Radial†	449.0	419.5	4972.5 µg/L		4972.5 ppb	13:58:10
2	K 766.490 Radial†	5822.1	5109.7	2384.6 µg/L		2384.6 ppb	13:57:49
2	Mg 279.077 IEC†	416.5	392.3	5175.6 µg/L		5175.6 ppb	13:58:10
2	Na 589.592 Radial†	5226.0	4841.6	2416.5 µg/L		2416.5 ppb	13:57:49
2	Sr 421.552†	90833.6	87152.1	518.11 µg/L		518.11 ppb	13:57:49
2	Sc 361.383	2122266.1	2122266.1	101.39 %			13:59:21
2	Y 371.029	1448400.7	1448400.7	101.08 %			13:59:21
2	Ag 328.068†	31661.8	31687.0	258.25 µg/L		258.25 ppb	13:59:27
2	As 188.979†	332.8	331.5	487.65 µg/L		487.65 ppb	13:59:47
2	B 249.677†	11881.3	11418.7	516.41 µg/L		516.41 ppb	13:59:27
2	Ba 233.527†	23693.3	23376.2	512.18 µg/L		512.18 ppb	13:59:27
2	Be 313.107†	459566.7	454411.5	266.80 µg/L		266.80 ppb	13:59:21
2	Cd 226.502†	21357.6	21234.8	504.71 µg/L		504.71 ppb	13:59:27
2	Co 228.616†	12210.4	11994.6	514.75 µg/L		514.75 ppb	13:59:27
2	Cr 267.716†	23436.5	23034.3	501.31 µg/L		501.31 ppb	13:59:27
2	Cu 324.752†	83758.0	78230.6	511.90 µg/L		511.90 ppb	13:59:27
2	Mn 257.610†	178049.4	176290.1	529.78 µg/L		529.78 ppb	13:59:21
2	Mo 202.031†	5680.3	5597.2	554.04 µg/L		554.04 ppb	13:59:47
2	Ni 231.604†	9693.7	9183.6	514.54 µg/L		514.54 ppb	13:59:27
2	P 214.914†	1830.4	1532.9	2496.8 µg/L		2496.8 ppb	13:59:47
2	Pb 220.353†	1974.9	1917.6	503.46 µg/L		503.46 ppb	13:59:47

2	S 181.975 Axial†	833.1	799.1	2543.2 µg/L	2543.2 ppb	13:59:47
2	Sb 206.836†	613.3	582.1	522.62 µg/L	522.62 ppb	13:59:47
2	Se 196.026†	2802.5	2736.6	2583.4 µg/L	2583.4 ppb	13:59:47
2	SiO2†	62170.4	58536.5	10568 µg/L	10568 ppb	13:59:27
2	Si 251.611†	74003.3	72562.5	4933.1 µg/L	4933.1 ppb	13:59:27
2	Sn 189.927†	1444.1	1431.7	557.90 µg/L	557.90 ppb	13:59:47
2	Ti 334.940†	218656.1	216229.2	505.30 µg/L	505.30 ppb	13:59:21
2	Tl 190.801†	522.5	549.4	541.49 µg/L	541.49 ppb	13:59:47
2	U 409.014†	5610.5	5539.2	501.96 µg/L	501.96 ppb	13:59:27
2	V 292.402†	44884.0	44155.0	526.53 µg/L	526.53 ppb	13:59:27
2	Zn 213.857†	23949.9	22612.0	516.99 µg/L	516.99 ppb	13:59:27
3	Sc RADIAL	100642.0	100642.0	104 %		13:58:16
3	Al 396.153Radial†	10698.5	10408.1	4959.0 µg/L	4959.0 ppb	13:58:16
3	Ca 317.933Radial†	14455.7	13516.9	4919.1 µg/L	4919.1 ppb	13:58:16
3	Fe 238.204 Radial†	451.9	422.6	5008.6 µg/L	5008.6 ppb	13:58:36
3	K 766.490 Radial†	5717.9	5013.6	2339.8 µg/L	2339.8 ppb	13:58:16
3	Mg 279.077 IEC†	411.4	387.7	5113.5 µg/L	5113.5 ppb	13:58:36
3	Na 589.592 Radial†	5192.1	4812.7	2402.0 µg/L	2402.0 ppb	13:58:16
3	Sr 421.552†	90503.1	86898.2	516.60 µg/L	516.60 ppb	13:58:16
3	Sc 361.383	2113439.8	2113439.8	100.97 %		13:59:54
3	Y 371.029	1442067.2	1442067.2	100.64 %		13:59:54
3	Ag 328.068†	29525.7	29701.9	241.91 µg/L	241.91 ppb	14:00:00
3	As 188.979†	279.5	280.1	411.91 µg/L	411.91 ppb	14:00:21
3	B 249.677†	11019.1	10613.8	479.75 µg/L	479.75 ppb	14:00:00
3	Ba 233.527†	21385.6	21188.3	464.22 µg/L	464.22 ppb	14:00:00
3	Be 313.107†	419133.8	416260.5	244.40 µg/L	244.40 ppb	13:59:54
3	Cd 226.502†	19161.1	19147.4	455.03 µg/L	455.03 ppb	14:00:00
3	Co 228.616†	10856.6	10704.1	459.32 µg/L	459.32 ppb	14:00:00
3	Cr 267.716†	20175.8	19901.5	433.13 µg/L	433.13 ppb	14:00:00
3	Cu 324.752†	75195.8	70095.7	458.78 µg/L	458.78 ppb	14:00:00
3	Mn 257.610†	162921.4	162041.0	486.96 µg/L	486.96 ppb	13:59:54
3	Mo 202.031†	4706.2	4655.8	460.89 µg/L	460.89 ppb	14:00:21
3	Ni 231.604†	8636.6	8176.6	458.12 µg/L	458.12 ppb	14:00:00
3	P 214.914†	1589.7	1302.0	2117.6 µg/L	2117.6 ppb	14:00:21
3	Pb 220.353†	1705.7	1659.1	435.58 µg/L	435.58 ppb	14:00:21
3	S 181.975 Axial†	735.0	705.3	2244.7 µg/L	2244.7 ppb	14:00:21
3	Sb 206.836†	518.9	491.2	440.70 µg/L	440.70 ppb	14:00:21
3	Se 196.026†	2434.0	2383.3	2251.5 µg/L	2251.5 ppb	14:00:21
3	SiO2†	57058.2	53729.6	9700.1 µg/L	9700.1 ppb	14:00:00
3	Si 251.611†	67611.4	66536.9	4523.4 µg/L	4523.4 ppb	14:00:00
3	Sn 189.927†	1175.9	1172.0	456.80 µg/L	456.80 ppb	14:00:21
3	Ti 334.940†	198210.0	196880.4	460.06 µg/L	460.06 ppb	13:59:54
3	Tl 190.801†	461.1	490.8	483.79 µg/L	483.79 ppb	14:00:21
3	U 409.014†	4826.7	4786.1	433.57 µg/L	433.57 ppb	14:00:00
3	V 292.402†	39492.8	39000.6	464.74 µg/L	464.74 ppb	14:00:00
3	Zn 213.857†	21512.4	20296.6	464.02 µg/L	464.02 ppb	14:00:00

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2116675.6	101.13 %	0.232			0.23%
Sc RADIAL	100434.5	104 %	0.4			0.42%
Y 371.029	1444116.3	100.78 %	0.259			0.26%
Ag 328.068†	31012.2	252.70 µg/L	9.345	252.70 ppb	9.345	3.70%
QC value within limits for Ag 328.068 Recovery = 101.08%						
Al 396.153Radial†	10417.6	4962.2 µg/L	3.52	4962.2 ppb	3.52	0.07%
QC value within limits for Al 396.153Radial Recovery = 99.24%						
As 188.979†	315.1	463.55 µg/L	44.757	463.55 ppb	44.757	9.66%
QC value within limits for As 188.979 Recovery = 92.71%						
B 249.677†	11145.9	503.97 µg/L	20.977	503.97 ppb	20.977	4.16%
QC value within limits for B 249.677 Recovery = 100.79%						
Ba 233.527†	22618.5	495.57 µg/L	27.168	495.57 ppb	27.168	5.48%
QC value within limits for Ba 233.527 Recovery = 99.11%						
Be 313.107†	441725.1	259.35 µg/L	12.947	259.35 ppb	12.947	4.99%
QC value within limits for Be 313.107 Recovery = 103.74%						
Ca 317.933Radial†	13564.2	4936.3 µg/L	23.49	4936.3 ppb	23.49	0.48%
QC value within limits for Ca 317.933Radial Recovery = 98.73%						
Cd 226.502†	20527.0	487.87 µg/L	28.437	487.87 ppb	28.437	5.83%
QC value within limits for Cd 226.502 Recovery = 97.57%						
Co 228.616†	11546.3	495.50 µg/L	31.354	495.50 ppb	31.354	6.33%

QC value within limits for Co 228.616 Recovery = 99.10%							
Cr 267.716†	21953.7	477.79 µg/L	38.695	477.79 ppb	38.695	8.10%	
QC value within limits for Cr 267.716 Recovery = 95.56%							
Cu 324.752†	75430.4	493.62 µg/L	30.188	493.62 ppb	30.188	6.12%	
QC value within limits for Cu 324.752 Recovery = 98.72%							
Fe 238.204 Radial†	422.3	5005.5 µg/L	31.56	5005.5 ppb	31.56	0.63%	
QC value within limits for Fe 238.204 Radial Recovery = 100.11%							
K 766.490 Radial†	5077.3	2369.5 µg/L	25.73	2369.5 ppb	25.73	1.09%	
QC value within limits for K 766.490 Radial Recovery = 94.78%							
Mg 279.077 IEC†	389.7	5141.5 µg/L	31.48	5141.5 ppb	31.48	0.61%	
QC value within limits for Mg 279.077 IEC Recovery = 102.83%							
Mn 257.610†	171589.0	515.65 µg/L	24.851	515.65 ppb	24.851	4.82%	
QC value within limits for Mn 257.610 Recovery = 103.13%							
Mo 202.031†	5321.6	526.77 µg/L	57.328	526.77 ppb	57.328	10.88%	
QC value within limits for Mo 202.031 Recovery = 105.35%							
Na 589.592 Radial†	4834.2	2412.8 µg/L	9.47	2412.8 ppb	9.47	0.39%	
QC value within limits for Na 589.592 Radial Recovery = 96.51%							
Ni 231.604†	8847.0	495.68 µg/L	32.524	495.68 ppb	32.524	6.56%	
QC value within limits for Ni 231.604 Recovery = 99.14%							
P 214.914†	1470.0	2393.9 µg/L	241.87	2393.9 ppb	241.87	10.10%	
QC value within limits for P 214.914 Recovery = 95.76%							
Pb 220.353†	1846.8	484.87 µg/L	43.115	484.87 ppb	43.115	8.89%	
QC value within limits for Pb 220.353 Recovery = 96.97%							
S 181.975 Axial†	771.7	2456.0 µg/L	183.85	2456.0 ppb	183.85	7.49%	
QC value within limits for S 181.975 Axial Recovery = 98.24%							
Sb 206.836†	553.6	497.01 µg/L	48.831	497.01 ppb	48.831	9.82%	
QC value within limits for Sb 206.836 Recovery = 99.40%							
Se 196.026†	2634.0	2487.1 µg/L	205.14	2487.1 ppb	205.14	8.25%	
QC value within limits for Se 196.026 Recovery = 99.48%							
SiO2†	56867.4	10267 µg/L	490.9	10267 ppb	490.9	4.78%	
QC value within limits for SiO2 Recovery = 95.99%							
Si 251.611†	70446.7	4789.2 µg/L	230.45	4789.2 ppb	230.45	4.81%	
QC value within limits for Si 251.611 Recovery = 95.78%							
Sn 189.927†	1358.7	529.49 µg/L	63.445	529.49 ppb	63.445	11.98%	
QC value within limits for Sn 189.927 Recovery = 105.90%							
Sr 421.552†	87068.2	517.61 µg/L	0.875	517.61 ppb	0.875	0.17%	
QC value within limits for Sr 421.552 Recovery = 103.52%							
Ti 334.940†	209802.9	490.27 µg/L	26.168	490.27 ppb	26.168	5.34%	
QC value within limits for Ti 334.940 Recovery = 98.05%							
Tl 190.801†	530.7	523.08 µg/L	34.051	523.08 ppb	34.051	6.51%	
QC value within limits for Tl 190.801 Recovery = 104.62%							
U 409.014†	5279.0	478.33 µg/L	38.781	478.33 ppb	38.781	8.11%	
QC value within limits for U 409.014 Recovery = 95.67%							
V 292.402†	42447.0	506.08 µg/L	35.801	506.08 ppb	35.801	7.07%	
QC value within limits for V 292.402 Recovery = 101.22%							
Zn 213.857†	21836.9	499.26 µg/L	30.520	499.26 ppb	30.520	6.11%	
QC value within limits for Zn 213.857 Recovery = 99.85%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/16/2010 14:00:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98878.3	98878.3	102 %		14:01:01
1	Al 396.153Radial†	-142.3	-20.0	-9.5824 µg/L	-9.5824 ppb	14:01:01
1	Ca 317.933Radial†	360.4	-32.5	-11.815 µg/L	-11.815 ppb	14:01:22
1	Fe 238.204 Radial†	14.8	2.6	30.450 µg/L	30.450 ppb	14:01:22
1	K 766.490 Radial†	418.0	-76.2	-35.567 µg/L	-35.567 ppb	14:01:01
1	Mg 279.077 IEC†	9.3	1.2	15.202 µg/L	15.202 ppb	14:01:22
1	Na 589.592 Radial†	185.1	0.6	0.3180 µg/L	0.3180 ppb	14:01:01
1	Sr 421.552†	119.7	-22.3	-0.1323 µg/L	-0.1323 ppb	14:01:01
1	Sc 361.383	2093188.4	2093188.4	100.00 %		14:02:23
1	Y 371.029	1429929.2	1429929.2	99.795 %		14:02:23
1	Ag 328.068†	-530.5	-70.3	-0.5637 µg/L	-0.5637 ppb	14:02:29
1	As 188.979†	-2.2	1.1	1.5852 µg/L	1.5852 ppb	14:02:49
1	B 249.677†	312.8	13.4	0.5924 µg/L	0.5924 ppb	14:02:29
1	Ba 233.527†	-4.3	4.1	0.0899 µg/L	0.0899 ppb	14:02:49
1	Be 313.107†	-1082.3	76.6	0.0449 µg/L	0.0449 ppb	14:02:29
1	Cd 226.502†	-168.9	1.6	0.0345 µg/L	0.0345 ppb	14:02:49
1	Co 228.616†	38.1	-10.0	-0.4293 µg/L	-0.4293 ppb	14:02:49
1	Cr 267.716†	48.0	-32.2	-0.7015 µg/L	-0.7015 ppb	14:02:29
1	Cu 324.752†	4412.7	35.9	0.2399 µg/L	0.2399 ppb	14:02:29
1	Mn 257.610†	-696.0	-9.0	-0.0262 µg/L	-0.0262 ppb	14:02:49
1	Mo 202.031†	17.2	12.1	1.1957 µg/L	1.1957 ppb	14:02:49
1	Ni 231.604†	356.5	-20.4	-1.1452 µg/L	-1.1452 ppb	14:02:49
1	P 214.914†	267.6	-4.8	-8.0633 µg/L	-8.0633 ppb	14:02:49
1	Pb 220.353†	33.6	3.4	0.9019 µg/L	0.9019 ppb	14:02:49
1	S 181.975 Axial†	23.4	0.9	2.7755 µg/L	2.7755 ppb	14:02:49
1	Sb 206.836†	25.0	2.2	2.0202 µg/L	2.0202 ppb	14:02:49
1	Se 196.026†	25.9	-1.5	-1.2774 µg/L	-1.2774 ppb	14:02:49
1	SiO2†	2754.4	-25.4	-4.5897 µg/L	-4.5897 ppb	14:02:29
1	Si 251.611†	426.2	2.1	0.1440 µg/L	0.1440 ppb	14:02:49
1	Sn 189.927†	-0.7	6.8	2.6268 µg/L	2.6268 ppb	14:02:49
1	Ti 334.940†	-488.2	89.0	0.2068 µg/L	0.2068 ppb	14:02:29
1	Tl 190.801†	-35.7	-1.6	-1.5349 µg/L	-1.5349 ppb	14:02:49
1	U 409.014†	-35.4	-29.5	-2.6859 µg/L	-2.6859 ppb	14:02:29
1	V 292.402†	92.2	-20.1	-0.2365 µg/L	-0.2365 ppb	14:02:29
1	Zn 213.857†	694.1	-314.7	-7.2440 µg/L	-7.2440 ppb	14:02:49
2	Sc RADIAL	97865.4	97865.4	101 %		14:01:27
2	Al 396.153Radial†	-126.8	-6.1	-2.9435 µg/L	-2.9435 ppb	14:01:27
2	Ca 317.933Radial†	362.1	-27.2	-9.8807 µg/L	-9.8807 ppb	14:01:47
2	Fe 238.204 Radial†	12.9	0.8	9.9891 µg/L	9.9891 ppb	14:01:47
2	K 766.490 Radial†	411.9	-78.0	-36.400 µg/L	-36.400 ppb	14:01:27
2	Mg 279.077 IEC†	11.2	3.1	40.653 µg/L	40.653 ppb	14:01:47
2	Na 589.592 Radial†	186.4	3.8	1.9010 µg/L	1.9010 ppb	14:01:27
2	Sr 421.552†	106.6	-34.0	-0.2022 µg/L	-0.2022 ppb	14:01:27
2	Sc 361.383	2104830.6	2104830.6	100.56 %		14:02:55
2	Y 371.029	1442517.7	1442517.7	100.67 %		14:02:55
2	Ag 328.068†	-488.0	-25.1	-0.2033 µg/L	-0.2033 ppb	14:03:01
2	As 188.979†	-4.3	-1.0	-1.4916 µg/L	-1.4916 ppb	14:03:22
2	B 249.677†	332.6	31.3	1.4168 µg/L	1.4168 ppb	14:03:01
2	Ba 233.527†	-1.9	6.5	0.1414 µg/L	0.1414 ppb	14:03:22
2	Be 313.107†	-1052.8	111.9	0.0657 µg/L	0.0657 ppb	14:03:01
2	Cd 226.502†	-168.8	2.7	0.0619 µg/L	0.0619 ppb	14:03:22
2	Co 228.616†	44.8	-3.5	-0.1498 µg/L	-0.1498 ppb	14:03:22
2	Cr 267.716†	69.2	-11.4	-0.2483 µg/L	-0.2483 ppb	14:03:01
2	Cu 324.752†	4345.3	-55.6	-0.3613 µg/L	-0.3613 ppb	14:03:01
2	Mn 257.610†	-711.9	-21.0	-0.0652 µg/L	-0.0652 ppb	14:03:22
2	Mo 202.031†	27.8	22.5	2.2254 µg/L	2.2254 ppb	14:03:22
2	Ni 231.604†	362.7	-16.2	-0.9109 µg/L	-0.9109 ppb	14:03:22
2	P 214.914†	268.4	-5.5	-9.1439 µg/L	-9.1439 ppb	14:03:22
2	Pb 220.353†	28.8	-1.5	-0.3967 µg/L	-0.3967 ppb	14:03:22

2	S 181.975 Axial†	21.2	-1.4	-4.5519 µg/L	-4.5519 ppb	14:03:22
2	Sb 206.836†	34.9	12.0	10.707 µg/L	10.707 ppb	14:03:22
2	Se 196.026†	17.8	-9.6	-9.0158 µg/L	-9.0158 ppb	14:03:22
2	SiO2†	2763.3	-31.9	-5.7561 µg/L	-5.7561 ppb	14:03:01
2	Si 251.611†	425.4	-1.0	-0.0708 µg/L	-0.0708 ppb	14:03:22
2	Sn 189.927†	-4.2	3.3	1.2784 µg/L	1.2784 ppb	14:03:22
2	Ti 334.940†	-463.0	116.9	0.2699 µg/L	0.2699 ppb	14:03:01
2	Tl 190.801†	-37.3	-3.0	-2.9282 µg/L	-2.9282 ppb	14:03:22
2	U 409.014†	-2.6	3.2	0.2885 µg/L	0.2885 ppb	14:03:01
2	V 292.402†	76.3	-36.4	-0.4141 µg/L	-0.4141 ppb	14:03:01
2	Zn 213.857†	695.2	-317.5	-7.3089 µg/L	-7.3089 ppb	14:03:22
3	Sc RADIAL	98474.2	98474.2	102 %		14:01:53
3	Al 396.153Radial†	-101.8	19.3	9.1663 µg/L	9.1663 ppb	14:01:53
3	Ca 317.933Radial†	363.5	-28.0	-10.188 µg/L	-10.188 ppb	14:02:13
3	Fe 238.204 Radial†	11.5	-0.7	-7.9882 µg/L	-7.9882 ppb	14:02:13
3	K 766.490 Radial†	504.8	10.9	5.0664 µg/L	5.0664 ppb	14:01:53
3	Mg 279.077 IEC†	8.6	0.4	5.8894 µg/L	5.8894 ppb	14:02:13
3	Na 589.592 Radial†	170.1	-13.4	-6.6870 µg/L	-6.6870 ppb	14:01:53
3	Sr 421.552†	121.2	-20.3	-0.1205 µg/L	-0.1205 ppb	14:01:53
3	Sc 361.383	2113179.1	2113179.1	100.96 %		14:03:28
3	Y 371.029	1448101.8	1448101.8	101.06 %		14:03:28
3	Ag 328.068†	-468.7	-4.1	-0.0340 µg/L	-0.0340 ppb	14:03:33
3	As 188.979†	-3.8	-0.5	-0.7547 µg/L	-0.7547 ppb	14:03:54
3	B 249.677†	302.2	0.0	0.0043 µg/L	0.0043 ppb	14:03:33
3	Ba 233.527†	-6.5	2.0	0.0434 µg/L	0.0434 ppb	14:03:54
3	Be 313.107†	-1083.7	85.5	0.0502 µg/L	0.0502 ppb	14:03:33
3	Cd 226.502†	-158.7	13.4	0.3186 µg/L	0.3186 ppb	14:03:54
3	Co 228.616†	36.5	-12.0	-0.5125 µg/L	-0.5125 ppb	14:03:54
3	Cr 267.716†	63.5	-17.3	-0.3764 µg/L	-0.3764 ppb	14:03:33
3	Cu 324.752†	4351.9	-66.1	-0.4333 µg/L	-0.4333 ppb	14:03:33
3	Mn 257.610†	-722.6	-28.8	-0.0874 µg/L	-0.0874 ppb	14:03:54
3	Mo 202.031†	21.2	15.8	1.5657 µg/L	1.5657 ppb	14:03:54
3	Ni 231.604†	370.2	-10.2	-0.5706 µg/L	-0.5706 ppb	14:03:54
3	P 214.914†	270.8	-4.2	-6.8446 µg/L	-6.8446 ppb	14:03:54
3	Pb 220.353†	41.8	11.2	2.9432 µg/L	2.9432 ppb	14:03:54
3	S 181.975 Axial†	17.7	-5.0	-15.964 µg/L	-15.964 ppb	14:03:54
3	Sb 206.836†	24.6	1.6	1.4824 µg/L	1.4824 ppb	14:03:54
3	Se 196.026†	23.1	-4.4	-4.2103 µg/L	-4.2103 ppb	14:03:54
3	SiO2†	2761.4	-44.6	-8.0543 µg/L	-8.0543 ppb	14:03:33
3	Si 251.611†	427.7	-0.5	-0.0318 µg/L	-0.0318 ppb	14:03:54
3	Sn 189.927†	-2.9	4.6	1.7858 µg/L	1.7858 ppb	14:03:54
3	Ti 334.940†	-517.8	64.3	0.1498 µg/L	0.1498 ppb	14:03:33
3	Tl 190.801†	-32.6	1.8	1.7516 µg/L	1.7516 ppb	14:03:54
3	U 409.014†	37.3	42.7	3.8804 µg/L	3.8804 ppb	14:03:33
3	V 292.402†	105.8	-7.5	-0.0725 µg/L	-0.0725 ppb	14:03:33
3	Zn 213.857†	682.6	-332.8	-7.6580 µg/L	-7.6580 ppb	14:03:54

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2103732.7	100.51 %	0.480			0.48%
Sc RADIAL	98406.0	102 %	0.5			0.52%
Y 371.029	1440182.9	100.51 %	0.650			0.65%
Ag 328.068†	-33.2	-0.2670 µg/L	0.27050	-0.2670 ppb	0.27050	101.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.3	-1.1199 µg/L	9.50643	-1.1199 ppb	9.50643	848.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.2203 µg/L	1.60649	-0.2203 ppb	1.60649	729.07%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	14.9	0.6712 µg/L	0.70954	0.6712 ppb	0.70954	105.72%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.2	0.0916 µg/L	0.04902	0.0916 ppb	0.04902	53.52%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	91.3	0.0536 µg/L	0.01078	0.0536 ppb	0.01078	20.12%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-29.2	-10.628 µg/L	1.0398	-10.628 ppb	1.0398	9.78%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.9	0.1383 µg/L	0.15671	0.1383 ppb	0.15671	113.31%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.5	-0.3639 µg/L	0.18997	-0.3639 ppb	0.18997	52.21%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-20.3 -0.4421 µg/L	0.23363 -0.4421 ppb	0.23363 52.85%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-28.6 -0.1849 µg/L	0.36967 -0.1849 ppb	0.36967 199.95%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.9 10.817 µg/L	19.2327 10.817 ppb	19.2327 177.80%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-47.8 -22.300 µg/L	23.7038 -22.300 ppb	23.7038 106.29%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.6 20.581 µg/L	17.9950 20.581 ppb	17.9950 87.43%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-19.6 -0.0596 µg/L	0.03099 -0.0596 ppb	0.03099 52.00%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	16.8 1.6623 µg/L	0.52156 1.6623 ppb	0.52156 31.38%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-3.0 -1.4893 µg/L	4.57035 -1.4893 ppb	4.57035 306.88%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-15.6 -0.8756 µg/L	0.28889 -0.8756 ppb	0.28889 32.99%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-4.9 -8.0173 µg/L	1.15037 -8.0173 ppb	1.15037 14.35%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	4.4 1.1495 µg/L	1.68366 1.1495 ppb	1.68366 146.47%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.9 -5.9135 µg/L	9.44368 -5.9135 ppb	9.44368 159.70%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	5.3 4.7365 µg/L	5.17748 4.7365 ppb	5.17748 109.31%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-5.2 -4.8345 µg/L	3.90679 -4.8345 ppb	3.90679 80.81%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-34.0 -6.1334 µg/L	1.76283 -6.1334 ppb	1.76283 28.74%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	0.2 0.0138 µg/L	0.11444 0.0138 ppb	0.11444 829.65%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	4.9 1.8970 µg/L	0.68105 1.8970 ppb	0.68105 35.90%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-25.5 -0.1517 µg/L	0.04414 -0.1517 ppb	0.04414 29.10%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	90.1 0.2088 µg/L	0.06007 0.2088 ppb	0.06007 28.77%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.9 -0.9038 µg/L	2.40286 -0.9038 ppb	2.40286 265.85%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	5.5 0.4943 µg/L	3.28796 0.4943 ppb	3.28796 665.14%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-21.4 -0.2411 µg/L	0.17084 -0.2411 ppb	0.17084 70.87%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-321.7 -7.4036 µg/L	0.22266 -7.4036 ppb	0.22266 3.01%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/16/2010 14:04:03

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	99135.6	99135.6	102 %		14:04:34
1	Al 396.153Radial†	319.8	431.5	205.75 µg/L	205.75 ppb	14:04:34
1	Ca 317.933Radial†	976.8	568.4	206.83 µg/L	206.83 ppb	14:04:54
1	Fe 238.204 Radial†	19.8	7.4	87.080 µg/L	87.080 ppb	14:04:54
1	K 766.490 Radial†	804.0	299.6	139.83 µg/L	139.83 ppb	14:04:34
1	Mg 279.077 IEC†	31.9	23.2	305.37 µg/L	305.37 ppb	14:04:54
1	Na 589.592 Radial†	798.4	598.9	298.91 µg/L	298.91 ppb	14:04:34
1	Sr 421.552†	1004.2	841.0	4.9998 µg/L	4.9998 ppb	14:04:34
1	Sc 361.383	2092379.1	2092379.1	99.965 %		14:05:56
1	Y 371.029	1432026.5	1432026.5	99.941 %		14:05:56
1	Ag 328.068†	171.0	631.3	5.1099 µg/L	5.1099 ppb	14:06:02
1	As 188.979†	18.0	21.2	31.333 µg/L	31.333 ppb	14:06:22
1	B 249.677†	1373.0	1074.1	48.707 µg/L	48.707 ppb	14:06:22
1	Ba 233.527†	246.0	254.5	5.5747 µg/L	5.5747 ppb	14:06:22
1	Be 313.107†	7555.8	8717.3	5.1199 µg/L	5.1199 ppb	14:06:02
1	Cd 226.502†	42.2	212.8	5.0548 µg/L	5.0548 ppb	14:06:22
1	Co 228.616†	156.2	108.2	4.6480 µg/L	4.6480 ppb	14:06:22
1	Cr 267.716†	299.8	219.6	4.7801 µg/L	4.7801 ppb	14:06:22
1	Cu 324.752†	5988.3	1613.7	10.556 µg/L	10.556 ppb	14:06:02
1	Mn 257.610†	2771.2	3459.2	10.381 µg/L	10.381 ppb	14:06:22
1	Mo 202.031†	122.7	117.6	11.643 µg/L	11.643 ppb	14:06:22
1	Ni 231.604†	475.7	98.9	5.5441 µg/L	5.5441 ppb	14:06:22
1	P 214.914†	373.9	101.6	167.74 µg/L	167.74 ppb	14:06:22
1	Pb 220.353†	69.3	39.2	10.246 µg/L	10.246 ppb	14:06:22
1	S 181.975 Axial†	58.8	36.3	115.39 µg/L	115.39 ppb	14:06:22
1	Sb 206.836†	40.6	17.9	16.105 µg/L	16.105 ppb	14:06:22
1	Se 196.026†	56.2	28.9	27.211 µg/L	27.211 ppb	14:06:22
1	SiO2†	3946.4	1168.0	210.87 µg/L	210.87 ppb	14:06:02
1	Si 251.611†	1875.8	1452.4	98.739 µg/L	98.739 ppb	14:06:22
1	Sn 189.927†	22.1	29.6	11.534 µg/L	11.534 ppb	14:06:22
1	Ti 334.940†	1641.2	2219.0	5.1680 µg/L	5.1680 ppb	14:06:02
1	Tl 190.801†	-6.3	27.8	27.294 µg/L	27.294 ppb	14:06:22
1	U 409.014†	616.5	622.5	56.498 µg/L	56.498 ppb	14:06:02
1	V 292.402†	554.5	442.4	5.3704 µg/L	5.3704 ppb	14:06:02
1	Zn 213.857†	1334.7	326.3	7.4505 µg/L	7.4505 ppb	14:06:22
2	Sc RADIAL	99015.1	99015.1	102 %		14:05:00
2	Al 396.153Radial†	335.2	447.0	213.16 µg/L	213.16 ppb	14:05:00
2	Ca 317.933Radial†	968.2	561.2	204.22 µg/L	204.22 ppb	14:05:20
2	Fe 238.204 Radial†	18.1	5.7	68.037 µg/L	68.037 ppb	14:05:20
2	K 766.490 Radial†	782.7	279.7	130.55 µg/L	130.55 ppb	14:05:00
2	Mg 279.077 IEC†	34.3	25.5	336.87 µg/L	336.87 ppb	14:05:20
2	Na 589.592 Radial†	766.7	568.9	283.93 µg/L	283.93 ppb	14:05:00
2	Sr 421.552†	1007.8	845.7	5.0274 µg/L	5.0274 ppb	14:05:00
2	Sc 361.383	2103084.1	2103084.1	100.48 %		14:06:28
2	Y 371.029	1439658.8	1439658.8	100.47 %		14:06:28
2	Ag 328.068†	79.0	538.9	4.3590 µg/L	4.3590 ppb	14:06:34
2	As 188.979†	16.8	20.0	29.449 µg/L	29.449 ppb	14:06:54
2	B 249.677†	1371.9	1066.1	48.352 µg/L	48.352 ppb	14:06:54
2	Ba 233.527†	235.0	242.3	5.3067 µg/L	5.3067 ppb	14:06:54
2	Be 313.107†	7484.7	8608.0	5.0557 µg/L	5.0557 ppb	14:06:34
2	Cd 226.502†	32.0	202.4	4.8093 µg/L	4.8093 ppb	14:06:54
2	Co 228.616†	160.3	111.5	4.7870 µg/L	4.7870 ppb	14:06:54
2	Cr 267.716†	295.9	214.3	4.6625 µg/L	4.6625 ppb	14:06:54
2	Cu 324.752†	6013.7	1608.5	10.519 µg/L	10.519 ppb	14:06:34
2	Mn 257.610†	2763.7	3437.6	10.313 µg/L	10.313 ppb	14:06:54
2	Mo 202.031†	111.4	105.7	10.466 µg/L	10.466 ppb	14:06:54
2	Ni 231.604†	470.8	91.6	5.1355 µg/L	5.1355 ppb	14:06:54
2	P 214.914†	357.6	83.5	137.69 µg/L	137.69 ppb	14:06:54
2	Pb 220.353†	71.7	41.2	10.788 µg/L	10.788 ppb	14:06:54

2	S 181.975 Axial†	55.5	32.7	104.16 µg/L	104.16 ppb	14:06:54
2	Sb 206.836†	34.7	11.8	10.612 µg/L	10.612 ppb	14:06:54
2	Se 196.026†	61.9	34.3	32.143 µg/L	32.143 ppb	14:06:54
2	SiO2†	3980.4	1181.7	213.35 µg/L	213.35 ppb	14:06:34
2	Si 251.611†	1861.7	1428.7	97.131 µg/L	97.131 ppb	14:06:54
2	Sn 189.927†	22.6	30.0	11.687 µg/L	11.687 ppb	14:06:54
2	Ti 334.940†	1635.6	2205.1	5.1330 µg/L	5.1330 ppb	14:06:34
2	Tl 190.801†	-12.4	21.8	21.380 µg/L	21.380 ppb	14:06:54
2	U 409.014†	568.8	571.9	51.905 µg/L	51.905 ppb	14:06:34
2	V 292.402†	458.4	343.9	4.1959 µg/L	4.1959 ppb	14:06:34
2	Zn 213.857†	1347.2	331.9	7.5805 µg/L	7.5805 ppb	14:06:54
3	Sc RADIAL	98662.9	98662.9	102 %		14:05:25
3	Al 396.153Radial†	307.8	421.3	200.90 µg/L	200.90 ppb	14:05:25
3	Ca 317.933Radial†	966.0	562.4	204.66 µg/L	204.66 ppb	14:05:46
3	Fe 238.204 Radial†	21.0	8.7	102.55 µg/L	102.55 ppb	14:05:46
3	K 766.490 Radial†	794.6	294.2	137.28 µg/L	137.28 ppb	14:05:25
3	Mg 279.077 IEC†	33.5	24.9	328.04 µg/L	328.04 ppb	14:05:46
3	Na 589.592 Radial†	784.5	589.0	293.98 µg/L	293.98 ppb	14:05:25
3	Sr 421.552†	965.0	807.2	4.7989 µg/L	4.7989 ppb	14:05:25
3	Sc 361.383	2083397.0	2083397.0	99.536 %		14:07:00
3	Y 371.029	1425472.4	1425472.4	99.484 %		14:07:00
3	Ag 328.068†	101.2	561.8	4.5487 µg/L	4.5487 ppb	14:07:06
3	As 188.979†	17.7	21.0	31.021 µg/L	31.021 ppb	14:07:26
3	B 249.677†	1265.5	972.1	44.067 µg/L	44.067 ppb	14:07:26
3	Ba 233.527†	190.0	199.3	4.3663 µg/L	4.3663 ppb	14:07:26
3	Be 313.107†	6871.8	8062.7	4.7355 µg/L	4.7355 ppb	14:07:06
3	Cd 226.502†	12.3	182.9	4.3402 µg/L	4.3402 ppb	14:07:26
3	Co 228.616†	129.0	81.6	3.5039 µg/L	3.5039 ppb	14:07:26
3	Cr 267.716†	255.4	176.4	3.8390 µg/L	3.8390 ppb	14:07:26
3	Cu 324.752†	5895.5	1546.3	10.119 µg/L	10.119 ppb	14:07:06
3	Mn 257.610†	2245.9	2943.3	8.8301 µg/L	8.8301 ppb	14:07:26
3	Mo 202.031†	103.5	98.8	9.7817 µg/L	9.7817 ppb	14:07:26
3	Ni 231.604†	450.3	75.5	4.2322 µg/L	4.2322 ppb	14:07:26
3	P 214.914†	353.7	83.0	136.85 µg/L	136.85 ppb	14:07:26
3	Pb 220.353†	65.1	35.2	9.2083 µg/L	9.2083 ppb	14:07:26
3	S 181.975 Axial†	53.0	30.7	97.569 µg/L	97.569 ppb	14:07:26
3	Sb 206.836†	30.2	7.6	6.8898 µg/L	6.8898 ppb	14:07:26
3	Se 196.026†	58.3	31.2	29.401 µg/L	29.401 ppb	14:07:26
3	SiO2†	3940.6	1179.3	212.90 µg/L	212.90 ppb	14:07:06
3	Si 251.611†	1695.4	1279.3	86.969 µg/L	86.969 ppb	14:07:26
3	Sn 189.927†	19.8	27.3	10.646 µg/L	10.646 ppb	14:07:26
3	Ti 334.940†	1430.7	2014.6	4.6882 µg/L	4.6882 ppb	14:07:06
3	Tl 190.801†	-12.1	21.9	21.490 µg/L	21.490 ppb	14:07:26
3	U 409.014†	522.0	530.3	48.122 µg/L	48.122 ppb	14:07:06
3	V 292.402†	489.6	379.6	4.6018 µg/L	4.6018 ppb	14:07:06
3	Zn 213.857†	1250.7	247.7	5.6441 µg/L	5.6441 ppb	14:07:26

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2092953.4	99.993 %	0.4709			0.47%
Sc RADIAL	98937.8	102 %	0.3			0.25%
Y 371.029	1432385.9	99.966 %	0.4955			0.50%
Ag 328.068†	577.3	4.6725 µg/L	0.39048	4.6725 ppb	0.39048	8.36%
QC value within limits for Ag 328.068 Recovery = 93.45%						
Al 396.153Radial†	433.3	206.61 µg/L	6.174	206.61 ppb	6.174	2.99%
QC value within limits for Al 396.153Radial Recovery = 103.30%						
As 188.979†	20.7	30.601 µg/L	1.0098	30.601 ppb	1.0098	3.30%
QC value within limits for As 188.979 Recovery = 102.00%						
B 249.677†	1037.4	47.042 µg/L	2.5830	47.042 ppb	2.5830	5.49%
QC value within limits for B 249.677 Recovery = 94.08%						
Ba 233.527†	232.0	5.0826 µg/L	0.63463	5.0826 ppb	0.63463	12.49%
QC value within limits for Ba 233.527 Recovery = 101.65%						
Be 313.107†	8462.7	4.9704 µg/L	0.20593	4.9704 ppb	0.20593	4.14%
QC value within limits for Be 313.107 Recovery = 99.41%						
Ca 317.933Radial†	564.0	205.24 µg/L	1.399	205.24 ppb	1.399	0.68%
QC value within limits for Ca 317.933Radial Recovery = 102.62%						
Cd 226.502†	199.4	4.7347 µg/L	0.36306	4.7347 ppb	0.36306	7.67%
QC value within limits for Cd 226.502 Recovery = 94.69%						
Co 228.616†	100.4	4.3130 µg/L	0.70411	4.3130 ppb	0.70411	16.33%

Cr	267.716†	203.4	4.4272 µg/L	0.51280	4.4272 ppb	0.51280	11.58%
	QC value within limits for Cr 267.716 Recovery = 88.54%						
Cu	324.752†	1589.5	10.398 µg/L	0.2423	10.398 ppb	0.2423	2.33%
	QC value within limits for Cu 324.752 Recovery = 103.98%						
Fe	238.204 Radial†	7.3	85.888 µg/L	17.2853	85.888 ppb	17.2853	20.13%
	QC value within limits for Fe 238.204 Radial Recovery = 85.89%						
K	766.490 Radial†	291.2	135.89 µg/L	4.794	135.89 ppb	4.794	3.53%
	QC value within limits for K 766.490 Radial Recovery = 90.59%						
Mg	279.077 IEC†	24.5	323.43 µg/L	16.250	323.43 ppb	16.250	5.02%
	QC value within limits for Mg 279.077 IEC Recovery = 107.81%						
Mn	257.610†	3280.0	9.8413 µg/L	0.87640	9.8413 ppb	0.87640	8.91%
	QC value within limits for Mn 257.610 Recovery = 98.41%						
Mo	202.031†	107.4	10.630 µg/L	0.9415	10.630 ppb	0.9415	8.86%
	QC value within limits for Mo 202.031 Recovery = 106.30%						
Na	589.592 Radial†	585.6	292.27 µg/L	7.636	292.27 ppb	7.636	2.61%
	QC value within limits for Na 589.592 Radial Recovery = 97.42%						
Ni	231.604†	88.7	4.9706 µg/L	0.67133	4.9706 ppb	0.67133	13.51%
	QC value within limits for Ni 231.604 Recovery = 99.41%						
P	214.914†	89.4	147.43 µg/L	17.599	147.43 ppb	17.599	11.94%
	QC value within limits for P 214.914 Recovery = 98.29%						
Pb	220.353†	38.5	10.081 µg/L	0.8026	10.081 ppb	0.8026	7.96%
	QC value within limits for Pb 220.353 Recovery = 100.81%						
S	181.975 Axial†	33.2	105.71 µg/L	9.013	105.71 ppb	9.013	8.53%
	QC value within limits for S 181.975 Axial Recovery = 105.71%						
Sb	206.836†	12.4	11.202 µg/L	4.6357	11.202 ppb	4.6357	41.38%
	QC value within limits for Sb 206.836 Recovery = 112.02%						
Se	196.026†	31.5	29.585 µg/L	2.4709	29.585 ppb	2.4709	8.35%
	QC value within limits for Se 196.026 Recovery = 98.62%						
SiO2†		1176.3	212.37 µg/L	1.320	212.37 ppb	1.320	0.62%
	QC value within limits for SiO2 Recovery = 99.70%						
Si	251.611†	1386.8	94.280 µg/L	6.3819	94.280 ppb	6.3819	6.77%
	QC value within limits for Si 251.611 Recovery = 94.28%						
Sn	189.927†	28.9	11.289 µg/L	0.5618	11.289 ppb	0.5618	4.98%
	QC value within limits for Sn 189.927 Recovery = 112.89%						
Sr	421.552†	831.3	4.9420 µg/L	0.12476	4.9420 ppb	0.12476	2.52%
	QC value within limits for Sr 421.552 Recovery = 98.84%						
Ti	334.940†	2146.2	4.9964 µg/L	0.26749	4.9964 ppb	0.26749	5.35%
	QC value within limits for Ti 334.940 Recovery = 99.93%						
Tl	190.801†	23.9	23.388 µg/L	3.3834	23.388 ppb	3.3834	14.47%
	QC value within limits for Tl 190.801 Recovery = 116.94%						
U	409.014†	574.9	52.175 µg/L	4.1942	52.175 ppb	4.1942	8.04%
	QC value within limits for U 409.014 Recovery = 104.35%						
V	292.402†	388.6	4.7227 µg/L	0.59653	4.7227 ppb	0.59653	12.63%
	QC value within limits for V 292.402 Recovery = 94.45%						
Zn	213.857†	302.0	6.8917 µg/L	1.08243	6.8917 ppb	1.08243	15.71%
	QC value less than the lower limit for Zn 213.857 Recovery = 68.92%						

QC Failed. Continue with analysis.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 3/16/2010 14:07:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	95101.3	95101.3	98.3 %		14:08:15
1	Al 396.153Radial†	1068948.1	1088029.1	519390 µg/L	519390 ppb	14:08:10
1	Ca 317.933Radial†	1322895.4	1345976.5	489830 µg/L	489830 ppb	14:08:10
1	Fe 238.204 Radial†	15758.7	16026.3	189550 µg/L	189550 ppb	14:08:15
1	K 766.490 Radial†	183.6	-298.5	-139.29 µg/L	-139.29 ppb	14:08:15
1	Mg 279.077 IEC†	37323.7	37977.8	500470 µg/L	500470 ppb	14:08:15
1	Na 589.592 Radial†	173.3	-4.2	-2.1132 µg/L	-2.1132 ppb	14:08:15
1	Sr 421.552†	723.2	596.6	3.5466 µg/L	3.5466 ppb	14:08:15
1	Sc 361.383	1962419.5	1962419.5	93.756 %		14:08:51
1	Y 371.029	1328103.7	1328103.7	92.688 %		14:08:51
1	Ag 328.068†	-2109.5	-1789.7	0.3332 µg/L	0.3332 ppb	14:09:12
1	As 188.979†	26.5	31.5	-36.469 µg/L	-36.469 ppb	14:09:12
1	B 249.677†	1192.3	972.4	-54.785 µg/L	-54.785 ppb	14:08:51
1	Ba 233.527†	311.3	340.4	7.4797 µg/L	7.4797 ppb	14:09:12
1	Be 313.107†	-1694.4	-648.4	-0.3927 µg/L	-0.3927 ppb	14:08:51
1	Cd 226.502†	836.0	1062.3	3.8277 µg/L	3.8277 ppb	14:09:12
1	Co 228.616†	117.7	77.5	3.2585 µg/L	3.2585 ppb	14:09:12
1	Cr 267.716†	-8.7	-89.5	-1.9348 µg/L	-1.9348 ppb	14:09:12
1	Cu 324.752†	-794.8	-5224.4	1.5123 µg/L	1.5123 ppb	14:09:12
1	Mn 257.610†	6547.1	7670.0	0.5282 µg/L	0.5282 ppb	14:08:51
1	Mo 202.031†	-76.6	-86.9	-1.3920 µg/L	-1.3920 ppb	14:09:12
1	Ni 231.604†	290.1	-67.5	-1.3258 µg/L	-1.3258 ppb	14:09:12
1	P 214.914†	300.2	47.8	78.143 µg/L	78.143 ppb	14:09:12
1	Pb 220.353†	-135.1	-174.3	-3.5676 µg/L	-3.5676 ppb	14:09:12
1	S 181.975 Axial†	-17.9	-41.7	-132.62 µg/L	-132.62 ppb	14:09:12
1	Sb 206.836†	23.5	2.4	-5.3575 µg/L	-5.3575 ppb	14:09:12
1	Se 196.026†	-173.4	-212.3	-12.241 µg/L	-12.241 ppb	14:09:12
1	SiO2†	2437.2	-180.3	-32.546 µg/L	-32.546 ppb	14:09:12
1	Si 251.611†	451.7	57.7	3.9218 µg/L	3.9218 ppb	14:09:12
1	Sn 189.927†	-90.6	-89.2	15.477 µg/L	15.477 ppb	14:09:12
1	Ti 334.940†	11734.0	13092.7	-1.1982 µg/L	-1.1982 ppb	14:08:51
1	Tl 190.801†	-5.5	28.3	-40.482 µg/L	-40.482 ppb	14:09:12
1	U 409.014†	-85.6	-85.5	-63.991 µg/L	-63.991 ppb	14:08:51
1	V 292.402†	1637.5	1634.2	-4.8417 µg/L	-4.8417 ppb	14:09:12
1	Zn 213.857†	2250.2	1391.2	-5.2885 µg/L	-5.2885 ppb	14:09:12
2	Sc RADIAL	94743.4	94743.4	97.9 %		14:08:27
2	Al 396.153Radial†	1071081.9	1094319.4	522390 µg/L	522390 ppb	14:08:21
2	Ca 317.933Radial†	1325360.9	1353582.1	492600 µg/L	492600 ppb	14:08:21
2	Fe 238.204 Radial†	15661.2	15987.3	189090 µg/L	189090 ppb	14:08:27
2	K 766.490 Radial†	156.2	-325.8	-152.03 µg/L	-152.03 ppb	14:08:27
2	Mg 279.077 IEC†	37248.3	38044.3	501350 µg/L	501350 ppb	14:08:27
2	Na 589.592 Radial†	229.2	53.5	26.712 µg/L	26.712 ppb	14:08:27
2	Sr 421.552†	690.4	565.9	3.3641 µg/L	3.3641 ppb	14:08:27
2	Sc 361.383	1958596.1	1958596.1	93.574 %		14:09:20
2	Y 371.029	1328310.8	1328310.8	92.703 %		14:09:20
2	Ag 328.068†	-2099.7	-1783.7	0.3431 µg/L	0.3431 ppb	14:09:41
2	As 188.979†	19.8	24.4	-47.282 µg/L	-47.282 ppb	14:09:41
2	B 249.677†	1155.4	935.4	-56.223 µg/L	-56.223 ppb	14:09:20
2	Ba 233.527†	296.3	325.0	7.1421 µg/L	7.1421 ppb	14:09:41
2	Be 313.107†	-1675.4	-631.6	-0.3827 µg/L	-0.3827 ppb	14:09:20
2	Cd 226.502†	836.2	1064.2	3.9252 µg/L	3.9252 ppb	14:09:41
2	Co 228.616†	119.8	79.9	3.3643 µg/L	3.3643 ppb	14:09:41
2	Cr 267.716†	-14.4	-95.6	-2.0676 µg/L	-2.0676 ppb	14:09:41
2	Cu 324.752†	-833.5	-5267.5	1.1444 µg/L	1.1444 ppb	14:09:41
2	Mn 257.610†	6564.5	7702.4	0.5389 µg/L	0.5389 ppb	14:09:20
2	Mo 202.031†	-59.6	-68.9	0.3706 µg/L	0.3706 ppb	14:09:41
2	Ni 231.604†	281.1	-76.5	-1.8354 µg/L	-1.8354 ppb	14:09:41
2	P 214.914†	298.1	46.2	76.648 µg/L	76.648 ppb	14:09:41
2	Pb 220.353†	-119.4	-157.8	0.9868 µg/L	0.9868 ppb	14:09:41

2	S 181.975 Axial†	-36.9	-61.9	-197.09 µg/L	-197.09 ppb	14:09:41
2	Sb 206.836†	14.8	-6.9	-13.630 µg/L	-13.630 ppb	14:09:41
2	Se 196.026†	-170.9	-209.9	-12.396 µg/L	-12.396 ppb	14:09:41
2	SiO2†	2462.8	-147.8	-26.690 µg/L	-26.690 ppb	14:09:41
2	Si 251.611†	450.0	56.8	3.8591 µg/L	3.8591 ppb	14:09:41
2	Sn 189.927†	-95.2	-94.3	13.772 µg/L	13.772 ppb	14:09:41
2	Ti 334.940†	11708.0	13089.3	-1.2316 µg/L	-1.2316 ppb	14:09:20
2	Tl 190.801†	-0.2	33.9	-35.621 µg/L	-35.621 ppb	14:09:41
2	U 409.014†	-71.1	-70.2	-62.706 µg/L	-62.706 ppb	14:09:20
2	V 292.402†	1595.5	1592.7	-5.2578 µg/L	-5.2578 ppb	14:09:41
2	Zn 213.857†	2260.4	1406.8	-4.9565 µg/L	-4.9565 ppb	14:09:41
3	Sc RADIAL	94615.8	94615.8	97.8 %		14:08:39
3	Al 396.153Radial†	1070126.8	1094818.2	522630 µg/L	522630 ppb	14:08:33
3	Ca 317.933Radial†	1321933.3	1351902.1	491990 µg/L	491990 ppb	14:08:33
3	Fe 238.204 Radial†	15752.5	16102.2	190450 µg/L	190450 ppb	14:08:39
3	K 766.490 Radial†	346.7	-130.6	-60.965 µg/L	-60.965 ppb	14:08:39
3	Mg 279.077 IEC†	37295.7	38144.1	502660 µg/L	502660 ppb	14:08:39
3	Na 589.592 Radial†	176.8	0.2	0.1120 µg/L	0.1120 ppb	14:08:39
3	Sr 421.552†	727.4	604.7	3.5948 µg/L	3.5948 ppb	14:08:39
3	Sc 361.383	1957230.1	1957230.1	93.508 %		14:09:49
3	Y 371.029	1328849.1	1328849.1	92.740 %		14:09:49
3	Ag 328.068†	-2090.5	-1775.4	0.5143 µg/L	0.5143 ppb	14:10:09
3	As 188.979†	27.1	32.2	-35.852 µg/L	-35.852 ppb	14:10:09
3	B 249.677†	1079.8	855.5	-60.559 µg/L	-60.559 ppb	14:09:49
3	Ba 233.527†	289.5	318.0	6.9890 µg/L	6.9890 ppb	14:10:09
3	Be 313.107†	-1694.6	-653.4	-0.3956 µg/L	-0.3956 ppb	14:09:49
3	Cd 226.502†	841.7	1070.7	3.9264 µg/L	3.9264 ppb	14:10:09
3	Co 228.616†	97.9	56.7	2.3643 µg/L	2.3643 ppb	14:10:09
3	Cr 267.716†	-18.6	-100.1	-2.1662 µg/L	-2.1662 ppb	14:10:09
3	Cu 324.752†	-774.4	-5204.9	1.8089 µg/L	1.8089 ppb	14:10:09
3	Mn 257.610†	6613.9	7760.1	0.7041 µg/L	0.7041 ppb	14:09:49
3	Mo 202.031†	-53.8	-62.6	1.0417 µg/L	1.0417 ppb	14:10:09
3	Ni 231.604†	295.6	-60.8	-0.9382 µg/L	-0.9382 ppb	14:10:09
3	P 214.914†	309.6	58.6	96.340 µg/L	96.340 ppb	14:10:09
3	Pb 220.353†	-120.4	-159.0	0.7035 µg/L	0.7035 ppb	14:10:09
3	S 181.975 Axial†	-31.1	-55.8	-177.44 µg/L	-177.44 ppb	14:10:09
3	Sb 206.836†	23.5	2.4	-5.3232 µg/L	-5.3232 ppb	14:10:09
3	Se 196.026†	-197.2	-238.2	-35.579 µg/L	-35.579 ppb	14:10:09
3	SiO2†	2453.8	-155.6	-28.094 µg/L	-28.094 ppb	14:10:09
3	Si 251.611†	446.0	52.8	3.5919 µg/L	3.5919 ppb	14:10:09
3	Sn 189.927†	-86.3	-84.9	17.393 µg/L	17.393 ppb	14:10:09
3	Ti 334.940†	11750.2	13143.2	-1.2193 µg/L	-1.2193 ppb	14:09:49
3	Tl 190.801†	-4.4	29.4	-39.609 µg/L	-39.609 ppb	14:10:09
3	U 409.014†	-10.1	-5.0	-56.935 µg/L	-56.935 ppb	14:09:49
3	V 292.402†	1598.6	1597.3	-5.3658 µg/L	-5.3658 ppb	14:10:09
3	Zn 213.857†	2255.7	1403.5	-5.1752 µg/L	-5.1752 ppb	14:10:09

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1959415.2	93.613 %	0.1285			0.14%
Sc RADIAL	94820.2	98.0 %	0.26			0.27%
Y 371.029	1328421.2	92.711 %	0.0269			0.03%
Ag 328.068†	-1783.0	0.3969 µg/L	0.10183	0.3969 ppb	0.10183	25.66%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1092388.9	521470 µg/L	1806.3	521470 ppb	1806.3	0.35%
QC value within limits for Al 396.153Radial Recovery = 104.29%						
As 188.979†	29.4	-39.868 µg/L	6.4283	-39.868 ppb	6.4283	16.12%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	921.1	-57.189 µg/L	3.0060	-57.189 ppb	3.0060	5.26%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	327.8	7.2036 µg/L	0.25105	7.2036 ppb	0.25105	3.49%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-644.5	-0.3903 µg/L	0.00673	-0.3903 ppb	0.00673	1.72%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1350486.9	491470 µg/L	1454.0	491470 ppb	1454.0	0.30%
QC value within limits for Ca 317.933Radial Recovery = 98.29%						
Cd 226.502†	1065.7	3.8931 µg/L	0.05662	3.8931 ppb	0.05662	1.45%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	71.4	2.9957 µg/L	0.54934	2.9957 ppb	0.54934	18.34%

Cr	267.716†	-95.1	-2.0562 µg/L	0.11610	-2.0562 ppb	0.11610	5.65%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-5232.3	1.4885 µg/L	0.33291	1.4885 ppb	0.33291	22.37%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	16038.6	189700 µg/L	691.3	189700 ppb	691.3	0.36%
QC value within limits for Fe 238.204 Radial Recovery = 94.85%							
K	766.490 Radial†	-251.6	-117.43 µg/L	49.312	-117.43 ppb	49.312	41.99%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	38055.4	501490 µg/L	1102.7	501490 ppb	1102.7	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 100.30%							
Mn	257.610†	7710.8	0.5904 µg/L	0.09865	0.5904 ppb	0.09865	16.71%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-72.8	0.0068 µg/L	1.25699	0.0068 ppb	1.25699	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	16.5	8.2368 µg/L	16.03833	8.2368 ppb	16.03833	194.71%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-68.3	-1.3665 µg/L	0.44997	-1.3665 ppb	0.44997	32.93%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	50.9	83.710 µg/L	10.9632	83.710 ppb	10.9632	13.10%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-163.7	-0.6258 µg/L	2.55166	-0.6258 ppb	2.55166	407.75%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-53.1	-169.05 µg/L	33.044	-169.05 ppb	33.044	19.55%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-0.7	-8.1034 µg/L	4.78578	-8.1034 ppb	4.78578	59.06%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-220.2	-20.072 µg/L	13.4298	-20.072 ppb	13.4298	66.91%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-161.2	-29.110 µg/L	3.0573	-29.110 ppb	3.0573	10.50%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	55.8	3.7909 µg/L	0.17521	3.7909 ppb	0.17521	4.62%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-89.5	15.547 µg/L	1.8114	15.547 ppb	1.8114	11.65%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	589.0	3.5018 µg/L	0.12168	3.5018 ppb	0.12168	3.47%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	13108.4	-1.2163 µg/L	0.01687	-1.2163 ppb	0.01687	1.39%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	30.5	-38.571 µg/L	2.5916	-38.571 ppb	2.5916	6.72%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-53.6	-61.211 µg/L	3.7580	-61.211 ppb	3.7580	6.14%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	1608.1	-5.1551 µg/L	0.27672	-5.1551 ppb	0.27672	5.37%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	1400.5	-5.1401 µg/L	0.16878	-5.1401 ppb	0.16878	3.28%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 104
 Date Collected: 3/16/2010 14:10:20
 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	94053.1	94053.1	97.2 %		14:10:57
1	Al 396.153Radial†	1067713.2	1098883.6	524560 µg/L	524560 ppb	14:10:52
1	Ca 317.933Radial†	1313723.3	1351543.5	491860 µg/L	491860 ppb	14:10:52
1	Fe 238.204 Radial†	15574.9	16015.9	189440 µg/L	189440 ppb	14:10:57
1	K 766.490 Radial†	11413.8	11260.4	5255.0 µg/L	5255.0 ppb	14:10:57
1	Mg 279.077 IEC†	37024.0	38092.7	501990 µg/L	501990 ppb	14:10:57
1	Na 589.592 Radial†	10371.5	10492.5	5236.9 µg/L	5236.9 ppb	14:10:57
1	Sr 421.552†	84533.3	86852.3	516.33 µg/L	516.33 ppb	14:10:52
1	Sc 361.383	1945677.3	1945677.3	92.956 %		14:11:35
1	Y 371.029	1321275.4	1321275.4	92.212 %		14:11:35
1	Ag 328.068†	28537.8	31160.5	268.35 µg/L	268.35 ppb	14:11:35
1	As 188.979†	352.2	382.2	480.63 µg/L	480.63 ppb	14:11:56
1	B 249.677†	11895.7	12497.7	469.11 µg/L	469.11 ppb	14:11:35
1	Ba 233.527†	21530.7	23170.5	507.72 µg/L	507.72 ppb	14:11:56
1	Be 313.107†	391033.5	421822.4	247.64 µg/L	247.64 ppb	14:11:35
1	Cd 226.502†	19152.1	20773.9	472.85 µg/L	472.85 ppb	14:11:56
1	Co 228.616†	9873.1	10573.1	453.56 µg/L	453.56 ppb	14:11:56
1	Cr 267.716†	21065.8	22581.8	491.48 µg/L	491.48 ppb	14:11:56
1	Cu 324.752†	79293.3	80925.0	564.18 µg/L	564.18 ppb	14:11:35
1	Mn 257.610†	159425.0	172192.2	494.88 µg/L	494.88 ppb	14:11:35
1	Mo 202.031†	4814.2	5173.9	519.16 µg/L	519.16 ppb	14:11:56
1	Ni 231.604†	7809.6	8024.5	451.99 µg/L	451.99 ppb	14:11:56
1	P 214.914†	1791.6	1655.0	2696.6 µg/L	2696.6 ppb	14:11:56
1	Pb 220.353†	1636.8	1730.7	496.31 µg/L	496.31 ppb	14:11:56
1	S 181.975 Axial†	767.2	802.8	2555.0 µg/L	2555.0 ppb	14:11:56
1	Sb 206.836†	588.4	610.2	539.79 µg/L	539.79 ppb	14:11:56
1	Se 196.026†	2310.6	2458.3	2495.9 µg/L	2495.9 ppb	14:11:56
1	SiO2†	60072.3	61844.4	11165 µg/L	11165 ppb	14:11:35
1	Si 251.611†	71989.3	77020.1	5236.1 µg/L	5236.1 ppb	14:11:35
1	Sn 189.927†	1167.8	1263.7	542.42 µg/L	542.42 ppb	14:11:56
1	Ti 334.940†	217593.7	234658.8	516.82 µg/L	516.82 ppb	14:11:35
1	Tl 190.801†	446.3	514.2	439.15 µg/L	439.15 ppb	14:11:56
1	U 409.014†	5107.8	5500.6	443.11 µg/L	443.11 ppb	14:11:35
1	V 292.402†	42830.7	45963.8	524.13 µg/L	524.13 ppb	14:11:35
1	Zn 213.857†	21890.3	22540.2	478.65 µg/L	478.65 ppb	14:11:56
2	Sc RADIAL	93638.4	93638.4	96.7 %		14:11:09
2	Al 396.153Radial†	1069334.2	1105424.8	527690 µg/L	527690 ppb	14:11:03
2	Ca 317.933Radial†	1320981.3	1365032.5	496760 µg/L	496760 ppb	14:11:03
2	Fe 238.204 Radial†	15571.4	16083.3	190240 µg/L	190240 ppb	14:11:09
2	K 766.490 Radial†	11415.1	11313.8	5279.9 µg/L	5279.9 ppb	14:11:09
2	Mg 279.077 IEC†	37110.4	38350.8	505400 µg/L	505400 ppb	14:11:09
2	Na 589.592 Radial†	10420.1	10590.0	5285.5 µg/L	5285.5 ppb	14:11:09
2	Sr 421.552†	84800.8	87514.0	520.26 µg/L	520.26 ppb	14:11:03
2	Sc 361.383	1955393.4	1955393.4	93.421 %		14:12:05
2	Y 371.029	1326796.4	1326796.4	92.597 %		14:12:05
2	Ag 328.068†	28696.1	31177.3	268.53 µg/L	268.53 ppb	14:12:05
2	As 188.979†	357.9	386.3	486.04 µg/L	486.04 ppb	14:12:25
2	B 249.677†	11881.3	12418.7	465.10 µg/L	465.10 ppb	14:12:05
2	Ba 233.527†	21506.4	23029.4	504.63 µg/L	504.63 ppb	14:12:25
2	Be 313.107†	391632.1	420372.9	246.78 µg/L	246.78 ppb	14:12:05
2	Cd 226.502†	19130.2	20648.1	469.76 µg/L	469.76 ppb	14:12:25
2	Co 228.616†	9843.2	10488.4	449.92 µg/L	449.92 ppb	14:12:25
2	Cr 267.716†	21078.3	22482.6	489.32 µg/L	489.32 ppb	14:12:25
2	Cu 324.752†	79499.1	80721.4	563.00 µg/L	563.00 ppb	14:12:05
2	Mn 257.610†	159830.4	171773.9	493.44 µg/L	493.44 ppb	14:12:05
2	Mo 202.031†	4791.9	5124.3	514.28 µg/L	514.28 ppb	14:12:25
2	Ni 231.604†	7776.7	7947.5	447.69 µg/L	447.69 ppb	14:12:25
2	P 214.914†	1776.3	1629.0	2653.8 µg/L	2653.8 ppb	14:12:25
2	Pb 220.353†	1629.1	1713.6	492.08 µg/L	492.08 ppb	14:12:25

2	S 181.975 Axial†	761.6	792.7	2522.6 µg/L	2522.6 ppb	14:12:25
2	Sb 206.836†	574.0	591.7	523.15 µg/L	523.15 ppb	14:12:25
2	Se 196.026†	2291.8	2425.9	2465.0 µg/L	2465.0 ppb	14:12:25
2	SiO2†	60171.1	61629.1	11126 µg/L	11126 ppb	14:12:05
2	Si 251.611†	72027.3	76676.0	5212.7 µg/L	5212.7 ppb	14:12:05
2	Sn 189.927†	1166.0	1255.6	539.76 µg/L	539.76 ppb	14:12:25
2	Ti 334.940†	217901.4	233825.1	514.68 µg/L	514.68 ppb	14:12:05
2	Tl 190.801†	449.6	515.4	439.36 µg/L	439.36 ppb	14:12:25
2	U 409.014†	5127.6	5494.6	442.15 µg/L	442.15 ppb	14:12:05
2	V 292.402†	42839.5	45744.3	521.40 µg/L	521.40 ppb	14:12:05
2	Zn 213.857†	21866.3	22397.4	475.15 µg/L	475.15 ppb	14:12:25
3	Sc RADIAL	93917.0	93917.0	97.0 %		14:11:21
3	Al 396.153Radial†	1073322.7	1106256.3	528080 µg/L	528080 ppb	14:11:15
3	Ca 317.933Radial†	1326453.9	1366621.8	497340 µg/L	497340 ppb	14:11:15
3	Fe 238.204 Radial†	15607.0	16072.2	190110 µg/L	190110 ppb	14:11:21
3	K 766.490 Radial†	11611.4	11481.1	5358.0 µg/L	5358.0 ppb	14:11:21
3	Mg 279.077 IEC†	37262.6	38393.8	505960 µg/L	505960 ppb	14:11:21
3	Na 589.592 Radial†	10431.2	10569.6	5275.3 µg/L	5275.3 ppb	14:11:21
3	Sr 421.552†	85202.7	87668.1	521.18 µg/L	521.18 ppb	14:11:15
3	Sc 361.383	1947287.0	1947287.0	93.033 %		14:12:35
3	Y 371.029	1322583.6	1322583.6	92.303 %		14:12:35
3	Ag 328.068†	28534.1	31131.1	268.15 µg/L	268.15 ppb	14:12:35
3	As 188.979†	364.0	394.5	498.14 µg/L	498.14 ppb	14:12:55
3	B 249.677†	11968.2	12565.0	471.81 µg/L	471.81 ppb	14:12:35
3	Ba 233.527†	21563.0	23186.1	508.06 µg/L	508.06 ppb	14:12:55
3	Be 313.107†	389686.7	420026.9	246.58 µg/L	246.58 ppb	14:12:35
3	Cd 226.502†	19155.5	20760.5	472.45 µg/L	472.45 ppb	14:12:55
3	Co 228.616†	9854.9	10544.8	452.35 µg/L	452.35 ppb	14:12:55
3	Cr 267.716†	21056.0	22552.5	490.84 µg/L	490.84 ppb	14:12:55
3	Cu 324.752†	79207.3	80762.0	563.24 µg/L	563.24 ppb	14:12:35
3	Mn 257.610†	158800.3	171378.9	492.21 µg/L	492.21 ppb	14:12:35
3	Mo 202.031†	4816.0	5171.5	518.95 µg/L	518.95 ppb	14:12:55
3	Ni 231.604†	7822.5	8031.4	452.39 µg/L	452.39 ppb	14:12:55
3	P 214.914†	1783.0	1644.1	2679.1 µg/L	2679.1 ppb	14:12:55
3	Pb 220.353†	1652.3	1745.8	500.58 µg/L	500.58 ppb	14:12:55
3	S 181.975 Axial†	786.5	822.9	2618.9 µg/L	2618.9 ppb	14:12:55
3	Sb 206.836†	583.5	604.5	534.62 µg/L	534.62 ppb	14:12:55
3	Se 196.026†	2320.8	2467.3	2503.0 µg/L	2503.0 ppb	14:12:55
3	SiO2†	59865.2	61568.4	11115 µg/L	11115 ppb	14:12:35
3	Si 251.611†	71749.0	76697.7	5214.2 µg/L	5214.2 ppb	14:12:35
3	Sn 189.927†	1160.6	1254.9	539.57 µg/L	539.57 ppb	14:12:55
3	Ti 334.940†	217063.3	233895.2	514.81 µg/L	514.81 ppb	14:12:35
3	Tl 190.801†	464.1	532.9	456.36 µg/L	456.36 ppb	14:12:55
3	U 409.014†	4969.9	5347.9	428.82 µg/L	428.82 ppb	14:12:35
3	V 292.402†	42719.6	45806.3	522.17 µg/L	522.17 ppb	14:12:35
3	Zn 213.857†	21894.2	22524.9	478.04 µg/L	478.04 ppb	14:12:55

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1949452.6	93.137 %	0.2488			0.27%
Sc RADIAL	93869.5	97.0 %	0.22			0.23%
Y 371.029	1323551.8	92.371 %	0.2013			0.22%
Ag 328.068†	31156.3	268.35 µg/L	0.188	268.35 ppb	0.188	0.07%
QC value within limits for Ag 328.068 Recovery = 107.34%						
Al 396.153Radial†	1103521.6	526780 µg/L	1927.7	526780 ppb	1927.7	0.37%
QC value within limits for Al 396.153Radial Recovery = 105.36%						
As 188.979†	387.7	488.27 µg/L	8.962	488.27 ppb	8.962	1.84%
QC value within limits for As 188.979 Recovery = 97.65%						
B 249.677†	12493.8	468.67 µg/L	3.376	468.67 ppb	3.376	0.72%
QC value within limits for B 249.677 Recovery = 93.73%						
Ba 233.527†	23128.7	506.80 µg/L	1.889	506.80 ppb	1.889	0.37%
QC value within limits for Ba 233.527 Recovery = 101.36%						
Be 313.107†	420740.7	247.00 µg/L	0.559	247.00 ppb	0.559	0.23%
QC value within limits for Be 313.107 Recovery = 98.80%						
Ca 317.933Radial†	1361065.9	495320 µg/L	3015.0	495320 ppb	3015.0	0.61%
QC value within limits for Ca 317.933Radial Recovery = 99.06%						
Cd 226.502†	20727.5	471.69 µg/L	1.679	471.69 ppb	1.679	0.36%
QC value within limits for Cd 226.502 Recovery = 94.34%						
Co 228.616†	10535.4	451.94 µg/L	1.855	451.94 ppb	1.855	0.41%

Cr	267.716†	22538.9	490.55 µg/L	1.109	490.55 ppb	1.109	0.23%
Cu	324.752†	80802.8	563.48 µg/L	0.623	563.48 ppb	0.623	0.11%
Fe	238.204 Radial†	16057.1	189930 µg/L	427.6	189930 ppb	427.6	0.23%
K	766.490 Radial†	11351.7	5297.6 µg/L	53.73	5297.6 ppb	53.73	1.01%
Mg	279.077 IEC†	38279.1	504450 µg/L	2146.3	504450 ppb	2146.3	0.43%
Mn	257.610†	171781.7	493.51 µg/L	1.338	493.51 ppb	1.338	0.27%
Mo	202.031†	5156.5	517.46 µg/L	2.757	517.46 ppb	2.757	0.53%
Na	589.592 Radial†	10550.7	5265.9 µg/L	25.65	5265.9 ppb	25.65	0.49%
Ni	231.604†	8001.1	450.69 µg/L	2.606	450.69 ppb	2.606	0.58%
P	214.914†	1642.7	2676.5 µg/L	21.56	2676.5 ppb	21.56	0.81%
Pb	220.353†	1730.0	496.32 µg/L	4.247	496.32 ppb	4.247	0.86%
S	181.975 Axial†	806.1	2565.5 µg/L	48.98	2565.5 ppb	48.98	1.91%
Sb	206.836†	602.2	532.52 µg/L	8.516	532.52 ppb	8.516	1.60%
Se	196.026†	2450.5	2488.0 µg/L	20.20	2488.0 ppb	20.20	0.81%
SiO2†		61680.7	11136 µg/L	26.2	11136 ppb	26.2	0.24%
Si	251.611†	76798.0	5221.0 µg/L	13.10	5221.0 ppb	13.10	0.25%
Sn	189.927†	1258.1	540.58 µg/L	1.593	540.58 ppb	1.593	0.29%
Sr	421.552†	87344.8	519.25 µg/L	2.577	519.25 ppb	2.577	0.50%
Ti	334.940†	234126.3	515.44 µg/L	1.201	515.44 ppb	1.201	0.23%
Tl	190.801†	520.8	444.95 µg/L	9.875	444.95 ppb	9.875	2.22%
U	409.014†	5447.7	438.03 µg/L	7.992	438.03 ppb	7.992	1.82%
V	292.402†	45838.2	522.57 µg/L	1.410	522.57 ppb	1.410	0.27%
Zn	213.857†	22487.5	477.28 µg/L	1.868	477.28 ppb	1.868	0.39%

QC value within limits for Co 228.616 Recovery = 90.39%

QC value within limits for Cr 267.716 Recovery = 98.11%

QC value within limits for Cu 324.752 Recovery = 112.70%

QC value within limits for Fe 238.204 Radial Recovery = 94.96%

QC value within limits for K 766.490 Radial Recovery = 105.95%

QC value within limits for Mg 279.077 IEC Recovery = 100.89%

QC value within limits for Mn 257.610 Radial Recovery = 98.70%

QC value within limits for Mo 202.031 Recovery = 103.49%

QC value within limits for Na 589.592 Radial Recovery = 105.32%

QC value within limits for Ni 231.604 Recovery = 90.14%

QC value within limits for P 214.914 Recovery = 107.06%

QC value within limits for Pb 220.353 Recovery = 99.26%

QC value within limits for S 181.975 Axial Recovery = 102.62%

QC value within limits for Sb 206.836 Recovery = 106.50%

QC value within limits for Se 196.026 Recovery = 99.52%

QC value within limits for SiO2 Recovery = 104.12%

QC value within limits for Si 251.611 Recovery = 104.42%

QC value within limits for Sn 189.927 Recovery = 108.12%

QC value within limits for Sr 421.552 Recovery = 103.85%

QC value within limits for Ti 334.940 Recovery = 103.09%

QC value within limits for Tl 190.801 Recovery = 88.99%

QC value within limits for U 409.014 Recovery = 87.61%

QC value within limits for V 292.402 Recovery = 104.51%

QC value within limits for Zn 213.857 Recovery = 95.46%

All analyte(s) passed QC.

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

Autosampler Location: 105
 Date Collected: 3/16/2010 14:13:05
 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	94671.6	94671.6	97.8 %		14:13:43
1	Al 396.153Radial†	1052553.7	1076206.9	513750 µg/L	513750 ppb	14:13:37
1	Ca 317.933Radial†	1303993.2	1332763.8	485020 µg/L	485020 ppb	14:13:37
1	Fe 238.204 Radial†	36882.6	37695.2	445850 µg/L	445850 ppb	14:13:43
1	K 766.490 Radial†	172.0	-309.5	-144.42 µg/L	-144.42 ppb	14:13:43
1	Mg 279.077 IEC†	36592.3	37402.5	492610 µg/L	492610 ppb	14:13:43
1	Na 589.592 Radial†	974327.3	995931.5	497070 µg/L	497070 ppb	14:13:37
1	Sr 421.552†	2085.8	1993.0	11.848 µg/L	11.848 ppb	14:13:43
1	Sc 361.383	1930212.6	1930212.6	92.218 %		14:14:20
1	Y 371.029	1301817.0	1301817.0	90.854 %		14:14:20
1	Ag 328.068†	-3823.3	-3685.8	4.9184 µg/L	4.9184 ppb	14:14:20
1	As 188.979†	17.9	22.7	-80.580 µg/L	-80.580 ppb	14:14:40
1	B 249.677†	1804.8	1657.7	-157.40 µg/L	-157.40 ppb	14:14:20
1	Ba 233.527†	678.1	743.8	16.329 µg/L	16.329 ppb	14:14:40
1	Be 313.107†	-8849.1	-8437.1	-4.9718 µg/L	-4.9718 ppb	14:14:20
1	Cd 226.502†	2127.4	2477.5	8.5043 µg/L	8.5043 ppb	14:14:40
1	Co 228.616†	261.1	235.0	10.000 µg/L	10.000 ppb	14:14:40
1	Cr 267.716†	320.3	267.1	5.8303 µg/L	5.8303 ppb	14:14:40
1	Cu 324.752†	-6537.4	-11465.8	8.9291 µg/L	8.9291 ppb	14:14:40
1	Mn 257.610†	7529.5	8852.0	19.764 µg/L	19.764 ppb	14:14:20
1	Mo 202.031†	-172.5	-192.2	-2.0792 µg/L	-2.0792 ppb	14:14:40
1	Ni 231.604†	236.0	-120.9	-0.9993 µg/L	-0.9993 ppb	14:14:40
1	P 214.914†	484.7	253.2	213.82 µg/L	213.82 ppb	14:14:40
1	Pb 220.353†	-37.2	-70.5	11.668 µg/L	11.668 ppb	14:14:40
1	S 181.975 Axial†	-37.7	-63.4	-201.85 µg/L	-201.85 ppb	14:14:40
1	Sb 206.836†	25.3	4.7	-3.4783 µg/L	-3.4783 ppb	14:14:40
1	Se 196.026†	-396.6	-457.4	578.46 µg/L	578.46 ppb	14:14:40
1	SiO2†	2429.0	-145.8	-26.319 µg/L	-26.319 ppb	14:14:40
1	Si 251.611†	-163.3	-601.2	-40.870 µg/L	-40.870 ppb	14:14:40
1	Sn 189.927†	-66.1	-64.2	23.478 µg/L	23.478 ppb	14:14:40
1	Ti 334.940†	14501.8	16302.9	6.8316 µg/L	6.8316 ppb	14:14:20
1	Tl 190.801†	-15.4	17.4	4.7966 µg/L	4.7966 ppb	14:14:40
1	U 409.014†	155144.5	168243.4	15185 µg/L	15185 ppb	14:14:20
1	V 292.402†	2802.0	2926.2	-6.2992 µg/L	-6.2992 ppb	14:14:40
1	Zn 213.857†	3662.1	2962.3	19.218 µg/L	19.218 ppb	14:14:40
2	Sc RADIAL	93000.2	93000.2	96.1 %		14:13:55
2	Al 396.153Radial†	1058319.8	1101546.9	525840 µg/L	525840 ppb	14:13:49
2	Ca 317.933Radial†	1303650.5	1356365.9	493610 µg/L	493610 ppb	14:13:49
2	Fe 238.204 Radial†	36394.2	37864.7	447850 µg/L	447850 ppb	14:13:55
2	K 766.490 Radial†	137.2	-342.5	-159.84 µg/L	-159.84 ppb	14:13:55
2	Mg 279.077 IEC†	35947.3	37403.5	492620 µg/L	492620 ppb	14:13:55
2	Na 589.592 Radial†	976667.6	1016269.0	507220 µg/L	507220 ppb	14:13:49
2	Sr 421.552†	2073.2	2018.2	11.998 µg/L	11.998 ppb	14:13:55
2	Sc 361.383	1922376.9	1922376.9	91.843 %		14:14:49
2	Y 371.029	1299994.3	1299994.3	90.727 %		14:14:49
2	Ag 328.068†	-3842.1	-3723.1	4.7666 µg/L	4.7666 ppb	14:14:49
2	As 188.979†	13.6	18.1	-88.665 µg/L	-88.665 ppb	14:15:10
2	B 249.677†	1879.9	1747.5	-154.37 µg/L	-154.37 ppb	14:14:49
2	Ba 233.527†	658.6	725.6	15.929 µg/L	15.929 ppb	14:15:10
2	Be 313.107†	-8932.7	-8567.2	-5.0479 µg/L	-5.0479 ppb	14:14:49
2	Cd 226.502†	2128.6	2488.2	8.5322 µg/L	8.5322 ppb	14:15:10
2	Co 228.616†	267.7	243.4	10.360 µg/L	10.360 ppb	14:15:10
2	Cr 267.716†	313.8	261.5	5.7077 µg/L	5.7077 ppb	14:15:10
2	Cu 324.752†	-6590.9	-11552.9	8.7371 µg/L	8.7371 ppb	14:15:10
2	Mn 257.610†	7522.4	8877.5	19.959 µg/L	19.959 ppb	14:14:49
2	Mo 202.031†	-173.5	-194.0	-2.1781 µg/L	-2.1781 ppb	14:15:10
2	Ni 231.604†	243.2	-112.1	-0.4755 µg/L	-0.4755 ppb	14:15:10
2	P 214.914†	482.4	252.9	215.24 µg/L	215.24 ppb	14:15:10
2	Pb 220.353†	-66.4	-102.5	4.2527 µg/L	4.2527 ppb	14:15:10

2	S 181.975 Axial†	-39.5	-65.5	-208.49 µg/L	-208.49 ppb	14:15:10
2	Sb 206.836†	23.1	2.4	-5.6216 µg/L	-5.6216 ppb	14:15:10
2	Se 196.026†	-399.3	-462.0	579.58 µg/L	579.58 ppb	14:15:10
2	SiO2†	2411.3	-154.3	-27.852 µg/L	-27.852 ppb	14:15:10
2	Si 251.611†	-170.8	-610.1	-41.477 µg/L	-41.477 ppb	14:15:10
2	Sn 189.927†	-70.6	-69.5	22.257 µg/L	22.257 ppb	14:15:10
2	Ti 334.940†	14098.6	15928.0	6.0897 µg/L	6.0897 ppb	14:14:49
2	Tl 190.801†	-9.8	23.5	9.3441 µg/L	9.3441 ppb	14:15:10
2	U 409.014†	154229.8	167933.2	15156 µg/L	15156 ppb	14:14:49
2	V 292.402†	2718.0	2847.1	-7.5184 µg/L	-7.5184 ppb	14:15:10
2	Zn 213.857†	3679.4	2997.4	19.928 µg/L	19.928 ppb	14:15:10
3	Sc RADIAL	93668.6	93668.6	96.8 %		14:14:07
3	Al 396.153Radial†	1029545.6	1063955.3	507900 µg/L	507900 ppb	14:14:01
3	Ca 317.933Radial†	1263359.0	1305051.6	474940 µg/L	474940 ppb	14:14:01
3	Fe 238.204 Radial†	36666.1	37875.4	447980 µg/L	447980 ppb	14:14:07
3	K 766.490 Radial†	271.0	-205.4	-95.841 µg/L	-95.841 ppb	14:14:07
3	Mg 279.077 IEC†	36314.2	37515.7	494100 µg/L	494100 ppb	14:14:07
3	Na 589.592 Radial†	954659.7	986275.4	492250 µg/L	492250 ppb	14:14:01
3	Sr 421.552†	2056.0	1985.1	11.801 µg/L	11.801 ppb	14:14:07
3	Sc 361.383	1929969.6	1929969.6	92.206 %		14:15:18
3	Y 371.029	1302939.9	1302939.9	90.932 %		14:15:18
3	Ag 328.068†	-3867.6	-3734.3	4.6914 µg/L	4.6914 ppb	14:15:18
3	As 188.979†	21.9	27.0	-73.269 µg/L	-73.269 ppb	14:15:39
3	B 249.677†	1873.9	1732.9	-155.10 µg/L	-155.10 ppb	14:15:18
3	Ba 233.527†	642.9	705.7	15.495 µg/L	15.495 ppb	14:15:39
3	Be 313.107†	-8935.8	-8532.2	-5.0272 µg/L	-5.0272 ppb	14:15:18
3	Cd 226.502†	2136.7	2487.8	8.5107 µg/L	8.5107 ppb	14:15:39
3	Co 228.616†	258.3	232.1	9.8760 µg/L	9.8760 ppb	14:15:39
3	Cr 267.716†	324.6	271.8	5.9341 µg/L	5.9341 ppb	14:15:39
3	Cu 324.752†	-6600.1	-11534.7	8.8800 µg/L	8.8800 ppb	14:15:39
3	Mn 257.610†	7518.4	8840.9	19.756 µg/L	19.756 ppb	14:15:18
3	Mo 202.031†	-176.5	-196.5	-2.4240 µg/L	-2.4240 ppb	14:15:39
3	Ni 231.604†	264.9	-89.6	0.7884 µg/L	0.7884 ppb	14:15:39
3	P 214.914†	473.2	240.8	189.98 µg/L	189.98 ppb	14:15:39
3	Pb 220.353†	-47.6	-81.8	8.3479 µg/L	8.3479 ppb	14:15:39
3	S 181.975 Axial†	-44.0	-70.3	-223.71 µg/L	-223.71 ppb	14:15:39
3	Sb 206.836†	29.1	8.8	0.3352 µg/L	0.3352 ppb	14:15:39
3	Se 196.026†	-420.9	-483.8	560.34 µg/L	560.34 ppb	14:15:39
3	SiO2†	2418.3	-157.0	-28.351 µg/L	-28.351 ppb	14:15:39
3	Si 251.611†	-177.1	-616.1	-41.886 µg/L	-41.886 ppb	14:15:39
3	Sn 189.927†	-59.9	-57.5	25.124 µg/L	25.124 ppb	14:15:39
3	Ti 334.940†	14000.3	15761.0	5.2872 µg/L	5.2872 ppb	14:15:18
3	Tl 190.801†	-11.8	21.3	10.939 µg/L	10.939 ppb	14:15:39
3	U 409.014†	154639.4	167716.8	15137 µg/L	15137 ppb	14:15:18
3	V 292.402†	2785.0	2908.1	-6.8359 µg/L	-6.8359 ppb	14:15:39
3	Zn 213.857†	3676.3	2978.2	19.393 µg/L	19.393 ppb	14:15:39

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1927519.7	92.089 %		0.2129			0.23%
Sc RADIAL	93780.1	96.9 %		0.87			0.90%
Y 371.029	1301583.7	90.838 %		0.1037			0.11%
Ag 328.068†	-3714.4	4.7921 µg/L		0.11566	4.7921 ppb	0.11566	2.41%
Al 396.153Radial†	1080569.7	515830 µg/L		9152.0	515830 ppb	9152.0	1.77%
QC value within limits for Al 396.153Radial Recovery = 103.17%							
As 188.979†	22.6	-80.838 µg/L		7.7012	-80.838 ppb	7.7012	9.53%
B 249.677†	1712.7	-155.63 µg/L		1.582	-155.63 ppb	1.582	1.02%
Ba 233.527†	725.0	15.918 µg/L		0.4170	15.918 ppb	0.4170	2.62%
Be 313.107†	-8512.2	-5.0156 µg/L		0.03934	-5.0156 ppb	0.03934	0.78%
Ca 317.933Radial†	1331393.7	484520 µg/L		9347.2	484520 ppb	9347.2	1.93%
QC value within limits for Ca 317.933Radial Recovery = 96.90%							
Cd 226.502†	2484.5	8.5158 µg/L		0.01463	8.5158 ppb	0.01463	0.17%
Co 228.616†	236.8	10.079 µg/L		0.2515	10.079 ppb	0.2515	2.50%
Cr 267.716†	266.8	5.8240 µg/L		0.11337	5.8240 ppb	0.11337	1.95%
Cu 324.752†	-11517.8	8.8487 µg/L		0.09973	8.8487 ppb	0.09973	1.13%
Fe 238.204 Radial†	37811.8	447230 µg/L		1195.1	447230 ppb	1195.1	0.27%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.45%							
K 766.490 Radial†	-285.8	-133.37 µg/L		33.401	-133.37 ppb	33.401	25.04%
Mg 279.077 IEC†	37440.6	493110 µg/L		856.8	493110 ppb	856.8	0.17%

QC value within limits for Mg 279.077 IEC Recovery = 98.62%

Mn 257.610†	8856.8	19.826 µg/L	0.1146	19.826 ppb	0.1146	0.58%
Mo 202.031†	-194.3	-2.2271 µg/L	0.17753	-2.2271 ppb	0.17753	7.97%
Na 589.592 Radial†	999492.0	498850 µg/L	7641.5	498850 ppb	7641.5	1.53%

QC value within limits for Na 589.592 Radial Recovery = 99.77%

Ni 231.604†	-107.5	-0.2288 µg/L	0.91903	-0.2288 ppb	0.91903	401.61%
P 214.914†	249.0	206.35 µg/L	14.190	206.35 ppb	14.190	6.88%
Pb 220.353†	-84.9	8.0896 µg/L	3.71451	8.0896 ppb	3.71451	45.92%
S 181.975 Axial†	-66.4	-211.35 µg/L	11.205	-211.35 ppb	11.205	5.30%
Sb 206.836†	5.3	-2.9216 µg/L	3.01721	-2.9216 ppb	3.01721	103.27%
Se 196.026†	-467.8	572.79 µg/L	10.799	572.79 ppb	10.799	1.89%
SiO2†	-152.4	-27.508 µg/L	1.0586	-27.508 ppb	1.0586	3.85%
Si 251.611†	-609.1	-41.411 µg/L	0.5110	-41.411 ppb	0.5110	1.23%
Sn 189.927†	-63.7	23.619 µg/L	1.4387	23.619 ppb	1.4387	6.09%
Sr 421.552†	1998.8	11.882 µg/L	0.1030	11.882 ppb	0.1030	0.87%
Ti 334.940†	15997.3	6.0695 µg/L	0.77238	6.0695 ppb	0.77238	12.73%
Tl 190.801†	20.7	8.3600 µg/L	3.18740	8.3600 ppb	3.18740	38.13%
U 409.014†	167964.5	15159 µg/L	23.9	15159 ppb	23.9	0.16%

QC value within limits for U 409.014 Recovery = 101.06%

V 292.402†	2893.8	-6.8845 µg/L	0.61106	-6.8845 ppb	0.61106	8.88%
Zn 213.857†	2979.3	19.513 µg/L	0.3701	19.513 ppb	0.3701	1.90%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 3/16/2010 14:15:48

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	98681.8	98681.8	102 %		14:16:27
1	Al 396.153Radial†	791.1	895.2	209.10 µg/L	209.10 ppb	14:16:27
1	Ca 317.933Radial†	535.8	140.2	51.021 µg/L	51.021 ppb	14:16:48
1	Fe 238.204 Radial†	13.8	1.5	230.85 µg/L	230.85 ppb	14:16:48
1	K 766.490 Radial†	672389.6	659002.6	307540 µg/L	307540 ppb	14:16:22
1	Mg 279.077 IEC†	1.2	-6.8	89.344 µg/L	89.344 ppb	14:16:48
1	Na 589.592 Radial†	1192.9	989.4	493.81 µg/L	493.81 ppb	14:16:27
1	Sr 421.552†	1723920.8	1690703.1	10051 µg/L	10051 ppb	14:16:22
1	Sc 361.383	2094408.5	2094408.5	100.06 %		14:18:17
1	Y 371.029	1416408.2	1416408.2	98.851 %		14:18:17
1	Ag 328.068†	-7353.2	-6888.4	14.447 µg/L	14.447 ppb	14:18:22
1	As 188.979†	6782.6	6781.6	10004 µg/L	10004 ppb	14:18:22
1	B 249.677†	114492.3	114121.9	5220.5 µg/L	5220.5 ppb	14:18:17
1	Ba 233.527†	703458.1	703029.8	15394 µg/L	15394 ppb	14:18:17
1	Be 313.107†	5088373.7	5086373.9	2984.7 µg/L	2984.7 ppb	14:18:17
1	Cd 226.502†	428448.1	428352.7	10192 µg/L	10192 ppb	14:18:17
1	Co 228.616†	233468.5	233275.6	10010 µg/L	10010 ppb	14:18:17
1	Cr 267.716†	1192875.4	1192054.7	25933 µg/L	25933 ppb	14:18:17
1	Cu 324.752†	3276740.2	3270329.5	21360 µg/L	21360 ppb	14:18:17
1	Mn 257.610†	3337256.3	3335871.6	10026 µg/L	10026 ppb	14:18:17
1	Mo 202.031†	107438.2	107366.4	10624 µg/L	10624 ppb	14:18:17
1	Ni 231.604†	184095.1	183603.9	10286 µg/L	10286 ppb	14:18:17
1	P 214.914†	11782.2	11502.5	17003 µg/L	17003 ppb	14:18:22
1	Pb 220.353†	100441.1	100348.6	26306 µg/L	26306 ppb	14:18:17
1	S 181.975 Axial†	16785.8	16752.9	53316 µg/L	53316 ppb	14:18:22
1	Sb 206.836†	11913.2	11883.1	10481 µg/L	10481 ppb	14:18:22
1	Se 196.026†	10987.9	10953.8	10295 µg/L	10295 ppb	14:18:22
1	SiO2†	568840.9	565708.1	102130 µg/L	102130 ppb	14:18:17
1	Si 251.611†	700803.3	699944.2	47585 µg/L	47585 ppb	14:18:17
1	Sn 189.927†	27684.3	27674.6	10774 µg/L	10774 ppb	14:18:22
1	Ti 334.940†	4321206.8	4319101.7	10100 µg/L	10100 ppb	14:18:17
1	Tl 190.801†	10260.1	10287.9	10137 µg/L	10137 ppb	14:18:22
1	U 409.014†	-2540.8	-2533.4	-230.03 µg/L	-230.03 ppb	14:18:17
1	V 292.402†	896151.0	895482.4	10709 µg/L	10709 ppb	14:18:17
1	Zn 213.857†	669754.7	668330.1	15308 µg/L	15308 ppb	14:18:17
2	Sc RADIAL	99227.5	99227.5	103 %		14:16:59
2	Al 396.153Radial†	807.9	907.3	220.62 µg/L	220.62 ppb	14:16:59
2	Ca 317.933Radial†	550.5	151.7	55.210 µg/L	55.210 ppb	14:17:20
2	Fe 238.204 Radial†	12.3	0.1	207.63 µg/L	207.63 ppb	14:17:20
2	K 766.490 Radial†	672362.4	655349.3	305840 µg/L	305840 ppb	14:16:54
2	Mg 279.077 IEC†	3.5	-4.6	112.96 µg/L	112.96 ppb	14:17:20
2	Na 589.592 Radial†	953.1	749.0	373.85 µg/L	373.85 ppb	14:16:59
2	Sr 421.552†	1725788.1	1683225.9	10007 µg/L	10007 ppb	14:16:54
2	Sc 361.383	2089385.6	2089385.6	99.822 %		14:18:39
2	Y 371.029	1413119.1	1413119.1	98.622 %		14:18:39
2	Ag 328.068†	-7199.9	-6752.5	13.635 µg/L	13.635 ppb	14:18:44
2	As 188.979†	6777.4	6792.7	10020 µg/L	10020 ppb	14:18:44
2	B 249.677†	111616.5	111516.0	5101.0 µg/L	5101.0 ppb	14:18:39
2	Ba 233.527†	684041.7	685268.9	15005 µg/L	15005 ppb	14:18:39
2	Be 313.107†	4943607.3	4953574.4	2906.8 µg/L	2906.8 ppb	14:18:39
2	Cd 226.502†	415843.7	416755.2	9916.5 µg/L	9916.5 ppb	14:18:39
2	Co 228.616†	226279.8	226634.9	9725.4 µg/L	9725.4 ppb	14:18:39
2	Cr 267.716†	1154499.0	1156475.8	25159 µg/L	25159 ppb	14:18:39
2	Cu 324.752†	3189838.7	3191145.5	20843 µg/L	20843 ppb	14:18:39
2	Mn 257.610†	3244580.4	3251048.3	9770.9 µg/L	9770.9 ppb	14:18:39
2	Mo 202.031†	104357.4	104538.2	10344 µg/L	10344 ppb	14:18:39
2	Ni 231.604†	178790.3	178732.0	10013 µg/L	10013 ppb	14:18:39
2	P 214.914†	11635.4	11383.7	16857 µg/L	16857 ppb	14:18:44
2	Pb 220.353†	97684.4	97828.2	25645 µg/L	25645 ppb	14:18:39

2	S 181.975 Axial†	16765.1	16772.5	53378 µg/L	53378 ppb	14:18:44
2	Sb 206.836†	11775.4	11773.7	10387 µg/L	10387 ppb	14:18:44
2	Se 196.026†	10902.5	10894.6	10239 µg/L	10239 ppb	14:18:44
2	SiO2†	556612.3	554824.3	100170 µg/L	100170 ppb	14:18:39
2	Si 251.611†	685339.5	686136.5	46646 µg/L	46646 ppb	14:18:39
2	Sn 189.927†	27024.0	27079.5	10543 µg/L	10543 ppb	14:18:44
2	Ti 334.940†	4200749.2	4208811.1	9841.8 µg/L	9841.8 ppb	14:18:39
2	Tl 190.801†	10259.2	10311.6	10158 µg/L	10158 ppb	14:18:44
2	U 409.014†	-2647.1	-2646.0	-240.25 µg/L	-240.25 ppb	14:18:39
2	V 292.402†	869628.3	871065.4	10417 µg/L	10417 ppb	14:18:39
2	Zn 213.857†	651634.3	651786.5	14929 µg/L	14929 ppb	14:18:39
3	Sc RADIAL	99146.3	99146.3	102 %		14:17:31
3	Al 396.153Radial†	797.8	898.1	232.76 µg/L	232.76 ppb	14:17:31
3	Ca 317.933Radial†	569.3	170.5	62.044 µg/L	62.044 ppb	14:17:52
3	Fe 238.204 Radial†	9.5	-2.7	157.97 µg/L	157.97 ppb	14:17:52
3	K 766.490 Radial†	679640.4	662991.4	309410 µg/L	309410 ppb	14:17:26
3	Mg 279.077 IEC†	3.3	-4.8	97.740 µg/L	97.740 ppb	14:17:52
3	Na 589.592 Radial†	823.9	623.8	311.32 µg/L	311.32 ppb	14:17:31
3	Sr 421.552†	1744621.8	1702990.6	10124 µg/L	10124 ppb	14:17:26
3	Sc 361.383	2074927.8	2074927.8	99.131 %		14:19:01
3	Y 371.029	1405489.5	1405489.5	98.089 %		14:19:01
3	Ag 328.068†	-6195.3	-5789.4	15.820 µg/L	15.820 ppb	14:19:06
3	As 188.979†	5965.2	6020.7	8880.9 µg/L	8880.9 ppb	14:19:06
3	B 249.677†	105435.4	106059.9	4849.4 µg/L	4849.4 ppb	14:19:01
3	Ba 233.527†	631768.9	637312.9	13955 µg/L	13955 ppb	14:19:01
3	Be 313.107†	4524269.0	4565069.7	2678.8 µg/L	2678.8 ppb	14:19:01
3	Cd 226.502†	382998.0	386524.4	9197.1 µg/L	9197.1 ppb	14:19:01
3	Co 228.616†	206754.1	208517.6	8948.0 µg/L	8948.0 ppb	14:19:01
3	Cr 267.716†	1033219.0	1042191.9	22673 µg/L	22673 ppb	14:19:01
3	Cu 324.752†	2919414.1	2940617.5	19207 µg/L	19207 ppb	14:19:01
3	Mn 257.610†	2964203.2	2990862.7	8988.9 µg/L	8988.9 ppb	14:19:01
3	Mo 202.031†	95577.7	96410.0	9539.9 µg/L	9539.9 ppb	14:19:01
3	Ni 231.604†	163249.9	164303.4	9204.7 µg/L	9204.7 ppb	14:19:01
3	P 214.914†	10085.8	9901.8	14546 µg/L	14546 ppb	14:19:06
3	Pb 220.353†	91212.7	91981.7	24113 µg/L	24113 ppb	14:19:01
3	S 181.975 Axial†	14772.3	14879.2	47353 µg/L	47353 ppb	14:19:06
3	Sb 206.836†	10303.5	10371.1	9150.9 µg/L	9150.9 ppb	14:19:06
3	Se 196.026†	9625.3	9682.3	9099.5 µg/L	9099.5 ppb	14:19:06
3	SiO2†	522275.8	524072.2	94614 µg/L	94614 ppb	14:19:01
3	Si 251.611†	642711.8	647919.2	44048 µg/L	44048 ppb	14:19:01
3	Sn 189.927†	22954.8	23163.3	9018.1 µg/L	9018.1 ppb	14:19:06
3	Ti 334.940†	3845959.1	3880234.9	9073.5 µg/L	9073.5 ppb	14:19:01
3	Tl 190.801†	9385.1	9501.4	9359.7 µg/L	9359.7 ppb	14:19:06
3	U 409.014†	-2244.4	-2258.2	-205.04 µg/L	-205.04 ppb	14:19:01
3	V 292.402†	793039.4	799875.7	9565.0 µg/L	9565.0 ppb	14:19:01
3	Zn 213.857†	598338.9	602572.7	13802 µg/L	13802 ppb	14:19:01

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2086240.6	99.672 %	0.4832			0.48%
Sc RADIAL	99018.5	102 %	0.3			0.30%
Y 371.029	1411672.3	98.521 %	0.3909			0.40%
Ag 328.068†	-6476.8	14.634 µg/L	1.1045	14.634 ppb	1.1045	7.55%
Al 396.153Radial†	900.2	220.83 µg/L	11.829	220.83 ppb	11.829	5.36%
As 188.979†	6531.7	9635.0 µg/L	653.12	9635.0 ppb	653.12	6.78%
QC value within limits for As 188.979 Recovery = 96.35%						
B 249.677†	110565.9	5057.0 µg/L	189.40	5057.0 ppb	189.40	3.75%
QC value within limits for B 249.677 Recovery = 101.14%						
Ba 233.527†	675203.9	14785 µg/L	744.5	14785 ppb	744.5	5.04%
QC value within limits for Ba 233.527 Recovery = 98.57%						
Be 313.107†	4868339.3	2856.7 µg/L	158.97	2856.7 ppb	158.97	5.56%
QC value within limits for Be 313.107 Recovery = 95.22%						
Ca 317.933Radial†	154.1	56.092 µg/L	5.5643	56.092 ppb	5.5643	9.92%
Cd 226.502†	410544.1	9768.6 µg/L	513.88	9768.6 ppb	513.88	5.26%
QC value within limits for Cd 226.502 Recovery = 97.69%						
Co 228.616†	222809.4	9561.3 µg/L	549.94	9561.3 ppb	549.94	5.75%
QC value within limits for Co 228.616 Recovery = 95.61%						
Cr 267.716†	1130240.8	24588 µg/L	1703.3	24588 ppb	1703.3	6.93%
QC value within limits for Cr 267.716 Recovery = 98.35%						

Cu 324.752†	3134030.8	20470 µg/L	1124.2	20470 ppb	1124.2	5.49%
QC value within limits for Cu 324.752 Recovery = 102.35%						
Fe 238.204 Radial†	-0.4	198.81 µg/L	37.228	198.81 ppb	37.228	18.73%
K 766.490 Radial†	659114.4	307600 µg/L	1783.8	307600 ppb	1783.8	0.58%
QC value within limits for K 766.490 Radial Recovery = 102.53%						
Mg 279.077 IEC†	-5.4	100.01 µg/L	11.971	100.01 ppb	11.971	11.97%
Mn 257.610†	3192594.2	9595.2 µg/L	540.32	9595.2 ppb	540.32	5.63%
QC value within limits for Mn 257.610 Recovery = 95.95%						
Mo 202.031†	102771.5	10169 µg/L	562.8	10169 ppb	562.8	5.53%
QC value within limits for Mo 202.031 Recovery = 101.69%						
Na 589.592 Radial†	787.4	392.99 µg/L	92.737	392.99 ppb	92.737	23.60%
Ni 231.604†	175546.4	9834.5 µg/L	562.28	9834.5 ppb	562.28	5.72%
QC value within limits for Ni 231.604 Recovery = 98.35%						
P 214.914†	10929.3	16135 µg/L	1378.0	16135 ppb	1378.0	8.54%
QC value within limits for P 214.914 Recovery = 107.57%						
Pb 220.353†	96719.5	25355 µg/L	1125.2	25355 ppb	1125.2	4.44%
QC value within limits for Pb 220.353 Recovery = 101.42%						
S 181.975 Axial†	16134.8	51349 µg/L	3460.9	51349 ppb	3460.9	6.74%
QC value within limits for S 181.975 Axial Recovery = 102.70%						
Sb 206.836†	11342.6	10006 µg/L	742.2	10006 ppb	742.2	7.42%
QC value within limits for Sb 206.836 Recovery = 100.06%						
Se 196.026†	10510.2	9877.7 µg/L	674.53	9877.7 ppb	674.53	6.83%
QC value within limits for Se 196.026 Recovery = 98.78%						
SiO2†	548201.5	98970 µg/L	3898.4	98970 ppb	3898.4	3.94%
QC value within limits for SiO2 Recovery = 92.50%						
Si 251.611†	678000.0	46093 µg/L	1832.2	46093 ppb	1832.2	3.97%
QC value within limits for Si 251.611 Recovery = 92.19%						
Sn 189.927†	25972.5	10112 µg/L	954.2	10112 ppb	954.2	9.44%
QC value within limits for Sn 189.927 Recovery = 101.12%						
Sr 421.552†	1692306.5	10061 µg/L	59.3	10061 ppb	59.3	0.59%
QC value within limits for Sr 421.552 Recovery = 100.61%						
Ti 334.940†	4136049.2	9671.7 µg/L	533.86	9671.7 ppb	533.86	5.52%
QC value within limits for Ti 334.940 Recovery = 96.72%						
Tl 190.801†	10033.6	9884.8 µg/L	454.85	9884.8 ppb	454.85	4.60%
QC value within limits for Tl 190.801 Recovery = 98.85%						
U 409.014†	-2479.2	-225.11 µg/L	18.114	-225.11 ppb	18.114	8.05%
V 292.402†	855474.5	10230 µg/L	594.4	10230 ppb	594.4	5.81%
QC value within limits for V 292.402 Recovery = 102.30%						
Zn 213.857†	640896.4	14679 µg/L	783.2	14679 ppb	783.2	5.34%
QC value within limits for Zn 213.857 Recovery = 97.86%						
All analyte(s) passed QC.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 14:19:16

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	96143.7	96143.7	99.3 %		14:19:49
1	Al 396.153Radial†	11038.5	11231.8	5349.9 µg/L	5349.9 ppb	14:19:49
1	Ca 317.933Radial†	15099.4	14815.4	5391.6 µg/L	5391.6 ppb	14:19:49
1	Fe 238.204 Radial†	455.2	446.3	5290.4 µg/L	5290.4 ppb	14:20:10
1	K 766.490 Radial†	12866.8	12467.7	5818.5 µg/L	5818.5 ppb	14:19:49
1	Mg 279.077 IEC†	419.1	414.0	5461.4 µg/L	5461.4 ppb	14:20:10
1	Na 589.592 Radial†	21569.8	21533.9	10748 µg/L	10748 ppb	14:19:49
1	Sr 421.552†	89244.2	89703.2	533.27 µg/L	533.27 ppb	14:19:49
1	Sc 361.383	2053030.7	2053030.7	98.085 %		14:21:14
1	Y 371.029	1399252.1	1399252.1	97.654 %		14:21:14
1	Ag 328.068†	64579.1	66300.0	536.34 µg/L	536.34 ppb	14:21:19
1	As 188.979†	371.5	382.0	562.27 µg/L	562.27 ppb	14:21:40
1	B 249.677†	11993.7	11928.5	539.45 µg/L	539.45 ppb	14:21:19
1	Ba 233.527†	24289.8	24772.4	542.75 µg/L	542.75 ppb	14:21:19
1	Be 313.107†	899098.1	917808.5	539.06 µg/L	539.06 ppb	14:21:14
1	Cd 226.502†	22186.8	22790.5	541.69 µg/L	541.69 ppb	14:21:19
1	Co 228.616†	12490.1	12685.9	544.39 µg/L	544.39 ppb	14:21:19
1	Cr 267.716†	24782.3	25185.8	548.11 µg/L	548.11 ppb	14:21:19
1	Cu 324.752†	86511.5	83823.7	548.49 µg/L	548.49 ppb	14:21:19
1	Mn 257.610†	178314.2	182482.0	548.39 µg/L	548.39 ppb	14:21:14
1	Mo 202.031†	5731.9	5838.7	577.95 µg/L	577.95 ppb	14:21:40
1	Ni 231.604†	9929.4	9746.3	546.07 µg/L	546.07 ppb	14:21:19
1	P 214.914†	1912.6	1677.6	2733.3 µg/L	2733.3 ppb	14:21:40
1	Pb 220.353†	2093.4	2104.1	552.35 µg/L	552.35 ppb	14:21:40
1	S 181.975 Axial†	364.4	349.0	1110.7 µg/L	1110.7 ppb	14:21:40
1	Sb 206.836†	665.8	656.1	588.43 µg/L	588.43 ppb	14:21:40
1	Se 196.026†	607.4	592.0	568.59 µg/L	568.59 ppb	14:21:40
1	SiO2†	34121.9	32008.2	5778.6 µg/L	5778.6 ppb	14:21:19
1	Si 251.611†	39350.6	39694.7	2698.6 µg/L	2698.6 ppb	14:21:19
1	Sn 189.927†	1425.4	1460.6	569.20 µg/L	569.20 ppb	14:21:40
1	Ti 334.940†	227703.2	232725.5	543.86 µg/L	543.86 ppb	14:21:14
1	Tl 190.801†	508.3	552.3	544.65 µg/L	544.65 ppb	14:21:40
1	U 409.014†	5907.2	6028.3	546.30 µg/L	546.30 ppb	14:21:19
1	V 292.402†	45127.9	45896.5	547.38 µg/L	547.38 ppb	14:21:19
1	Zn 213.857†	24156.1	23618.8	539.94 µg/L	539.94 ppb	14:21:19
2	Sc RADIAL	96569.8	96569.8	99.8 %		14:20:15
2	Al 396.153Radial†	11040.4	11184.6	5327.7 µg/L	5327.7 ppb	14:20:15
2	Ca 317.933Radial†	15064.2	14713.0	5354.4 µg/L	5354.4 ppb	14:20:15
2	Fe 238.204 Radial†	461.5	450.6	5340.9 µg/L	5340.9 ppb	14:20:36
2	K 766.490 Radial†	12643.2	12186.5	5687.2 µg/L	5687.2 ppb	14:20:15
2	Mg 279.077 IEC†	414.4	407.3	5373.6 µg/L	5373.6 ppb	14:20:36
2	Na 589.592 Radial†	21432.8	21300.7	10631 µg/L	10631 ppb	14:20:15
2	Sr 421.552†	89037.8	89099.8	529.69 µg/L	529.69 ppb	14:20:15
2	Sc 361.383	2051314.7	2051314.7	98.003 %		14:21:47
2	Y 371.029	1399692.0	1399692.0	97.684 %		14:21:47
2	Ag 328.068†	64493.4	66267.6	536.08 µg/L	536.08 ppb	14:21:53
2	As 188.979†	361.4	372.1	547.55 µg/L	547.55 ppb	14:22:13
2	B 249.677†	11992.2	11937.2	539.83 µg/L	539.83 ppb	14:21:53
2	Ba 233.527†	24241.5	24743.9	542.13 µg/L	542.13 ppb	14:21:53
2	Be 313.107†	895057.8	914452.7	537.09 µg/L	537.09 ppb	14:21:47
2	Cd 226.502†	22230.1	22853.6	543.18 µg/L	543.18 ppb	14:21:53
2	Co 228.616†	12463.4	12669.3	543.67 µg/L	543.67 ppb	14:21:53
2	Cr 267.716†	24819.4	25244.8	549.40 µg/L	549.40 ppb	14:21:53
2	Cu 324.752†	86217.7	83597.6	547.03 µg/L	547.03 ppb	14:21:53
2	Mn 257.610†	177397.5	181698.8	546.04 µg/L	546.04 ppb	14:21:47
2	Mo 202.031†	5571.8	5680.2	562.26 µg/L	562.26 ppb	14:22:13
2	Ni 231.604†	9903.7	9728.6	545.07 µg/L	545.07 ppb	14:21:53
2	P 214.914†	1880.5	1646.4	2681.4 µg/L	2681.4 ppb	14:22:13
2	Pb 220.353†	2075.2	2087.3	547.91 µg/L	547.91 ppb	14:22:13

2	S 181.975 Axial†	349.3	333.9	1062.7 µg/L	1062.7 ppb	14:22:13
2	Sb 206.836†	645.6	636.1	570.30 µg/L	570.30 ppb	14:22:13
2	Se 196.026†	594.6	579.4	557.00 µg/L	557.00 ppb	14:22:13
2	SiO2†	34063.4	31977.6	5773.1 µg/L	5773.1 ppb	14:21:53
2	Si 251.611†	39209.6	39584.4	2691.1 µg/L	2691.1 ppb	14:21:53
2	Sn 189.927†	1393.7	1429.5	557.09 µg/L	557.09 ppb	14:22:13
2	Ti 334.940†	226609.6	231803.8	541.71 µg/L	541.71 ppb	14:21:47
2	Tl 190.801†	504.5	548.9	541.22 µg/L	541.22 ppb	14:22:13
2	U 409.014†	5811.7	5935.9	537.90 µg/L	537.90 ppb	14:21:53
2	V 292.402†	45121.8	45928.8	547.63 µg/L	547.63 ppb	14:21:53
2	Zn 213.857†	24028.2	23508.9	537.42 µg/L	537.42 ppb	14:21:53
3	Sc RADIAL	97410.2	97410.2	101 %		14:20:41
3	Al 396.153Radial†	11042.1	11090.9	5284.9 µg/L	5284.9 ppb	14:20:41
3	Ca 317.933Radial†	15109.2	14627.4	5323.2 µg/L	5323.2 ppb	14:20:41
3	Fe 238.204 Radial†	462.5	447.6	5304.2 µg/L	5304.2 ppb	14:21:02
3	K 766.490 Radial†	12592.5	12026.8	5612.7 µg/L	5612.7 ppb	14:20:41
3	Mg 279.077 IEC†	416.8	406.2	5356.8 µg/L	5356.8 ppb	14:21:02
3	Na 589.592 Radial†	21538.2	21220.1	10591 µg/L	10591 ppb	14:20:41
3	Sr 421.552†	89376.9	88666.9	527.11 µg/L	527.11 ppb	14:20:41
3	Sc 361.383	2042567.9	2042567.9	97.585 %		14:22:20
3	Y 371.029	1393710.7	1393710.7	97.267 %		14:22:20
3	Ag 328.068†	59730.4	61668.6	498.70 µg/L	498.70 ppb	14:22:26
3	As 188.979†	305.3	316.1	465.05 µg/L	465.05 ppb	14:22:46
3	B 249.677†	10934.0	10905.2	492.88 µg/L	492.88 ppb	14:22:26
3	Ba 233.527†	21624.9	22168.4	485.68 µg/L	485.68 ppb	14:22:26
3	Be 313.107†	811235.9	832467.7	488.94 µg/L	488.94 ppb	14:22:20
3	Cd 226.502†	19667.4	20324.6	483.01 µg/L	483.01 ppb	14:22:26
3	Co 228.616†	10934.2	11156.7	478.71 µg/L	478.71 ppb	14:22:26
3	Cr 267.716†	21207.3	21651.8	471.21 µg/L	471.21 ppb	14:22:26
3	Cu 324.752†	76779.2	74302.3	486.31 µg/L	486.31 ppb	14:22:26
3	Mn 257.610†	161636.4	166322.8	499.83 µg/L	499.83 ppb	14:22:20
3	Mo 202.031†	4590.3	4698.7	465.15 µg/L	465.15 ppb	14:22:46
3	Ni 231.604†	8743.8	8583.2	480.91 µg/L	480.91 ppb	14:22:26
3	P 214.914†	1613.1	1380.7	2245.1 µg/L	2245.1 ppb	14:22:46
3	Pb 220.353†	1753.3	1766.6	463.71 µg/L	463.71 ppb	14:22:46
3	S 181.975 Axial†	317.3	302.6	962.92 µg/L	962.92 ppb	14:22:46
3	Sb 206.836†	550.8	541.7	485.43 µg/L	485.43 ppb	14:22:46
3	Se 196.026†	520.5	506.0	487.94 µg/L	487.94 ppb	14:22:46
3	SiO2†	31146.8	29137.8	5260.4 µg/L	5260.4 ppb	14:22:26
3	Si 251.611†	35648.0	36105.9	2454.6 µg/L	2454.6 ppb	14:22:26
3	Sn 189.927†	1126.5	1161.8	452.85 µg/L	452.85 ppb	14:22:46
3	Ti 334.940†	203810.2	209430.5	489.39 µg/L	489.39 ppb	14:22:20
3	Tl 190.801†	446.2	491.4	484.60 µg/L	484.60 ppb	14:22:46
3	U 409.014†	5034.2	5164.6	467.88 µg/L	467.88 ppb	14:22:26
3	V 292.402†	39193.5	40051.0	477.25 µg/L	477.25 ppb	14:22:26
3	Zn 213.857†	21239.8	20756.5	474.43 µg/L	474.43 ppb	14:22:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2048971.1	97.891 %	0.2681			0.27%
Sc RADIAL	96707.9	99.9 %	0.67			0.67%
Y 371.029	1397551.6	97.535 %	0.2327			0.24%
Ag 328.068†	64745.4	523.71 µg/L	21.660	523.71 ppb	21.660	4.14%
QC value within limits for Ag 328.068 Recovery = 104.74%						
Al 396.153Radial†	11169.1	5320.8 µg/L	33.00	5320.8 ppb	33.00	0.62%
QC value within limits for Al 396.153Radial Recovery = 106.42%						
As 188.979†	356.7	524.95 µg/L	52.399	524.95 ppb	52.399	9.98%
QC value within limits for As 188.979 Recovery = 104.99%						
B 249.677†	11590.3	524.05 µg/L	26.996	524.05 ppb	26.996	5.15%
QC value within limits for B 249.677 Recovery = 104.81%						
Ba 233.527†	23894.9	523.52 µg/L	32.774	523.52 ppb	32.774	6.26%
QC value within limits for Ba 233.527 Recovery = 104.70%						
Be 313.107†	888242.9	521.69 µg/L	28.386	521.69 ppb	28.386	5.44%
QC value within limits for Be 313.107 Recovery = 104.34%						
Ca 317.933Radial†	14718.6	5356.4 µg/L	34.25	5356.4 ppb	34.25	0.64%
QC value within limits for Ca 317.933Radial Recovery = 107.13%						
Cd 226.502†	21989.6	522.63 µg/L	34.319	522.63 ppb	34.319	6.57%
QC value within limits for Cd 226.502 Recovery = 104.53%						
Co 228.616†	12170.6	522.26 µg/L	37.716	522.26 ppb	37.716	7.22%

QC value within limits for Co 228.616 Recovery = 104.45%						
Cr 267.716†	24027.5	522.91 µg/L	44.777	522.91 ppb	44.777	8.56%
QC value within limits for Cr 267.716 Recovery = 104.58%						
Cu 324.752†	80574.5	527.28 µg/L	35.488	527.28 ppb	35.488	6.73%
QC value within limits for Cu 324.752 Recovery = 105.46%						
Fe 238.204 Radial†	448.2	5311.8 µg/L	26.14	5311.8 ppb	26.14	0.49%
QC value within limits for Fe 238.204 Radial Recovery = 106.24%						
K 766.490 Radial†	12227.0	5706.1 µg/L	104.19	5706.1 ppb	104.19	1.83%
QC value greater than the upper limit for K 766.490 Radial Recovery = 114.12%						
Mg 279.077 IEC†	409.1	5397.2 µg/L	56.20	5397.2 ppb	56.20	1.04%
QC value within limits for Mg 279.077 IEC Recovery = 107.94%						
Mn 257.610†	176834.5	531.42 µg/L	27.383	531.42 ppb	27.383	5.15%
QC value within limits for Mn 257.610 Recovery = 106.28%						
Mo 202.031†	5405.9	535.12 µg/L	61.102	535.12 ppb	61.102	11.42%
QC value within limits for Mo 202.031 Recovery = 107.02%						
Na 589.592 Radial†	21351.5	10657 µg/L	81.3	10657 ppb	81.3	0.76%
QC value within limits for Na 589.592 Radial Recovery = 106.57%						
Ni 231.604†	9352.7	524.02 µg/L	37.336	524.02 ppb	37.336	7.12%
QC value within limits for Ni 231.604 Recovery = 104.80%						
P 214.914†	1568.2	2553.2 µg/L	268.15	2553.2 ppb	268.15	10.50%
QC value within limits for P 214.914 Recovery = 102.13%						
Pb 220.353†	1986.0	521.32 µg/L	49.949	521.32 ppb	49.949	9.58%
QC value within limits for Pb 220.353 Recovery = 104.26%						
S 181.975 Axial†	328.5	1045.4 µg/L	75.40	1045.4 ppb	75.40	7.21%
QC value within limits for S 181.975 Axial Recovery = 104.54%						
Sb 206.836†	611.3	548.05 µg/L	54.984	548.05 ppb	54.984	10.03%
QC value within limits for Sb 206.836 Recovery = 109.61%						
Se 196.026†	559.1	537.84 µg/L	43.605	537.84 ppb	43.605	8.11%
QC value within limits for Se 196.026 Recovery = 107.57%						
SiO2†	31041.2	5604.0 µg/L	297.61	5604.0 ppb	297.61	5.31%
QC value within limits for SiO2 Recovery = 104.80%						
Si 251.611†	38461.7	2614.8 µg/L	138.75	2614.8 ppb	138.75	5.31%
QC value within limits for Si 251.611 Recovery = 104.59%						
Sn 189.927†	1350.7	526.38 µg/L	63.967	526.38 ppb	63.967	12.15%
QC value within limits for Sn 189.927 Recovery = 105.28%						
Sr 421.552†	89156.6	530.02 µg/L	3.094	530.02 ppb	3.094	0.58%
QC value within limits for Sr 421.552 Recovery = 106.00%						
Ti 334.940†	224653.3	524.98 µg/L	30.844	524.98 ppb	30.844	5.88%
QC value within limits for Ti 334.940 Recovery = 105.00%						
Tl 190.801†	530.9	523.49 µg/L	33.721	523.49 ppb	33.721	6.44%
QC value within limits for Tl 190.801 Recovery = 104.70%						
U 409.014†	5709.6	517.36 µg/L	43.060	517.36 ppb	43.060	8.32%
QC value within limits for U 409.014 Recovery = 103.47%						
V 292.402†	43958.8	524.09 µg/L	40.562	524.09 ppb	40.562	7.74%
QC value within limits for V 292.402 Recovery = 104.82%						
Zn 213.857†	22628.1	517.26 µg/L	37.115	517.26 ppb	37.115	7.18%
QC value within limits for Zn 213.857 Recovery = 103.45%						
QC Failed. Continue with analysis.						

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

Autosampler Location: 8
 Date Collected: 3/16/2010 14:22:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97273.1	97273.1	101 %		14:23:26
1	Al 396.153Radial†	-101.7	18.1	8.5498 µg/L	8.5498 ppb	14:23:26
1	Ca 317.933Radial†	432.4	44.9	16.346 µg/L	16.346 ppb	14:23:46
1	Fe 238.204 Radial†	11.5	-0.5	-5.6288 µg/L	-5.6288 ppb	14:23:46
1	K 766.490 Radial†	816.1	326.7	152.44 µg/L	152.44 ppb	14:23:26
1	Mg 279.077 IEC†	12.4	4.3	57.123 µg/L	57.123 ppb	14:23:46
1	Na 589.592 Radial†	313.3	131.1	65.452 µg/L	65.452 ppb	14:23:26
1	Sr 421.552†	162.5	22.3	0.1324 µg/L	0.1324 ppb	14:23:26
1	Sc 361.383	2069842.9	2069842.9	98.888 %		14:24:48
1	Y 371.029	1419836.3	1419836.3	99.090 %		14:24:48
1	Ag 328.068†	-462.4	-7.4	-0.0560 µg/L	-0.0560 ppb	14:24:54
1	As 188.979†	-0.2	3.1	4.5320 µg/L	4.5320 ppb	14:25:14
1	B 249.677†	367.1	71.8	3.2621 µg/L	3.2621 ppb	14:25:14
1	Ba 233.527†	4.6	13.1	0.2871 µg/L	0.2871 ppb	14:25:14
1	Be 313.107†	-978.6	169.3	0.0991 µg/L	0.0991 ppb	14:24:54
1	Cd 226.502†	-169.8	-1.1	-0.0254 µg/L	-0.0254 ppb	14:25:14
1	Co 228.616†	55.1	7.7	0.3318 µg/L	0.3318 ppb	14:25:14
1	Cr 267.716†	74.7	-4.7	-0.1022 µg/L	-0.1022 ppb	14:25:14
1	Cu 324.752†	5003.5	683.0	4.4603 µg/L	4.4603 ppb	14:24:54
1	Mn 257.610†	-619.9	60.1	0.1766 µg/L	0.1766 ppb	14:25:14
1	Mo 202.031†	46.8	42.2	4.1769 µg/L	4.1769 ppb	14:25:14
1	Ni 231.604†	374.3	1.6	0.0893 µg/L	0.0893 ppb	14:25:14
1	P 214.914†	275.9	6.7	10.632 µg/L	10.632 ppb	14:25:14
1	Pb 220.353†	39.3	9.5	2.5133 µg/L	2.5133 ppb	14:25:14
1	S 181.975 Axial†	29.8	7.6	24.165 µg/L	24.165 ppb	14:25:14
1	Sb 206.836†	30.3	8.0	7.1667 µg/L	7.1667 ppb	14:25:14
1	Se 196.026†	27.1	0.1	-0.0088 µg/L	-0.0088 ppb	14:25:14
1	SiO2†	2792.7	44.4	8.0127 µg/L	8.0127 ppb	14:25:14
1	Si 251.611†	510.6	92.3	6.2745 µg/L	6.2745 ppb	14:25:14
1	Sn 189.927†	1.9	9.4	3.6485 µg/L	3.6485 ppb	14:25:14
1	Ti 334.940†	-180.6	394.6	0.9185 µg/L	0.9185 ppb	14:24:54
1	Tl 190.801†	-36.9	-3.2	-3.1351 µg/L	-3.1351 ppb	14:25:14
1	U 409.014†	-56.9	-51.7	-4.6952 µg/L	-4.6952 ppb	14:24:54
1	V 292.402†	157.7	47.1	0.5842 µg/L	0.5842 ppb	14:24:54
1	Zn 213.857†	1062.1	65.2	1.4904 µg/L	1.4904 ppb	14:25:14
2	Sc RADIAL	97912.2	97912.2	101 %		14:23:52
2	Al 396.153Radial†	-81.2	39.0	18.545 µg/L	18.545 ppb	14:23:52
2	Ca 317.933Radial†	415.9	25.8	9.3918 µg/L	9.3918 ppb	14:24:12
2	Fe 238.204 Radial†	13.3	1.2	14.332 µg/L	14.332 ppb	14:24:12
2	K 766.490 Radial†	789.4	295.0	137.65 µg/L	137.65 ppb	14:23:52
2	Mg 279.077 IEC†	9.7	1.6	20.668 µg/L	20.668 ppb	14:24:12
2	Na 589.592 Radial†	331.3	146.9	73.326 µg/L	73.326 ppb	14:23:52
2	Sr 421.552†	155.8	14.6	0.0869 µg/L	0.0869 ppb	14:23:52
2	Sc 361.383	2090786.4	2090786.4	99.889 %		14:25:20
2	Y 371.029	1430220.1	1430220.1	99.815 %		14:25:20
2	Ag 328.068†	-437.2	22.5	0.1797 µg/L	0.1797 ppb	14:25:26
2	As 188.979†	0.5	3.7	5.5105 µg/L	5.5105 ppb	14:25:46
2	B 249.677†	371.6	72.6	3.2889 µg/L	3.2889 ppb	14:25:46
2	Ba 233.527†	11.2	19.7	0.4296 µg/L	0.4296 ppb	14:25:46
2	Be 313.107†	-971.7	186.1	0.1090 µg/L	0.1090 ppb	14:25:26
2	Cd 226.502†	-160.3	10.1	0.2390 µg/L	0.2390 ppb	14:25:46
2	Co 228.616†	45.3	-2.7	-0.1163 µg/L	-0.1163 ppb	14:25:46
2	Cr 267.716†	85.1	4.9	0.1065 µg/L	0.1065 ppb	14:25:46
2	Cu 324.752†	5008.9	637.8	4.1686 µg/L	4.1686 ppb	14:25:26
2	Mn 257.610†	-635.3	51.0	0.1526 µg/L	0.1526 ppb	14:25:46
2	Mo 202.031†	38.0	32.9	3.2610 µg/L	3.2610 ppb	14:25:46
2	Ni 231.604†	381.7	5.2	0.2911 µg/L	0.2911 ppb	14:25:46
2	P 214.914†	269.5	-2.6	-4.6575 µg/L	-4.6575 ppb	14:25:46
2	Pb 220.353†	32.6	2.5	0.6481 µg/L	0.6481 ppb	14:25:46

2	S 181.975 Axial†	17.3	-5.2	-16.519 µg/L	-16.519 ppb	14:25:46
2	Sb 206.836†	31.0	8.3	7.4915 µg/L	7.4915 ppb	14:25:46
2	Se 196.026†	21.9	-5.4	-5.0218 µg/L	-5.0218 ppb	14:25:46
2	SiO2†	2769.7	-6.9	-1.2541 µg/L	-1.2541 ppb	14:25:46
2	Si 251.611†	494.6	71.0	4.8282 µg/L	4.8282 ppb	14:25:46
2	Sn 189.927†	7.4	14.9	5.7926 µg/L	5.7926 ppb	14:25:46
2	Ti 334.940†	-231.1	345.9	0.8073 µg/L	0.8073 ppb	14:25:26
2	Tl 190.801†	-31.4	2.7	2.6514 µg/L	2.6514 ppb	14:25:46
2	U 409.014†	42.5	48.4	4.3917 µg/L	4.3917 ppb	14:25:26
2	V 292.402†	84.8	-27.4	-0.2952 µg/L	-0.2952 ppb	14:25:26
2	Zn 213.857†	1056.2	48.5	1.1062 µg/L	1.1062 ppb	14:25:46
3	Sc RADIAL	97435.2	97435.2	101 %		14:24:17
3	Al 396.153Radial†	-99.4	20.5	9.7343 µg/L	9.7343 ppb	14:24:17
3	Ca 317.933Radial†	401.3	13.3	4.8493 µg/L	4.8493 ppb	14:24:38
3	Fe 238.204 Radial†	13.0	1.0	11.319 µg/L	11.319 ppb	14:24:38
3	K 766.490 Radial†	688.4	198.5	92.631 µg/L	92.631 ppb	14:24:17
3	Mg 279.077 IEC†	11.9	3.8	50.715 µg/L	50.715 ppb	14:24:38
3	Na 589.592 Radial†	294.1	111.6	55.687 µg/L	55.687 ppb	14:24:17
3	Sr 421.552†	174.3	33.8	0.2007 µg/L	0.2007 ppb	14:24:17
3	Sc 361.383	2071400.8	2071400.8	98.963 %		14:25:52
3	Y 371.029	1416537.4	1416537.4	98.860 %		14:25:52
3	Ag 328.068†	-444.1	11.4	0.0932 µg/L	0.0932 ppb	14:25:58
3	As 188.979†	-2.4	0.8	1.1894 µg/L	1.1894 ppb	14:26:18
3	B 249.677†	365.9	70.4	3.1890 µg/L	3.1890 ppb	14:26:18
3	Ba 233.527†	2.1	10.6	0.2313 µg/L	0.2313 ppb	14:26:18
3	Be 313.107†	-1030.5	117.6	0.0687 µg/L	0.0687 ppb	14:25:58
3	Cd 226.502†	-157.9	11.0	0.2614 µg/L	0.2614 ppb	14:26:18
3	Co 228.616†	50.9	3.3	0.1439 µg/L	0.1439 ppb	14:26:18
3	Cr 267.716†	76.5	-3.0	-0.0650 µg/L	-0.0650 ppb	14:26:18
3	Cu 324.752†	4919.6	594.5	3.8852 µg/L	3.8852 ppb	14:25:58
3	Mn 257.610†	-644.3	35.9	0.1053 µg/L	0.1053 ppb	14:26:18
3	Mo 202.031†	37.4	32.7	3.2322 µg/L	3.2322 ppb	14:26:18
3	Ni 231.604†	386.9	14.1	0.7904 µg/L	0.7904 ppb	14:26:18
3	P 214.914†	277.9	8.5	13.623 µg/L	13.623 ppb	14:26:18
3	Pb 220.353†	33.0	3.2	0.8333 µg/L	0.8333 ppb	14:26:18
3	S 181.975 Axial†	26.5	4.2	13.428 µg/L	13.428 ppb	14:26:18
3	Sb 206.836†	32.7	10.3	9.2792 µg/L	9.2792 ppb	14:26:18
3	Se 196.026†	28.4	1.4	1.2992 µg/L	1.2992 ppb	14:26:18
3	SiO2†	2763.6	12.8	2.3082 µg/L	2.3082 ppb	14:26:18
3	Si 251.611†	513.6	94.9	6.4527 µg/L	6.4527 ppb	14:26:18
3	Sn 189.927†	-8.3	-0.9	-0.3688 µg/L	-0.3688 ppb	14:26:18
3	Ti 334.940†	-202.7	372.5	0.8670 µg/L	0.8670 ppb	14:25:58
3	Tl 190.801†	-36.0	-2.2	-2.1722 µg/L	-2.1722 ppb	14:26:18
3	U 409.014†	-32.6	-27.2	-2.4694 µg/L	-2.4694 ppb	14:25:58
3	V 292.402†	118.4	7.4	0.1078 µg/L	0.1078 ppb	14:25:58
3	Zn 213.857†	993.5	-4.9	-0.1263 µg/L	-0.1263 ppb	14:26:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2077343.3	99.247 %	0.5574			0.56%
Sc RADIAL	97540.2	101 %	0.3			0.34%
Y 371.029	1422197.9	99.255 %	0.4983			0.50%
Ag 328.068†	8.9	0.0723 µg/L	0.11925	0.0723 ppb	0.11925	164.95%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	25.9	12.276 µg/L	5.4612	12.276 ppb	5.4612	44.49%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.5	3.7439 µg/L	2.26578	3.7439 ppb	2.26578	60.52%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	71.6	3.2467 µg/L	0.05170	3.2467 ppb	0.05170	1.59%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	14.4	0.3160 µg/L	0.10224	0.3160 ppb	0.10224	32.36%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	157.6	0.0923 µg/L	0.02100	0.0923 ppb	0.02100	22.75%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	28.0	10.196 µg/L	5.7901	10.196 ppb	5.7901	56.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.7	0.1583 µg/L	0.15952	0.1583 ppb	0.15952	100.75%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.8	0.1198 µg/L	0.22502	0.1198 ppb	0.22502	187.84%

Cr	267.716†	-0.9	-0.0202 µg/L	0.11133	-0.0202 ppb	0.11133	551.01%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	638.5	4.1714 µg/L	0.28755	4.1714 ppb	0.28755	6.89%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.6	6.6739 µg/L	10.76045	6.6739 ppb	10.76045	161.23%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	273.4	127.57 µg/L	31.154	127.57 ppb	31.154	24.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	3.2	42.835 µg/L	19.4630	42.835 ppb	19.4630	45.44%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	49.0	0.1448 µg/L	0.03630	0.1448 ppb	0.03630	25.06%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	35.9	3.5567 µg/L	0.53731	3.5567 ppb	0.53731	15.11%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	129.9	64.822 µg/L	8.8361	64.822 ppb	8.8361	13.63%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	7.0	0.3903 µg/L	0.36089	0.3903 ppb	0.36089	92.47%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	4.2	6.5325 µg/L	9.80561	6.5325 ppb	9.80561	150.10%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	5.1	1.3316 µg/L	1.02757	1.3316 ppb	1.02757	77.17%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.2	7.0248 µg/L	21.08394	7.0248 ppb	21.08394	300.14%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	8.9	7.9791 µg/L	1.13751	7.9791 ppb	1.13751	14.26%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.3	-1.2438 µg/L	3.33655	-1.2438 ppb	3.33655	268.25%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		16.7	3.0223 µg/L	4.67448	3.0223 ppb	4.67448	154.67%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	86.1	5.8518 µg/L	0.89093	5.8518 ppb	0.89093	15.22%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	7.8	3.0241 µg/L	3.12779	3.0241 ppb	3.12779	103.43%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	23.6	0.1400 µg/L	0.05727	0.1400 ppb	0.05727	40.91%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	371.0	0.8643 µg/L	0.05562	0.8643 ppb	0.05562	6.44%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.9	-0.8853 µg/L	3.10051	-0.8853 ppb	3.10051	350.23%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-10.2	-0.9243 µg/L	4.73639	-0.9243 ppb	4.73639	512.45%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	9.0	0.1323 µg/L	0.44020	0.1323 ppb	0.44020	332.82%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	36.2	0.8234 µg/L	0.84465	0.8234 ppb	0.84465	102.58%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 3/16/2010 14:35:59

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031610A.sif

Batch ID:

Results Data Set: 031610B

Results Library: c:\pe\optimal\Results\Results.mdb
=====

Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 3/16/2010 13:44:38

IEC File: 011510.iec

MSF File:

Method Description:

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

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/16/2010 14:36:01

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	98836.5	98836.5	102 %		14:36:33
1	Al 396.153Radial†	10370.2	10274.6	4894.1 µg/L	4894.1 ppb	14:36:33
1	Ca 317.933Radial†	14110.2	13432.5	4888.4 µg/L	4888.4 ppb	14:36:33
1	Fe 238.204 Radial†	427.7	406.9	4822.9 µg/L	4822.9 ppb	14:36:53

1	K 766.490 Radial†	11236.5	10518.3	4908.7 µg/L	4908.7 ppb	14:36:33
1	Mg 279.077 IEC†	393.9	377.7	4983.6 µg/L	4983.6 ppb	14:36:53
1	Na 589.592 Radial†	20216.7	19617.1	9791.0 µg/L	9791.0 ppb	14:36:33
1	Sr 421.552†	84297.6	82411.2	489.92 µg/L	489.92 ppb	14:36:33
1	Sc 361.383	2089081.4	2089081.4	99.808 %		14:37:57
1	Y 371.029	1424616.3	1424616.3	99.424 %		14:37:57
1	Ag 328.068†	60837.8	61415.2	496.82 µg/L	496.82 ppb	14:38:02
1	As 188.979†	349.2	353.1	519.79 µg/L	519.79 ppb	14:38:23
1	B 249.677†	11212.2	10934.5	494.52 µg/L	494.52 ppb	14:38:02
1	Ba 233.527†	22850.3	22902.8	501.79 µg/L	501.79 ppb	14:38:02
1	Be 313.107†	843840.3	846625.8	497.25 µg/L	497.25 ppb	14:37:57
1	Cd 226.502†	20866.2	21077.0	500.97 µg/L	500.97 ppb	14:38:02
1	Co 228.616†	11722.0	11696.6	501.94 µg/L	501.94 ppb	14:38:02
1	Cr 267.716†	23307.4	23272.1	506.47 µg/L	506.47 ppb	14:38:02
1	Cu 324.752†	81383.5	77163.7	504.91 µg/L	504.91 ppb	14:38:02
1	Mn 257.610†	166969.2	167978.1	504.80 µg/L	504.80 ppb	14:37:57
1	Mo 202.031†	5238.2	5243.2	519.00 µg/L	519.00 ppb	14:38:23
1	Ni 231.604†	9339.5	8980.6	503.16 µg/L	503.16 ppb	14:38:02
1	P 214.914†	1812.2	1543.3	2514.4 µg/L	2514.4 ppb	14:38:23
1	Pb 220.353†	1972.9	1946.5	510.93 µg/L	510.93 ppb	14:38:23
1	S 181.975 Axial†	339.5	317.6	1010.8 µg/L	1010.8 ppb	14:38:23
1	Sb 206.836†	591.8	570.3	511.38 µg/L	511.38 ppb	14:38:23
1	Se 196.026†	566.6	540.4	519.03 µg/L	519.03 ppb	14:38:23
1	SiO2†	32389.2	29671.9	5356.8 µg/L	5356.8 ppb	14:38:02
1	Si 251.611†	37313.5	36961.3	2512.8 µg/L	2512.8 ppb	14:38:02
1	Sn 189.927†	1324.3	1334.3	519.96 µg/L	519.96 ppb	14:38:23
1	Ti 334.940†	211841.7	212827.3	497.36 µg/L	497.36 ppb	14:37:57
1	Tl 190.801†	479.9	514.9	507.66 µg/L	507.66 ppb	14:38:23
1	U 409.014†	5584.2	5600.8	507.57 µg/L	507.57 ppb	14:38:02
1	V 292.402†	42568.2	42538.0	507.21 µg/L	507.21 ppb	14:38:02
1	Zn 213.857†	23034.8	22070.4	504.60 µg/L	504.60 ppb	14:38:02
2	Sc RADIAL	99004.5	99004.5	102 %		14:36:59
2	Al 396.153Radial†	10332.8	10220.8	4868.7 µg/L	4868.7 ppb	14:36:59
2	Ca 317.933Radial†	14124.8	13423.3	4885.0 µg/L	4885.0 ppb	14:36:59
2	Fe 238.204 Radial†	430.9	409.3	4852.1 µg/L	4852.1 ppb	14:37:19
2	K 766.490 Radial†	11178.3	10442.7	4873.4 µg/L	4873.4 ppb	14:36:59
2	Mg 279.077 IEC†	392.8	376.0	4959.9 µg/L	4959.9 ppb	14:37:19
2	Na 589.592 Radial†	20214.1	19581.1	9773.0 µg/L	9773.0 ppb	14:36:59
2	Sr 421.552†	84106.4	82084.3	487.98 µg/L	487.98 ppb	14:36:59
2	Sc 361.383	2095270.2	2095270.2	100.10 %		14:38:30
2	Y 371.029	1432014.3	1432014.3	99.940 %		14:38:30
2	Ag 328.068†	61109.5	61506.7	497.56 µg/L	497.56 ppb	14:38:36
2	As 188.979†	335.1	338.0	497.39 µg/L	497.39 ppb	14:38:56
2	B 249.677†	11269.5	10958.5	495.60 µg/L	495.60 ppb	14:38:36
2	Ba 233.527†	22977.1	22961.8	503.08 µg/L	503.08 ppb	14:38:36
2	Be 313.107†	847681.5	847965.7	498.04 µg/L	498.04 ppb	14:38:30
2	Cd 226.502†	20932.4	21081.4	501.07 µg/L	501.07 ppb	14:38:36
2	Co 228.616†	11803.2	11743.0	503.92 µg/L	503.92 ppb	14:38:36
2	Cr 267.716†	23403.4	23299.0	507.05 µg/L	507.05 ppb	14:38:36
2	Cu 324.752†	81650.8	77189.9	505.08 µg/L	505.08 ppb	14:38:36
2	Mn 257.610†	167972.1	168485.8	506.33 µg/L	506.33 ppb	14:38:30
2	Mo 202.031†	5137.7	5127.2	507.53 µg/L	507.53 ppb	14:38:56
2	Ni 231.604†	9421.1	9034.5	506.18 µg/L	506.18 ppb	14:38:36
2	P 214.914†	1789.5	1515.2	2467.6 µg/L	2467.6 ppb	14:38:56
2	Pb 220.353†	1960.4	1928.2	506.10 µg/L	506.10 ppb	14:38:56
2	S 181.975 Axial†	335.1	312.2	993.60 µg/L	993.60 ppb	14:38:56
2	Sb 206.836†	580.8	557.5	499.79 µg/L	499.79 ppb	14:38:56
2	Se 196.026†	560.9	533.0	512.16 µg/L	512.16 ppb	14:38:56
2	SiO2†	32706.0	29892.5	5396.7 µg/L	5396.7 ppb	14:38:36
2	Si 251.611†	37567.7	37104.9	2522.5 µg/L	2522.5 ppb	14:38:36
2	Sn 189.927†	1297.9	1304.0	508.18 µg/L	508.18 ppb	14:38:56
2	Ti 334.940†	212305.2	212663.4	496.97 µg/L	496.97 ppb	14:38:30
2	Tl 190.801†	480.5	514.1	506.84 µg/L	506.84 ppb	14:38:56
2	U 409.014†	5618.0	5618.0	509.13 µg/L	509.13 ppb	14:38:36
2	V 292.402†	42740.8	42584.4	507.67 µg/L	507.67 ppb	14:38:36
2	Zn 213.857†	23124.0	22091.3	505.07 µg/L	505.07 ppb	14:38:36
3	Sc RADIAL	98781.4	98781.4	102 %		14:37:25
3	Al 396.153Radial†	10333.9	10244.7	4881.7 µg/L	4881.7 ppb	14:37:25
3	Ca 317.933Radial†	14028.2	13359.8	4861.9 µg/L	4861.9 ppb	14:37:25
3	Fe 238.204 Radial†	433.0	412.3	4885.9 µg/L	4885.9 ppb	14:37:45
3	K 766.490 Radial†	11220.3	10508.6	4904.2 µg/L	4904.2 ppb	14:37:25

3	Mg 279.077 IEC†	390.2	374.4	4937.4 µg/L	4937.4 ppb	14:37:45
3	Na 589.592 Radial†	20249.0	19659.9	9812.3 µg/L	9812.3 ppb	14:37:25
3	Sr 421.552†	84112.1	82275.6	489.12 µg/L	489.12 ppb	14:37:25
3	Sc 361.383	2077745.8	2077745.8	99.266 %		14:39:03
3	Y 371.029	1419580.7	1419580.7	99.073 %		14:39:03
3	Ag 328.068†	56985.6	57867.2	467.99 µg/L	467.99 ppb	14:39:09
3	As 188.979†	288.1	293.5	431.85 µg/L	431.85 ppb	14:39:29
3	B 249.677†	10392.6	10170.1	459.70 µg/L	459.70 ppb	14:39:09
3	Ba 233.527†	20740.1	20901.9	457.94 µg/L	457.94 ppb	14:39:09
3	Be 313.107†	778168.7	785081.3	461.11 µg/L	461.11 ppb	14:39:03
3	Cd 226.502†	18814.6	19124.3	454.50 µg/L	454.50 ppb	14:39:09
3	Co 228.616†	10524.0	10553.8	452.84 µg/L	452.84 ppb	14:39:09
3	Cr 267.716†	20281.8	20351.5	442.91 µg/L	442.91 ppb	14:39:09
3	Cu 324.752†	73645.8	69813.7	456.91 µg/L	456.91 ppb	14:39:09
3	Mn 257.610†	154366.9	156195.3	469.39 µg/L	469.39 ppb	14:39:03
3	Mo 202.031†	4283.5	4310.1	426.67 µg/L	426.67 ppb	14:39:29
3	Ni 231.604†	8432.9	8118.4	454.86 µg/L	454.86 ppb	14:39:09
3	P 214.914†	1562.5	1301.7	2116.8 µg/L	2116.8 ppb	14:39:29
3	Pb 220.353†	1694.8	1677.2	440.20 µg/L	440.20 ppb	14:39:29
3	S 181.975 Axial†	296.7	276.3	879.44 µg/L	879.44 ppb	14:39:29
3	Sb 206.836†	510.0	491.1	439.96 µg/L	439.96 ppb	14:39:29
3	Se 196.026†	487.8	464.1	447.58 µg/L	447.58 ppb	14:39:29
3	SiO2†	30169.0	27612.4	4985.0 µg/L	4985.0 ppb	14:39:09
3	Si 251.611†	34426.0	34256.4	2328.9 µg/L	2328.9 ppb	14:39:09
3	Sn 189.927†	1057.3	1072.5	418.05 µg/L	418.05 ppb	14:39:29
3	Ti 334.940†	193739.2	195748.9	457.42 µg/L	457.42 ppb	14:39:03
3	Tl 190.801†	433.9	471.3	464.66 µg/L	464.66 ppb	14:39:29
3	U 409.014†	4890.2	4932.2	446.86 µg/L	446.86 ppb	14:39:09
3	V 292.402†	37965.7	38134.1	454.30 µg/L	454.30 ppb	14:39:09
3	Zn 213.857†	20728.0	19872.4	454.28 µg/L	454.28 ppb	14:39:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2087365.8	99.726 %	0.4246			0.43%
Sc RADIAL	98874.1	102 %	0.1			0.12%
Y 371.029	1425403.8	99.479 %	0.4365			0.44%
Ag 328.068†	60263.0	487.46 µg/L	16.861	487.46 ppb	16.861	3.46%
QC value within limits for Ag 328.068 Recovery = 97.49%						
Al 396.153Radial†	10246.7	4881.5 µg/L	12.71	4881.5 ppb	12.71	0.26%
QC value within limits for Al 396.153Radial Recovery = 97.63%						
As 188.979†	328.2	483.01 µg/L	45.702	483.01 ppb	45.702	9.46%
QC value within limits for As 188.979 Recovery = 96.60%						
B 249.677†	10687.7	483.27 µg/L	20.423	483.27 ppb	20.423	4.23%
QC value within limits for B 249.677 Recovery = 96.65%						
Ba 233.527†	22255.5	487.60 µg/L	25.699	487.60 ppb	25.699	5.27%
QC value within limits for Ba 233.527 Recovery = 97.52%						
Be 313.107†	826557.6	485.46 µg/L	21.100	485.46 ppb	21.100	4.35%
QC value within limits for Be 313.107 Recovery = 97.09%						
Ca 317.933Radial†	13405.2	4878.4 µg/L	14.40	4878.4 ppb	14.40	0.30%
QC value within limits for Ca 317.933Radial Recovery = 97.57%						
Cd 226.502†	20427.6	485.51 µg/L	26.861	485.51 ppb	26.861	5.53%
QC value within limits for Cd 226.502 Recovery = 97.10%						
Co 228.616†	11331.1	486.23 µg/L	28.936	486.23 ppb	28.936	5.95%
QC value within limits for Co 228.616 Recovery = 97.25%						
Cr 267.716†	22307.6	485.48 µg/L	36.863	485.48 ppb	36.863	7.59%
QC value within limits for Cr 267.716 Recovery = 97.10%						
Cu 324.752†	74722.4	488.97 µg/L	27.761	488.97 ppb	27.761	5.68%
QC value within limits for Cu 324.752 Recovery = 97.79%						
Fe 238.204 Radial†	409.5	4853.7 µg/L	31.53	4853.7 ppb	31.53	0.65%
QC value within limits for Fe 238.204 Radial Recovery = 97.07%						
K 766.490 Radial†	10489.9	4895.4 µg/L	19.18	4895.4 ppb	19.18	0.39%
QC value within limits for K 766.490 Radial Recovery = 97.91%						
Mg 279.077 IEC†	376.0	4960.3 µg/L	23.09	4960.3 ppb	23.09	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 99.21%						
Mn 257.610†	164219.7	493.51 µg/L	20.897	493.51 ppb	20.897	4.23%
QC value within limits for Mn 257.610 Recovery = 98.70%						
Mo 202.031†	4893.5	484.40 µg/L	50.323	484.40 ppb	50.323	10.39%
QC value within limits for Mo 202.031 Recovery = 96.88%						
Na 589.592 Radial†	19619.4	9792.1 µg/L	19.70	9792.1 ppb	19.70	0.20%

QC value within limits for Na 589.592 Radial Recovery = 97.92%

Ni 231.604†	8711.1	488.07 µg/L	28.798	488.07 ppb	28.798	5.90%
QC value within limits for Ni 231.604 Recovery = 97.61%						
P 214.914†	1453.4	2366.3 µg/L	217.34	2366.3 ppb	217.34	9.19%
QC value within limits for P 214.914 Recovery = 94.65%						
Pb 220.353†	1850.6	485.74 µg/L	39.516	485.74 ppb	39.516	8.14%
QC value within limits for Pb 220.353 Recovery = 97.15%						
S 181.975 Axial†	302.0	961.26 µg/L	71.383	961.26 ppb	71.383	7.43%
QC value within limits for S 181.975 Axial Recovery = 96.13%						
Sb 206.836†	539.6	483.71 µg/L	38.331	483.71 ppb	38.331	7.92%
QC value within limits for Sb 206.836 Recovery = 96.74%						
Se 196.026†	512.5	492.92 µg/L	39.421	492.92 ppb	39.421	8.00%
QC value within limits for Se 196.026 Recovery = 98.58%						
SiO2†	29058.9	5246.2 µg/L	227.04	5246.2 ppb	227.04	4.33%
QC value within limits for SiO2 Recovery = 98.11%						
Si 251.611†	36107.5	2454.7 µg/L	109.10	2454.7 ppb	109.10	4.44%
QC value within limits for Si 251.611 Recovery = 98.19%						
Sn 189.927†	1236.9	482.06 µg/L	55.747	482.06 ppb	55.747	11.56%
QC value within limits for Sn 189.927 Recovery = 96.41%						
Sr 421.552†	82257.0	489.01 µg/L	0.977	489.01 ppb	0.977	0.20%
QC value within limits for Sr 421.552 Recovery = 97.80%						
Ti 334.940†	207079.9	483.92 µg/L	22.946	483.92 ppb	22.946	4.74%
QC value within limits for Ti 334.940 Recovery = 96.78%						
Tl 190.801†	500.1	493.05 µg/L	24.593	493.05 ppb	24.593	4.99%
QC value within limits for Tl 190.801 Recovery = 98.61%						
U 409.014†	5383.6	487.86 µg/L	35.510	487.86 ppb	35.510	7.28%
QC value within limits for U 409.014 Recovery = 97.57%						
V 292.402†	41085.5	489.72 µg/L	30.682	489.72 ppb	30.682	6.27%
QC value within limits for V 292.402 Recovery = 97.94%						
Zn 213.857†	21344.7	487.98 µg/L	29.186	487.98 ppb	29.186	5.98%
QC value within limits for Zn 213.857 Recovery = 97.60%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 14:39:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97923.2	97923.2	101 %		14:40:10
1	Al 396.153Radial†	-127.0	-6.2	-3.0132 µg/L	-3.0132 ppb	14:40:10
1	Ca 317.933Radial†	379.5	-10.1	-3.6906 µg/L	-3.6906 ppb	14:40:30
1	Fe 238.204 Radial†	13.1	1.0	11.304 µg/L	11.304 ppb	14:40:30
1	K 766.490 Radial†	514.7	23.4	10.898 µg/L	10.898 ppb	14:40:10
1	Mg 279.077 IEC†	8.1	0.0	0.6110 µg/L	0.6110 ppb	14:40:30
1	Na 589.592 Radial†	236.0	52.7	26.312 µg/L	26.312 ppb	14:40:10
1	Sr 421.552†	124.6	-16.2	-0.0965 µg/L	-0.0965 ppb	14:40:10
1	Sc 361.383	2069830.8	2069830.8	98.888 %		14:41:32
1	Y 371.029	1415716.5	1415716.5	98.803 %		14:41:32
1	Ag 328.068†	-548.9	-94.9	-0.7650 µg/L	-0.7650 ppb	14:41:38
1	As 188.979†	-2.5	0.8	1.1284 µg/L	1.1284 ppb	14:41:58
1	B 249.677†	335.6	40.0	1.8096 µg/L	1.8096 ppb	14:41:38
1	Ba 233.527†	-7.7	0.7	0.0133 µg/L	0.0133 ppb	14:41:58
1	Be 313.107†	-1007.1	140.4	0.0824 µg/L	0.0824 ppb	14:41:38
1	Cd 226.502†	-156.5	12.4	0.2920 µg/L	0.2920 ppb	14:41:58
1	Co 228.616†	39.8	-7.8	-0.3333 µg/L	-0.3333 ppb	14:41:58
1	Cr 267.716†	101.8	22.7	0.4934 µg/L	0.4934 ppb	14:41:38
1	Cu 324.752†	4549.2	223.7	1.4630 µg/L	1.4630 ppb	14:41:38
1	Mn 257.610†	-612.1	68.0	0.2049 µg/L	0.2049 ppb	14:41:58
1	Mo 202.031†	29.0	24.2	2.3924 µg/L	2.3924 ppb	14:41:58
1	Ni 231.604†	365.0	-7.8	-0.4362 µg/L	-0.4362 ppb	14:41:58
1	P 214.914†	270.2	0.8	1.1901 µg/L	1.1901 ppb	14:41:58
1	Pb 220.353†	29.1	-0.8	-0.1964 µg/L	-0.1964 ppb	14:41:58
1	S 181.975 Axial†	24.6	2.3	7.3601 µg/L	7.3601 ppb	14:41:58
1	Sb 206.836†	28.1	5.7	5.0982 µg/L	5.0982 ppb	14:41:58
1	Se 196.026†	27.2	0.2	0.2537 µg/L	0.2537 ppb	14:41:58
1	SiO2†	2772.4	23.8	4.2969 µg/L	4.2969 ppb	14:41:38
1	Si 251.611†	434.7	15.5	1.0525 µg/L	1.0525 ppb	14:41:58
1	Sn 189.927†	-2.4	5.1	1.9690 µg/L	1.9690 ppb	14:41:58
1	Ti 334.940†	-488.9	82.8	0.1936 µg/L	0.1936 ppb	14:41:38
1	Tl 190.801†	-32.9	0.8	0.8120 µg/L	0.8120 ppb	14:41:58
1	U 409.014†	2.0	7.8	0.7080 µg/L	0.7080 ppb	14:41:38
1	V 292.402†	58.8	-52.9	-0.6052 µg/L	-0.6052 ppb	14:41:38
1	Zn 213.857†	683.6	-317.5	-7.3122 µg/L	-7.3122 ppb	14:41:58
2	Sc RADIAL	97416.1	97416.1	101 %		14:40:36
2	Al 396.153Radial†	-106.0	14.0	6.6472 µg/L	6.6472 ppb	14:40:36
2	Ca 317.933Radial†	385.8	-2.0	-0.7354 µg/L	-0.7354 ppb	14:40:56
2	Fe 238.204 Radial†	13.2	1.1	13.143 µg/L	13.143 ppb	14:40:56
2	K 766.490 Radial†	484.3	-4.2	-1.9398 µg/L	-1.9398 ppb	14:40:36
2	Mg 279.077 IEC†	10.3	2.2	29.081 µg/L	29.081 ppb	14:40:56
2	Na 589.592 Radial†	221.0	39.0	19.447 µg/L	19.447 ppb	14:40:36
2	Sr 421.552†	148.5	8.2	0.0485 µg/L	0.0485 ppb	14:40:36
2	Sc 361.383	2086144.2	2086144.2	99.667 %		14:42:04
2	Y 371.029	1426251.6	1426251.6	99.538 %		14:42:04
2	Ag 328.068†	-589.9	-131.6	-1.0551 µg/L	-1.0551 ppb	14:42:10
2	As 188.979†	-0.7	2.6	3.7661 µg/L	3.7661 ppb	14:42:30
2	B 249.677†	317.1	18.8	0.8456 µg/L	0.8456 ppb	14:42:10
2	Ba 233.527†	4.0	12.4	0.2722 µg/L	0.2722 ppb	14:42:30
2	Be 313.107†	-987.6	168.0	0.0985 µg/L	0.0985 ppb	14:42:10
2	Cd 226.502†	-171.4	-1.3	-0.0335 µg/L	-0.0335 ppb	14:42:30
2	Co 228.616†	39.2	-8.7	-0.3740 µg/L	-0.3740 ppb	14:42:30
2	Cr 267.716†	66.2	-13.8	-0.3010 µg/L	-0.3010 ppb	14:42:10
2	Cu 324.752†	4518.2	156.6	1.0254 µg/L	1.0254 ppb	14:42:10
2	Mn 257.610†	-612.2	72.7	0.2173 µg/L	0.2173 ppb	14:42:30
2	Mo 202.031†	29.8	24.8	2.4526 µg/L	2.4526 ppb	14:42:30
2	Ni 231.604†	375.3	-0.3	-0.0180 µg/L	-0.0180 ppb	14:42:30
2	P 214.914†	266.0	-5.5	-9.1845 µg/L	-9.1845 ppb	14:42:30
2	Pb 220.353†	33.3	3.3	0.8585 µg/L	0.8585 ppb	14:42:30

2	S 181.975 Axial†	19.4	-3.1	-9.8857 µg/L	-9.8857 ppb	14:42:30
2	Sb 206.836†	33.4	10.8	9.6809 µg/L	9.6809 ppb	14:42:30
2	Se 196.026†	27.2	-0.0	0.0113 µg/L	0.0113 ppb	14:42:30
2	SiO2†	2745.6	-25.0	-4.5104 µg/L	-4.5104 ppb	14:42:10
2	Si 251.611†	444.0	21.4	1.4568 µg/L	1.4568 ppb	14:42:30
2	Sn 189.927†	4.6	12.1	4.7090 µg/L	4.7090 ppb	14:42:30
2	Ti 334.940†	-380.1	195.9	0.4557 µg/L	0.4557 ppb	14:42:10
2	Tl 190.801†	-32.4	1.6	1.6129 µg/L	1.6129 ppb	14:42:30
2	U 409.014†	12.1	17.9	1.6267 µg/L	1.6267 ppb	14:42:10
2	V 292.402†	120.3	8.3	0.1168 µg/L	0.1168 ppb	14:42:10
2	Zn 213.857†	677.0	-329.6	-7.5918 µg/L	-7.5918 ppb	14:42:30
3	Sc RADIAL	98240.0	98240.0	101 %		14:41:01
3	Al 396.153Radial†	-164.8	-43.1	-20.609 µg/L	-20.609 ppb	14:41:01
3	Ca 317.933Radial†	390.4	-0.7	-0.2496 µg/L	-0.2496 ppb	14:41:22
3	Fe 238.204 Radial†	12.5	0.4	4.3734 µg/L	4.3734 ppb	14:41:22
3	K 766.490 Radial†	536.7	43.4	20.244 µg/L	20.244 ppb	14:41:01
3	Mg 279.077 IEC†	13.6	5.4	71.694 µg/L	71.694 ppb	14:41:22
3	Na 589.592 Radial†	220.9	37.1	18.494 µg/L	18.494 ppb	14:41:01
3	Sr 421.552†	125.8	-15.5	-0.0922 µg/L	-0.0922 ppb	14:41:01
3	Sc 361.383	2101049.5	2101049.5	100.38 %		14:42:36
3	Y 371.029	1437937.2	1437937.2	100.35 %		14:42:36
3	Ag 328.068†	-490.1	-28.1	-0.2276 µg/L	-0.2276 ppb	14:42:42
3	As 188.979†	-5.7	-2.4	-3.6107 µg/L	-3.6107 ppb	14:43:02
3	B 249.677†	304.1	3.6	0.1626 µg/L	0.1626 ppb	14:42:42
3	Ba 233.527†	-2.5	5.9	0.1291 µg/L	0.1291 ppb	14:43:02
3	Be 313.107†	-941.4	221.0	0.1297 µg/L	0.1297 ppb	14:42:42
3	Cd 226.502†	-161.4	9.8	0.2310 µg/L	0.2310 ppb	14:43:02
3	Co 228.616†	41.6	-6.6	-0.2822 µg/L	-0.2822 ppb	14:43:02
3	Cr 267.716†	72.6	-7.9	-0.1720 µg/L	-0.1720 ppb	14:42:42
3	Cu 324.752†	4566.2	172.3	1.1262 µg/L	1.1262 ppb	14:42:42
3	Mn 257.610†	-622.5	66.8	0.1962 µg/L	0.1962 ppb	14:43:02
3	Mo 202.031†	32.4	27.1	2.6860 µg/L	2.6860 ppb	14:43:02
3	Ni 231.604†	364.6	-13.7	-0.7696 µg/L	-0.7696 ppb	14:43:02
3	P 214.914†	267.4	-6.0	-10.051 µg/L	-10.051 ppb	14:43:02
3	Pb 220.353†	39.5	9.2	2.4200 µg/L	2.4200 ppb	14:43:02
3	S 181.975 Axial†	25.9	3.2	10.281 µg/L	10.281 ppb	14:43:02
3	Sb 206.836†	29.8	7.0	6.2789 µg/L	6.2789 ppb	14:43:02
3	Se 196.026†	22.4	-5.0	-4.7585 µg/L	-4.7585 ppb	14:43:02
3	SiO2†	2754.3	-35.9	-6.4746 µg/L	-6.4746 ppb	14:42:42
3	Si 251.611†	439.8	14.1	0.9571 µg/L	0.9571 ppb	14:43:02
3	Sn 189.927†	-3.2	4.3	1.6676 µg/L	1.6676 ppb	14:43:02
3	Ti 334.940†	-455.0	123.9	0.2842 µg/L	0.2842 ppb	14:42:42
3	Tl 190.801†	-40.6	-6.4	-6.2256 µg/L	-6.2256 ppb	14:43:02
3	U 409.014†	-34.9	-28.9	-2.6292 µg/L	-2.6292 ppb	14:42:42
3	V 292.402†	81.7	-31.0	-0.3486 µg/L	-0.3486 ppb	14:42:42
3	Zn 213.857†	667.7	-343.7	-7.9163 µg/L	-7.9163 ppb	14:43:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2085674.9	99.645 %	0.7460			0.75%
Sc RADIAL	97859.8	101 %	0.4			0.42%
Y 371.029	1426635.1	99.565 %	0.7757			0.78%
Ag 328.068†	-84.9	-0.6826 µg/L	0.41989	-0.6826 ppb	0.41989	61.52%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-11.7	-5.6584 µg/L	13.81945	-5.6584 ppb	13.81945	244.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.3	0.4279 µg/L	3.73797	0.4279 ppb	3.73797	873.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	20.8	0.9392 µg/L	0.82745	0.9392 ppb	0.82745	88.10%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.3	0.1382 µg/L	0.12965	0.1382 ppb	0.12965	93.81%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	176.5	0.1036 µg/L	0.02406	0.1036 ppb	0.02406	23.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-4.3	-1.5585 µg/L	1.86230	-1.5585 ppb	1.86230	119.49%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1631 µg/L	0.17303	0.1631 ppb	0.17303	106.06%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-7.7	-0.3298 µg/L	0.04598	-0.3298 ppb	0.04598	13.94%

Cr	267.716†	0.3	0.0068 µg/L	0.42635	0.0068 ppb	0.42635	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	184.2	1.2049 µg/L	0.22917	1.2049 ppb	0.22917	19.02%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.8	9.6067 µg/L	4.62456	9.6067 ppb	4.62456	48.14%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	20.9	9.7340 µg/L	11.13749	9.7340 ppb	11.13749	114.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	2.6	33.795 µg/L	35.7751	33.795 ppb	35.7751	105.86%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	69.2	0.2061 µg/L	0.01063	0.2061 ppb	0.01063	5.15%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	25.4	2.5103 µg/L	0.15511	2.5103 ppb	0.15511	6.18%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	42.9	21.418 µg/L	4.2653	21.418 ppb	4.2653	19.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-7.3	-0.4080 µg/L	0.37661	-0.4080 ppb	0.37661	92.32%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-3.6	-6.0152 µg/L	6.25504	-6.0152 ppb	6.25504	103.99%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	3.9	1.0274 µg/L	1.31637	1.0274 ppb	1.31637	128.13%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.8	2.5852 µg/L	10.89844	2.5852 ppb	10.89844	421.57%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	7.8	7.0193 µg/L	2.37938	7.0193 ppb	2.37938	33.90%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.6	-1.4978 µg/L	2.82643	-1.4978 ppb	2.82643	188.70%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-12.3	-2.2294 µg/L	5.73660	-2.2294 ppb	5.73660	257.32%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	17.0	1.1555 µg/L	0.26528	1.1555 ppb	0.26528	22.96%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	7.1	2.7819 µg/L	1.67575	2.7819 ppb	1.67575	60.24%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-7.9	-0.0467 µg/L	0.08252	-0.0467 ppb	0.08252	176.63%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	134.2	0.3111 µg/L	0.13313	0.3111 ppb	0.13313	42.79%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.3	-1.2669 µg/L	4.31300	-1.2669 ppb	4.31300	340.44%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-1.1	-0.0982 µg/L	2.23954	-0.0982 ppb	2.23954	>999.9%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-25.2	-0.2790 µg/L	0.36598	-0.2790 ppb	0.36598	131.17%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-330.3	-7.6068 µg/L	0.30234	-7.6068 ppb	0.30234	3.97%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: LR1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 113

Date Collected: 3/16/2010 14:43:13

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	98821.0	98821.0	102 %		14:43:44
1	Al 396.153Radial†	-178.8	-55.9	-26.396 µg/L	-26.396 ppb	14:43:44
1	Ca 317.933Radial†	535.2	138.9	50.535 µg/L	50.535 ppb	14:44:05
1	Fe 238.204 Radial†	32349.8	31672.5	374610 µg/L	374610 ppb	14:43:44
1	K 766.490 Radial†	215.1	-274.7	-128.19 µg/L	-128.19 ppb	14:43:44
1	Mg 279.077 IEC†	9.1	0.9	-389.76 µg/L	-389.76 ppb	14:44:05
1	Na 589.592 Radial†	195.1	10.5	5.2457 µg/L	5.2457 ppb	14:43:44
1	Sr 421.552†	172.3	29.3	0.1742 µg/L	0.1742 ppb	14:43:44
1	Sc 361.383	2084224.1	2084224.1	99.576 %		14:45:07
1	Y 371.029	1417107.9	1417107.9	98.900 %		14:45:07
1	Ag 328.068†	-3119.9	-2673.0	7.5909 µg/L	7.5909 ppb	14:45:13
1	As 188.979†	-20.0	-16.8	-71.152 µg/L	-71.152 ppb	14:45:33
1	B 249.677†	1596.3	1303.8	-136.31 µg/L	-136.31 ppb	14:45:13
1	Ba 233.527†	526.6	537.3	11.817 µg/L	11.817 ppb	14:45:33
1	Be 313.107†	-1203.6	-49.9	-0.0293 µg/L	-0.0293 ppb	14:45:13
1	Cd 226.502†	1807.9	1986.2	4.8780 µg/L	4.8780 ppb	14:45:13
1	Co 228.616†	498.4	452.5	19.428 µg/L	19.428 ppb	14:45:33
1	Cr 267.716†	-156.8	-237.7	-5.1458 µg/L	-5.1458 ppb	14:45:33
1	Cu 324.752†	-2661.5	-7049.5	24.382 µg/L	24.382 ppb	14:45:13
1	Mn 257.610†	394.3	1082.9	25.431 µg/L	25.431 ppb	14:45:07
1	Mo 202.031†	-126.9	-132.6	1.1124 µg/L	1.1124 ppb	14:45:13
1	Ni 231.604†	290.6	-85.0	0.0781 µg/L	0.0781 ppb	14:45:33
1	P 214.914†	490.7	220.3	66.605 µg/L	66.605 ppb	14:45:33
1	Pb 220.353†	31.1	1.1	6.5378 µg/L	6.5378 ppb	14:45:33
1	S 181.975 Axial†	-11.0	-33.5	-106.76 µg/L	-106.76 ppb	14:45:33
1	Sb 206.836†	30.4	7.8	6.8064 µg/L	6.8064 ppb	14:45:33
1	Se 196.026†	-313.0	-341.6	870.20 µg/L	870.20 ppb	14:45:33
1	SiO2†	2521.1	-247.9	-44.756 µg/L	-44.756 ppb	14:45:13
1	Si 251.611†	-335.5	-761.0	-51.735 µg/L	-51.735 ppb	14:45:13
1	Sn 189.927†	6.7	14.2	3.7517 µg/L	3.7517 ppb	14:45:33
1	Ti 334.940†	-586.1	-11.4	-0.0268 µg/L	-0.0268 ppb	14:45:13
1	Tl 190.801†	-48.3	-14.4	38.883 µg/L	38.883 ppb	14:45:33
1	U 409.014†	842.3	851.7	25.258 µg/L	25.258 ppb	14:45:13
1	V 292.402†	3256.1	3157.6	-10.295 µg/L	-10.295 ppb	14:45:13
1	Zn 213.857†	2607.2	1609.5	19.356 µg/L	19.356 ppb	14:45:33
2	Sc RADIAL	99842.3	99842.3	103 %		14:44:10
2	Al 396.153Radial†	-178.8	-54.0	-25.554 µg/L	-25.554 ppb	14:44:10
2	Ca 317.933Radial†	539.3	137.5	50.047 µg/L	50.047 ppb	14:44:30
2	Fe 238.204 Radial†	33033.7	32011.3	378620 µg/L	378620 ppb	14:44:10
2	K 766.490 Radial†	304.8	-189.9	-88.622 µg/L	-88.622 ppb	14:44:10
2	Mg 279.077 IEC†	7.6	-0.6	-414.47 µg/L	-414.47 ppb	14:44:30
2	Na 589.592 Radial†	164.4	-21.2	-10.605 µg/L	-10.605 ppb	14:44:10
2	Sr 421.552†	162.0	17.6	0.1049 µg/L	0.1049 ppb	14:44:10
2	Sc 361.383	2091219.4	2091219.4	99.910 %		14:45:40
2	Y 371.029	1421954.5	1421954.5	99.238 %		14:45:40
2	Ag 328.068†	-3184.1	-2726.8	7.4846 µg/L	7.4846 ppb	14:45:45
2	As 188.979†	-17.9	-14.7	-68.458 µg/L	-68.458 ppb	14:46:06
2	B 249.677†	1789.5	1491.7	-129.87 µg/L	-129.87 ppb	14:45:45
2	Ba 233.527†	513.2	522.1	11.491 µg/L	11.491 ppb	14:46:06
2	Be 313.107†	-1359.3	-201.7	-0.1185 µg/L	-0.1185 ppb	14:45:45
2	Cd 226.502†	1831.6	2003.9	4.8452 µg/L	4.8452 ppb	14:45:45
2	Co 228.616†	493.2	445.6	19.134 µg/L	19.134 ppb	14:46:06
2	Cr 267.716†	-134.5	-214.8	-4.6475 µg/L	-4.6475 ppb	14:46:06
2	Cu 324.752†	-2689.9	-7069.0	25.009 µg/L	25.009 ppb	14:45:45
2	Mn 257.610†	393.8	1081.1	25.664 µg/L	25.664 ppb	14:45:40
2	Mo 202.031†	-109.5	-114.7	3.0356 µg/L	3.0356 ppb	14:45:45
2	Ni 231.604†	306.4	-70.2	0.9606 µg/L	0.9606 ppb	14:46:06
2	P 214.914†	483.1	211.1	48.045 µg/L	48.045 ppb	14:46:06
2	Pb 220.353†	29.8	-0.4	6.2257 µg/L	6.2257 ppb	14:46:06

2	S 181.975 Axial†	-10.1	-32.6	-103.86 µg/L	-103.86 ppb	14:46:06
2	Sb 206.836†	27.2	4.5	3.8854 µg/L	3.8854 ppb	14:46:06
2	Se 196.026†	-283.9	-311.5	911.29 µg/L	911.29 ppb	14:46:06
2	SiO2†	2523.9	-253.6	-45.778 µg/L	-45.778 ppb	14:45:45
2	Si 251.611†	-329.6	-754.0	-51.259 µg/L	-51.259 ppb	14:45:45
2	Sn 189.927†	6.1	13.5	3.4694 µg/L	3.4694 ppb	14:46:06
2	Ti 334.940†	-618.7	-42.0	-0.0969 µg/L	-0.0969 ppb	14:45:45
2	Tl 190.801†	-37.2	-3.1	50.423 µg/L	50.423 ppb	14:46:06
2	U 409.014†	812.9	819.4	21.773 µg/L	21.773 ppb	14:45:45
2	V 292.402†	3490.7	3381.5	-8.1489 µg/L	-8.1489 ppb	14:45:45
2	Zn 213.857†	2565.2	1558.6	17.993 µg/L	17.993 ppb	14:46:06
3	Sc RADIAL	99677.7	99677.7	103 %		14:44:36
3	Al 396.153Radial†	-155.3	-31.5	-14.776 µg/L	-14.776 ppb	14:44:36
3	Ca 317.933Radial†	528.9	128.2	46.672 µg/L	46.672 ppb	14:44:56
3	Fe 238.204 Radial†	32875.1	31910.2	377420 µg/L	377420 ppb	14:44:36
3	K 766.490 Radial†	294.8	-199.0	-92.893 µg/L	-92.893 ppb	14:44:36
3	Mg 279.077 IEC†	7.7	-0.5	-412.23 µg/L	-412.23 ppb	14:44:56
3	Na 589.592 Radial†	161.9	-23.4	-11.685 µg/L	-11.685 ppb	14:44:36
3	Sr 421.552†	176.2	31.7	0.1884 µg/L	0.1884 ppb	14:44:36
3	Sc 361.383	2105079.9	2105079.9	100.57 %		14:46:12
3	Y 371.029	1432585.5	1432585.5	99.980 %		14:46:12
3	Ag 328.068†	-2786.9	-2310.8	10.699 µg/L	10.699 ppb	14:46:18
3	As 188.979†	-17.2	-13.9	-67.117 µg/L	-67.117 ppb	14:46:38
3	B 249.677†	1598.6	1290.2	-138.40 µg/L	-138.40 ppb	14:46:18
3	Ba 233.527†	433.9	439.9	9.6824 µg/L	9.6824 ppb	14:46:38
3	Be 313.107†	-1273.7	-107.6	-0.0633 µg/L	-0.0633 ppb	14:46:18
3	Cd 226.502†	1605.4	1766.9	-0.6542 µg/L	-0.6542 ppb	14:46:18
3	Co 228.616†	416.2	365.8	15.702 µg/L	15.702 ppb	14:46:38
3	Cr 267.716†	-104.3	-183.9	-3.9778 µg/L	-3.9778 ppb	14:46:38
3	Cu 324.752†	-1793.0	-6159.5	30.724 µg/L	30.724 ppb	14:46:18
3	Mn 257.610†	355.9	1040.9	25.472 µg/L	25.472 ppb	14:46:12
3	Mo 202.031†	-121.5	-125.9	1.8831 µg/L	1.8831 ppb	14:46:18
3	Ni 231.604†	295.1	-83.4	0.2080 µg/L	0.2080 ppb	14:46:38
3	P 214.914†	452.0	177.0	-8.1559 µg/L	-8.1559 ppb	14:46:38
3	Pb 220.353†	20.5	-9.8	3.7501 µg/L	3.7501 ppb	14:46:38
3	S 181.975 Axial†	-14.7	-37.1	-118.10 µg/L	-118.10 ppb	14:46:38
3	Sb 206.836†	25.2	2.4	1.9419 µg/L	1.9419 ppb	14:46:38
3	Se 196.026†	-243.8	-269.8	946.68 µg/L	946.68 ppb	14:46:38
3	SiO2†	2566.6	-227.8	-41.125 µg/L	-41.125 ppb	14:46:18
3	Si 251.611†	-232.9	-655.6	-44.573 µg/L	-44.573 ppb	14:46:18
3	Sn 189.927†	16.4	23.7	7.4439 µg/L	7.4439 ppb	14:46:38
3	Ti 334.940†	-491.8	88.3	0.2077 µg/L	0.2077 ppb	14:46:18
3	Tl 190.801†	-49.7	-15.3	38.380 µg/L	38.380 ppb	14:46:38
3	U 409.014†	646.8	648.9	6.4562 µg/L	6.4562 ppb	14:46:18
3	V 292.402†	3078.4	2948.6	-13.131 µg/L	-13.131 ppb	14:46:18
3	Zn 213.857†	2219.2	1197.7	9.7345 µg/L	9.7345 ppb	14:46:38

Mean Data: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2093507.8	100.02 %		0.507			0.51%
Sc RADIAL	99447.0	103 %		0.6			0.55%
Y 371.029	1423882.6	99.373 %		0.5525			0.56%
Ag 328.068†	-2570.2	8.5913 µg/L		1.82565	8.5913 ppb	1.82565	21.25%
Al 396.153Radial†	-47.1	-22.242 µg/L		6.4792	-22.242 ppb	6.4792	29.13%
As 188.979†	-15.1	-68.909 µg/L		2.0548	-68.909 ppb	2.0548	2.98%
B 249.677†	1361.9	-134.86 µg/L		4.443	-134.86 ppb	4.443	3.29%
Ba 233.527†	499.7	10.997 µg/L		1.1498	10.997 ppb	1.1498	10.46%
Be 313.107†	-119.7	-0.0704 µg/L		0.04500	-0.0704 ppb	0.04500	63.96%
Ca 317.933Radial†	134.9	49.085 µg/L		2.1034	49.085 ppb	2.1034	4.29%
Cd 226.502†	1919.0	3.0230 µg/L		3.18456	3.0230 ppb	3.18456	105.34%
Co 228.616†	421.3	18.088 µg/L		2.0714	18.088 ppb	2.0714	11.45%
Cr 267.716†	-212.1	-4.5904 µg/L		0.58607	-4.5904 ppb	0.58607	12.77%
Cu 324.752†	-6759.3	26.705 µg/L		3.4949	26.705 ppb	3.4949	13.09%
Fe 238.204 Radial†	31864.6	376880 µg/L		2057.4	376880 ppb	2057.4	0.55%
K 766.490 Radial†	-221.2	-103.24 µg/L		21.719	-103.24 ppb	21.719	21.04%
Mg 279.077 IEC†	-0.1	-405.49 µg/L		13.665	-405.49 ppb	13.665	3.37%
Mn 257.610†	1068.3	25.522 µg/L		0.1245	25.522 ppb	0.1245	0.49%
Mo 202.031†	-124.4	2.0104 µg/L		0.96787	2.0104 ppb	0.96787	48.14%
Na 589.592 Radial†	-11.4	-5.6815 µg/L		9.47860	-5.6815 ppb	9.47860	166.83%

Ni 231.604†	-79.6	0.4156 µg/L	0.47650	0.4156 ppb	0.47650	114.66%
P 214.914†	202.8	35.498 µg/L	38.9276	35.498 ppb	38.9276	109.66%
Pb 220.353†	-3.0	5.5045 µg/L	1.52739	5.5045 ppb	1.52739	27.75%
S 181.975 Axial†	-34.4	-109.57 µg/L	7.528	-109.57 ppb	7.528	6.87%
Sb 206.836†	4.9	4.2112 µg/L	2.44856	4.2112 ppb	2.44856	58.14%
Se 196.026†	-307.6	909.39 µg/L	38.277	909.39 ppb	38.277	4.21%
SiO2†	-243.1	-43.886 µg/L	2.4454	-43.886 ppb	2.4454	5.57%
Si 251.611†	-723.5	-49.189 µg/L	4.0046	-49.189 ppb	4.0046	8.14%
Sn 189.927†	17.2	4.8883 µg/L	2.21766	4.8883 ppb	2.21766	45.37%
Sr 421.552†	26.2	0.1558 µg/L	0.04465	0.1558 ppb	0.04465	28.65%
Ti 334.940†	11.6	0.0280 µg/L	0.15950	0.0280 ppb	0.15950	569.88%
Tl 190.801†	-10.9	42.562 µg/L	6.8126	42.562 ppb	6.8126	16.01%
U 409.014†	773.4	17.829 µg/L	10.0021	17.829 ppb	10.0021	56.10%
V 292.402†	3162.6	-10.525 µg/L	2.4992	-10.525 ppb	2.4992	23.74%
Zn 213.857†	1455.3	15.695 µg/L	5.2065	15.695 ppb	5.2065	33.17%

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 14:46:48

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	100002.2	100002.2	103 %		14:47:20
1	Al 396.153Radial†	10332.5	10119.8	4820.0 µg/L	4820.0 ppb	14:47:20
1	Ca 317.933Radial†	14133.6	13294.1	4838.0 µg/L	4838.0 ppb	14:47:20
1	Fe 238.204 Radial†	442.3	416.2	4933.0 µg/L	4933.0 ppb	14:47:40
1	K 766.490 Radial†	11169.4	10325.1	4818.5 µg/L	4818.5 ppb	14:47:20
1	Mg 279.077 IEC†	391.4	370.8	4892.3 µg/L	4892.3 ppb	14:47:40
1	Na 589.592 Radial†	20261.8	19430.0	9697.6 µg/L	9697.6 ppb	14:47:20
1	Sr 421.552†	84170.7	81326.2	483.47 µg/L	483.47 ppb	14:47:20
1	Sc 361.383	2066641.5	2066641.5	98.736 %		14:48:44
1	Y 371.029	1412477.4	1412477.4	98.577 %		14:48:44
1	Ag 328.068†	61390.7	62637.1	506.69 µg/L	506.69 ppb	14:48:49
1	As 188.979†	349.1	356.8	525.22 µg/L	525.22 ppb	14:49:10
1	B 249.677†	11270.0	11115.0	502.67 µg/L	502.67 ppb	14:48:49
1	Ba 233.527†	23001.0	23304.0	510.58 µg/L	510.58 ppb	14:48:49
1	Be 313.107†	843291.4	855250.1	502.32 µg/L	502.32 ppb	14:48:44
1	Cd 226.502†	21022.1	21461.9	510.11 µg/L	510.11 ppb	14:48:49
1	Co 228.616†	11785.4	11888.3	510.17 µg/L	510.17 ppb	14:48:49
1	Cr 267.716†	23536.2	23757.4	517.03 µg/L	517.03 ppb	14:48:49
1	Cu 324.752†	81807.9	78478.9	513.52 µg/L	513.52 ppb	14:48:49
1	Mn 257.610†	167086.9	169913.7	510.63 µg/L	510.63 ppb	14:48:44
1	Mo 202.031†	5263.5	5325.8	527.18 µg/L	527.18 ppb	14:49:10
1	Ni 231.604†	9383.0	9126.2	511.32 µg/L	511.32 ppb	14:48:49
1	P 214.914†	1823.7	1574.6	2565.5 µg/L	2565.5 ppb	14:49:10
1	Pb 220.353†	1974.7	1969.8	517.04 µg/L	517.04 ppb	14:49:10
1	S 181.975 Axial†	336.2	318.0	1012.0 µg/L	1012.0 ppb	14:49:10
1	Sb 206.836†	588.1	572.9	513.78 µg/L	513.78 ppb	14:49:10
1	Se 196.026†	567.9	547.9	526.47 µg/L	526.47 ppb	14:49:10
1	SiO2†	32606.5	30244.3	5460.2 µg/L	5460.2 ppb	14:48:49
1	Si 251.611†	37492.2	37548.2	2552.7 µg/L	2552.7 ppb	14:48:49
1	Sn 189.927†	1323.2	1347.6	525.15 µg/L	525.15 ppb	14:49:10
1	Ti 334.940†	210964.0	214243.0	500.67 µg/L	500.67 ppb	14:48:44
1	Tl 190.801†	487.8	528.2	520.65 µg/L	520.65 ppb	14:49:10
1	U 409.014†	5653.2	5731.4	519.43 µg/L	519.43 ppb	14:48:49
1	V 292.402†	42793.6	43229.3	515.45 µg/L	515.45 ppb	14:48:49
1	Zn 213.857†	23185.4	22473.4	513.83 µg/L	513.83 ppb	14:48:49
2	Sc RADIAL	99966.1	99966.1	103 %		14:47:46
2	Al 396.153Radial†	10273.1	10065.8	4794.5 µg/L	4794.5 ppb	14:47:46
2	Ca 317.933Radial†	14142.8	13307.9	4843.0 µg/L	4843.0 ppb	14:47:46
2	Fe 238.204 Radial†	441.1	415.1	4920.8 µg/L	4920.8 ppb	14:48:06
2	K 766.490 Radial†	11149.8	10310.1	4811.5 µg/L	4811.5 ppb	14:47:46
2	Mg 279.077 IEC†	390.5	370.1	4882.2 µg/L	4882.2 ppb	14:48:06
2	Na 589.592 Radial†	20227.3	19403.8	9684.5 µg/L	9684.5 ppb	14:47:46
2	Sr 421.552†	84211.8	81395.4	483.89 µg/L	483.89 ppb	14:47:46
2	Sc 361.383	2071164.5	2071164.5	98.952 %		14:49:17
2	Y 371.029	1413074.0	1413074.0	98.618 %		14:49:17
2	Ag 328.068†	61209.6	62318.3	504.13 µg/L	504.13 ppb	14:49:23
2	As 188.979†	344.6	351.5	517.31 µg/L	517.31 ppb	14:49:43
2	B 249.677†	11263.6	11083.6	501.25 µg/L	501.25 ppb	14:49:23
2	Ba 233.527†	23001.4	23253.5	509.47 µg/L	509.47 ppb	14:49:23
2	Be 313.107†	843189.8	853282.2	501.16 µg/L	501.16 ppb	14:49:17
2	Cd 226.502†	21025.2	21418.5	509.08 µg/L	509.08 ppb	14:49:23
2	Co 228.616†	11793.6	11870.5	509.40 µg/L	509.40 ppb	14:49:23
2	Cr 267.716†	23441.7	23609.9	513.82 µg/L	513.82 ppb	14:49:23
2	Cu 324.752†	81544.7	78032.0	510.60 µg/L	510.60 ppb	14:49:23
2	Mn 257.610†	167292.2	169751.6	510.14 µg/L	510.14 ppb	14:49:17
2	Mo 202.031†	5156.4	5205.9	515.32 µg/L	515.32 ppb	14:49:43
2	Ni 231.604†	9416.1	9139.0	512.04 µg/L	512.04 ppb	14:49:23
2	P 214.914†	1805.9	1552.6	2529.1 µg/L	2529.1 ppb	14:49:43
2	Pb 220.353†	1972.7	1963.4	515.34 µg/L	515.34 ppb	14:49:43

2	S 181.975 Axial†	340.3	321.4	1022.7 µg/L	1022.7 ppb	14:49:43
2	Sb 206.836†	583.1	566.6	507.97 µg/L	507.97 ppb	14:49:43
2	Se 196.026†	561.1	539.7	518.78 µg/L	518.78 ppb	14:49:43
2	SiO2†	32606.6	30172.4	5447.2 µg/L	5447.2 ppb	14:49:23
2	Si 251.611†	37482.7	37455.7	2546.4 µg/L	2546.4 ppb	14:49:23
2	Sn 189.927†	1293.5	1314.7	512.31 µg/L	512.31 ppb	14:49:43
2	Ti 334.940†	211443.1	214260.5	500.71 µg/L	500.71 ppb	14:49:17
2	Tl 190.801†	482.8	522.0	514.64 µg/L	514.64 ppb	14:49:43
2	U 409.014†	5557.8	5622.5	509.53 µg/L	509.53 ppb	14:49:23
2	V 292.402†	42859.4	43201.1	515.02 µg/L	515.02 ppb	14:49:23
2	Zn 213.857†	23126.3	22362.5	511.28 µg/L	511.28 ppb	14:49:23
3	Sc RADIAL	99184.3	99184.3	102 %		14:48:12
3	Al 396.153Radial†	10349.2	10218.5	4869.3 µg/L	4869.3 ppb	14:48:12
3	Ca 317.933Radial†	14209.2	13480.7	4905.9 µg/L	4905.9 ppb	14:48:12
3	Fe 238.204 Radial†	440.6	418.0	4953.1 µg/L	4953.1 ppb	14:48:32
3	K 766.490 Radial†	11166.9	10411.8	4859.0 µg/L	4859.0 ppb	14:48:12
3	Mg 279.077 IEC†	390.8	373.4	4924.6 µg/L	4924.6 ppb	14:48:32
3	Na 589.592 Radial†	20383.4	19710.4	9837.5 µg/L	9837.5 ppb	14:48:12
3	Sr 421.552†	84696.1	82510.7	490.52 µg/L	490.52 ppb	14:48:12
3	Sc 361.383	2085274.6	2085274.6	99.626 %		14:49:50
3	Y 371.029	1422624.2	1422624.2	99.285 %		14:49:50
3	Ag 328.068†	56927.7	57601.8	465.85 µg/L	465.85 ppb	14:49:56
3	As 188.979†	286.7	291.0	428.11 µg/L	428.11 ppb	14:50:16
3	B 249.677†	10409.3	10149.1	458.70 µg/L	458.70 ppb	14:49:56
3	Ba 233.527†	20676.0	20762.1	454.87 µg/L	454.87 ppb	14:49:56
3	Be 313.107†	785177.0	789285.5	463.57 µg/L	463.57 ppb	14:49:50
3	Cd 226.502†	18801.8	19043.0	452.55 µg/L	452.55 ppb	14:49:56
3	Co 228.616†	10512.7	10504.1	450.70 µg/L	450.70 ppb	14:49:56
3	Cr 267.716†	20227.8	20223.6	440.13 µg/L	440.13 ppb	14:49:56
3	Cu 324.752†	73452.9	69352.1	453.91 µg/L	453.91 ppb	14:49:56
3	Mn 257.610†	156317.2	157591.4	473.60 µg/L	473.60 ppb	14:49:50
3	Mo 202.031†	4267.5	4278.4	423.54 µg/L	423.54 ppb	14:50:16
3	Ni 231.604†	8361.0	8015.5	449.09 µg/L	449.09 ppb	14:49:56
3	P 214.914†	1551.1	1284.5	2088.5 µg/L	2088.5 ppb	14:50:16
3	Pb 220.353†	1682.8	1658.9	435.40 µg/L	435.40 ppb	14:50:16
3	S 181.975 Axial†	290.8	269.4	857.37 µg/L	857.37 ppb	14:50:16
3	Sb 206.836†	500.3	479.5	429.59 µg/L	429.59 ppb	14:50:16
3	Se 196.026†	490.7	465.3	448.89 µg/L	448.89 ppb	14:50:16
3	SiO2†	29961.9	27294.8	4927.7 µg/L	4927.7 ppb	14:49:56
3	Si 251.611†	34218.1	33922.6	2306.2 µg/L	2306.2 ppb	14:49:56
3	Sn 189.927†	1056.3	1067.7	416.19 µg/L	416.19 ppb	14:50:16
3	Ti 334.940†	195556.5	196868.4	460.04 µg/L	460.04 ppb	14:49:50
3	Tl 190.801†	430.9	466.6	460.20 µg/L	460.20 ppb	14:50:16
3	U 409.014†	4887.2	4911.4	444.96 µg/L	444.96 ppb	14:49:56
3	V 292.402†	37901.0	37931.1	451.86 µg/L	451.86 ppb	14:49:56
3	Zn 213.857†	20722.2	19791.2	452.44 µg/L	452.44 ppb	14:49:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2074360.2	99.104 %	0.4643			0.47%
Sc RADIAL	99717.5	103 %	0.5			0.46%
Y 371.029	1416058.5	98.827 %	0.3974			0.40%
Ag 328.068†	60852.4	492.22 µg/L	22.876	492.22 ppb	22.876	4.65%
QC value within limits for Ag 328.068 Recovery = 98.44%						
Al 396.153Radial†	10134.7	4828.0 µg/L	38.01	4828.0 ppb	38.01	0.79%
QC value within limits for Al 396.153Radial Recovery = 96.56%						
As 188.979†	333.1	490.22 µg/L	53.930	490.22 ppb	53.930	11.00%
QC value within limits for As 188.979 Recovery = 98.04%						
B 249.677†	10782.6	487.54 µg/L	24.986	487.54 ppb	24.986	5.12%
QC value within limits for B 249.677 Recovery = 97.51%						
Ba 233.527†	22439.8	491.64 µg/L	31.846	491.64 ppb	31.846	6.48%
QC value within limits for Ba 233.527 Recovery = 98.33%						
Be 313.107†	832605.9	489.02 µg/L	22.042	489.02 ppb	22.042	4.51%
QC value within limits for Be 313.107 Recovery = 97.80%						
Ca 317.933Radial†	13360.9	4862.3 µg/L	37.84	4862.3 ppb	37.84	0.78%
QC value within limits for Ca 317.933Radial Recovery = 97.25%						
Cd 226.502†	20641.1	490.58 µg/L	32.941	490.58 ppb	32.941	6.71%
QC value within limits for Cd 226.502 Recovery = 98.12%						
Co 228.616†	11420.9	490.09 µg/L	34.117	490.09 ppb	34.117	6.96%

QC value within limits for Co 228.616 Recovery = 98.02%					
Cr 267.716†	22530.3	490.32 µg/L	43.500	490.32 ppb	8.87%
QC value within limits for Cr 267.716 Recovery = 98.06%					
Cu 324.752†	75287.7	492.67 µg/L	33.603	492.67 ppb	6.82%
QC value within limits for Cu 324.752 Recovery = 98.53%					
Fe 238.204 Radial†	416.4	4935.6 µg/L	16.29	4935.6 ppb	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 98.71%					
K 766.490 Radial†	10349.0	4829.7 µg/L	25.64	4829.7 ppb	0.53%
QC value within limits for K 766.490 Radial Recovery = 96.59%					
Mg 279.077 IEC†	371.4	4899.7 µg/L	22.15	4899.7 ppb	0.45%
QC value within limits for Mg 279.077 IEC Recovery = 97.99%					
Mn 257.610†	165752.2	498.12 µg/L	21.243	498.12 ppb	4.26%
QC value within limits for Mn 257.610 Recovery = 99.62%					
Mo 202.031†	4936.7	488.68 µg/L	56.724	488.68 ppb	11.61%
QC value within limits for Mo 202.031 Recovery = 97.74%					
Na 589.592 Radial†	19514.7	9739.9 µg/L	84.83	9739.9 ppb	0.87%
QC value within limits for Na 589.592 Radial Recovery = 97.40%					
Ni 231.604†	8760.2	490.82 µg/L	36.136	490.82 ppb	7.36%
QC value within limits for Ni 231.604 Recovery = 98.16%					
P 214.914†	1470.6	2394.4 µg/L	265.52	2394.4 ppb	11.09%
QC value within limits for P 214.914 Recovery = 95.77%					
Pb 220.353†	1864.1	489.26 µg/L	46.652	489.26 ppb	9.54%
QC value within limits for Pb 220.353 Recovery = 97.85%					
S 181.975 Axial†	302.9	964.03 µg/L	92.529	964.03 ppb	9.60%
QC value within limits for S 181.975 Axial Recovery = 96.40%					
Sb 206.836†	539.7	483.78 µg/L	47.023	483.78 ppb	9.72%
QC value within limits for Sb 206.836 Recovery = 96.76%					
Se 196.026†	517.6	498.05 µg/L	42.745	498.05 ppb	8.58%
QC value within limits for Se 196.026 Recovery = 99.61%					
SiO2†	29237.1	5278.3 µg/L	303.76	5278.3 ppb	5.75%
QC value within limits for SiO2 Recovery = 98.71%					
Si 251.611†	36308.8	2468.4 µg/L	140.53	2468.4 ppb	5.69%
QC value within limits for Si 251.611 Recovery = 98.74%					
Sn 189.927†	1243.3	484.55 µg/L	59.551	484.55 ppb	12.29%
QC value within limits for Sn 189.927 Recovery = 96.91%					
Sr 421.552†	81744.1	485.96 µg/L	3.952	485.96 ppb	0.81%
QC value within limits for Sr 421.552 Recovery = 97.19%					
Ti 334.940†	208457.3	487.14 µg/L	23.470	487.14 ppb	4.82%
QC value within limits for Ti 334.940 Recovery = 97.43%					
Tl 190.801†	505.6	498.50 µg/L	33.301	498.50 ppb	6.68%
QC value within limits for Tl 190.801 Recovery = 99.70%					
U 409.014†	5421.8	491.31 µg/L	40.441	491.31 ppb	8.23%
QC value within limits for U 409.014 Recovery = 98.26%					
V 292.402†	41453.8	494.11 µg/L	36.590	494.11 ppb	7.41%
QC value within limits for V 292.402 Recovery = 98.82%					
Zn 213.857†	21542.4	492.51 µg/L	34.729	492.51 ppb	7.05%
QC value within limits for Zn 213.857 Recovery = 98.50%					

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 14:50:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97547.7	97547.7	101 %		14:50:56
1	Al 396.153Radial†	-149.7	-29.2	-13.973 µg/L	-13.973 ppb	14:50:56
1	Ca 317.933Radial†	369.7	-18.5	-6.7321 µg/L	-6.7321 ppb	14:51:16
1	Fe 238.204 Radial†	13.5	1.4	16.924 µg/L	16.924 ppb	14:51:16
1	K 766.490 Radial†	498.1	8.9	4.1566 µg/L	4.1566 ppb	14:50:56
1	Mg 279.077 IEC†	11.8	3.8	49.563 µg/L	49.563 ppb	14:51:16
1	Na 589.592 Radial†	188.5	6.5	3.2264 µg/L	3.2264 ppb	14:50:56
1	Sr 421.552†	104.6	-35.7	-0.2120 µg/L	-0.2120 ppb	14:50:56
1	Sc 361.383	2086857.2	2086857.2	99.701 %		14:52:18
1	Y 371.029	1429226.5	1429226.5	99.746 %		14:52:18
1	Ag 328.068†	-536.8	-78.2	-0.6312 µg/L	-0.6312 ppb	14:52:24
1	As 188.979†	-1.4	1.9	2.7720 µg/L	2.7720 ppb	14:52:44
1	B 249.677†	300.3	1.8	0.0731 µg/L	0.0731 ppb	14:52:24
1	Ba 233.527†	1.3	9.8	0.2124 µg/L	0.2124 ppb	14:52:44
1	Be 313.107†	-1115.7	39.8	0.0233 µg/L	0.0233 ppb	14:52:24
1	Cd 226.502†	-174.2	-4.1	-0.1005 µg/L	-0.1005 ppb	14:52:44
1	Co 228.616†	51.4	3.5	0.1514 µg/L	0.1514 ppb	14:52:44
1	Cr 267.716†	70.7	-9.3	-0.2028 µg/L	-0.2028 ppb	14:52:24
1	Cu 324.752†	4402.6	39.1	0.2586 µg/L	0.2586 ppb	14:52:24
1	Mn 257.610†	-624.9	60.2	0.1786 µg/L	0.1786 ppb	14:52:44
1	Mo 202.031†	16.2	11.1	1.1017 µg/L	1.1017 ppb	14:52:44
1	Ni 231.604†	366.1	-9.7	-0.5435 µg/L	-0.5435 ppb	14:52:44
1	P 214.914†	267.2	-4.4	-7.3949 µg/L	-7.3949 ppb	14:52:44
1	Pb 220.353†	36.5	6.4	1.6946 µg/L	1.6946 ppb	14:52:44
1	S 181.975 Axial†	19.7	-2.8	-8.8508 µg/L	-8.8508 ppb	14:52:44
1	Sb 206.836†	27.9	5.2	4.6824 µg/L	4.6824 ppb	14:52:44
1	Se 196.026†	15.0	-12.3	-11.517 µg/L	-11.517 ppb	14:52:44
1	SiO2†	2691.1	-80.6	-14.546 µg/L	-14.546 ppb	14:52:24
1	Si 251.611†	417.6	-5.2	-0.3539 µg/L	-0.3539 ppb	14:52:44
1	Sn 189.927†	-2.8	4.6	1.8062 µg/L	1.8062 ppb	14:52:44
1	Ti 334.940†	-499.9	75.8	0.1733 µg/L	0.1733 ppb	14:52:24
1	Tl 190.801†	-29.6	4.4	4.2914 µg/L	4.2914 ppb	14:52:44
1	U 409.014†	-56.5	-50.9	-4.6213 µg/L	-4.6213 ppb	14:52:24
1	V 292.402†	51.2	-60.9	-0.7183 µg/L	-0.7183 ppb	14:52:24
1	Zn 213.857†	667.6	-339.3	-7.8125 µg/L	-7.8125 ppb	14:52:44
2	Sc RADIAL	97055.0	97055.0	100 %		14:51:22
2	Al 396.153Radial†	-121.6	-1.9	-0.9577 µg/L	-0.9577 ppb	14:51:22
2	Ca 317.933Radial†	380.0	-6.3	-2.2941 µg/L	-2.2941 ppb	14:51:42
2	Fe 238.204 Radial†	12.2	0.2	2.8206 µg/L	2.8206 ppb	14:51:42
2	K 766.490 Radial†	479.4	-7.3	-3.3854 µg/L	-3.3854 ppb	14:51:22
2	Mg 279.077 IEC†	4.7	-3.3	-43.939 µg/L	-43.939 ppb	14:51:42
2	Na 589.592 Radial†	181.4	0.3	0.1724 µg/L	0.1724 ppb	14:51:22
2	Sr 421.552†	140.8	1.0	0.0062 µg/L	0.0062 ppb	14:51:22
2	Sc 361.383	2077661.3	2077661.3	99.262 %		14:52:50
2	Y 371.029	1420720.2	1420720.2	99.152 %		14:52:50
2	Ag 328.068†	-539.7	-83.5	-0.6702 µg/L	-0.6702 ppb	14:52:56
2	As 188.979†	-4.4	-1.1	-1.6927 µg/L	-1.6927 ppb	14:53:16
2	B 249.677†	318.7	21.8	0.9863 µg/L	0.9863 ppb	14:52:56
2	Ba 233.527†	-0.8	7.6	0.1664 µg/L	0.1664 ppb	14:53:16
2	Be 313.107†	-1103.5	47.1	0.0276 µg/L	0.0276 ppb	14:52:56
2	Cd 226.502†	-174.3	-5.0	-0.1205 µg/L	-0.1205 ppb	14:53:16
2	Co 228.616†	39.5	-8.3	-0.3556 µg/L	-0.3556 ppb	14:53:16
2	Cr 267.716†	99.2	19.7	0.4278 µg/L	0.4278 ppb	14:52:56
2	Cu 324.752†	4429.3	85.6	0.5595 µg/L	0.5595 ppb	14:52:56
2	Mn 257.610†	-618.9	63.5	0.1939 µg/L	0.1939 ppb	14:53:16
2	Mo 202.031†	18.9	13.9	1.3776 µg/L	1.3776 ppb	14:53:16
2	Ni 231.604†	360.3	-14.0	-0.7820 µg/L	-0.7820 ppb	14:53:16
2	P 214.914†	269.9	-0.5	-0.8297 µg/L	-0.8297 ppb	14:53:16
2	Pb 220.353†	30.7	0.7	0.1922 µg/L	0.1922 ppb	14:53:16

2	S 181.975 Axial†	26.1	3.7	11.792 µg/L	11.792 ppb	14:53:16
2	Sb 206.836†	27.8	5.2	4.6869 µg/L	4.6869 ppb	14:53:16
2	Se 196.026†	19.4	-7.7	-7.2315 µg/L	-7.2315 ppb	14:53:16
2	SiO2†	2751.8	-7.5	-1.3548 µg/L	-1.3548 ppb	14:52:56
2	Si 251.611†	424.1	3.2	0.2163 µg/L	0.2163 ppb	14:53:16
2	Sn 189.927†	-8.0	-0.6	-0.2455 µg/L	-0.2455 ppb	14:53:16
2	Ti 334.940†	-505.5	68.0	0.1624 µg/L	0.1624 ppb	14:52:56
2	Tl 190.801†	-34.6	-0.7	-0.6733 µg/L	-0.6733 ppb	14:53:16
2	U 409.014†	49.2	55.3	5.0241 µg/L	5.0241 ppb	14:52:56
2	V 292.402†	116.8	5.3	0.0793 µg/L	0.0793 ppb	14:52:56
2	Zn 213.857†	675.8	-328.0	-7.5467 µg/L	-7.5467 ppb	14:53:16
3	Sc RADIAL	96786.0	96786.0	100.0 %		14:51:48
3	Al 396.153Radial†	-137.9	-18.6	-8.9198 µg/L	-8.9198 ppb	14:51:48
3	Ca 317.933Radial†	363.6	-21.7	-7.8937 µg/L	-7.8937 ppb	14:52:08
3	Fe 238.204 Radial†	12.5	0.5	6.4442 µg/L	6.4442 ppb	14:52:08
3	K 766.490 Radial†	483.8	-1.5	-0.7189 µg/L	-0.7189 ppb	14:51:48
3	Mg 279.077 IEC†	8.8	0.8	11.225 µg/L	11.225 ppb	14:52:08
3	Na 589.592 Radial†	196.1	15.5	7.7391 µg/L	7.7391 ppb	14:51:48
3	Sr 421.552†	118.2	-21.2	-0.1259 µg/L	-0.1259 ppb	14:51:48
3	Sc 361.383	2080927.0	2080927.0	99.418 %		14:53:22
3	Y 371.029	1422051.9	1422051.9	99.245 %		14:53:22
3	Ag 328.068†	-437.6	20.0	0.1568 µg/L	0.1568 ppb	14:53:28
3	As 188.979†	-1.2	2.1	3.0511 µg/L	3.0511 ppb	14:53:48
3	B 249.677†	334.6	37.2	1.6845 µg/L	1.6845 ppb	14:53:28
3	Ba 233.527†	-9.0	-0.6	-0.0141 µg/L	-0.0141 ppb	14:53:48
3	Be 313.107†	-996.4	156.6	0.0919 µg/L	0.0919 ppb	14:53:28
3	Cd 226.502†	-168.1	1.5	0.0357 µg/L	0.0357 ppb	14:53:48
3	Co 228.616†	44.1	-3.7	-0.1573 µg/L	-0.1573 ppb	14:53:48
3	Cr 267.716†	73.6	-6.2	-0.1347 µg/L	-0.1347 ppb	14:53:28
3	Cu 324.752†	4500.5	150.2	0.9823 µg/L	0.9823 ppb	14:53:28
3	Mn 257.610†	-632.9	50.3	0.1509 µg/L	0.1509 ppb	14:53:48
3	Mo 202.031†	21.3	16.3	1.6166 µg/L	1.6166 ppb	14:53:48
3	Ni 231.604†	368.0	-6.7	-0.3775 µg/L	-0.3775 ppb	14:53:48
3	P 214.914†	264.9	-5.9	-9.9023 µg/L	-9.9023 ppb	14:53:48
3	Pb 220.353†	40.1	10.2	2.6764 µg/L	2.6764 ppb	14:53:48
3	S 181.975 Axial†	23.2	0.8	2.5857 µg/L	2.5857 ppb	14:53:48
3	Sb 206.836†	27.2	4.6	4.1501 µg/L	4.1501 ppb	14:53:48
3	Se 196.026†	21.7	-5.5	-5.1181 µg/L	-5.1181 ppb	14:53:48
3	SiO2†	2703.6	-60.3	-10.883 µg/L	-10.883 ppb	14:53:28
3	Si 251.611†	427.3	5.7	0.3860 µg/L	0.3860 ppb	14:53:48
3	Sn 189.927†	-5.8	1.6	0.6373 µg/L	0.6373 ppb	14:53:48
3	Ti 334.940†	-460.4	114.2	0.2660 µg/L	0.2660 ppb	14:53:28
3	Tl 190.801†	-31.5	2.5	2.4208 µg/L	2.4208 ppb	14:53:48
3	U 409.014†	-18.3	-12.5	-1.1396 µg/L	-1.1396 ppb	14:53:28
3	V 292.402†	56.0	-56.0	-0.6512 µg/L	-0.6512 ppb	14:53:28
3	Zn 213.857†	676.9	-328.0	-7.5523 µg/L	-7.5523 ppb	14:53:48

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2081815.1	99.460 %	0.2227			0.22%
Sc RADIAL	97129.6	100 %	0.4			0.40%
Y 371.029	1423999.5	99.381 %	0.3193			0.32%
Ag 328.068†	-47.2	-0.3815 µg/L	0.46662	-0.3815 ppb	0.46662	122.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-16.6	-7.9500 µg/L	6.56148	-7.9500 ppb	6.56148	82.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.9	1.3768 µg/L	2.66191	1.3768 ppb	2.66191	193.35%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	20.3	0.9146 µg/L	0.80808	0.9146 ppb	0.80808	88.35%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.6	0.1216 µg/L	0.11974	0.1216 ppb	0.11974	98.48%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	81.2	0.0476 µg/L	0.03843	0.0476 ppb	0.03843	80.70%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-15.5	-5.6400 µg/L	2.95526	-5.6400 ppb	2.95526	52.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.5	-0.0618 µg/L	0.08498	-0.0618 ppb	0.08498	137.58%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.8	-0.1205 µg/L	0.25553	-0.1205 ppb	0.25553	212.04%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	1.4	0.0301 µg/L	0.34613	0.0301 ppb	0.34613 >999.9%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	91.6	0.6002 µg/L	0.36356	0.6002 ppb	0.36356 60.58%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	0.7	8.7296 µg/L	7.32427	8.7296 ppb	7.32427 83.90%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	0.0	0.0174 µg/L	3.82453	0.0174 ppb	3.82453 >999.9%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	0.4	5.6161 µg/L	47.00261	5.6161 ppb	47.00261 836.93%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	58.0	0.1745 µg/L	0.02178	0.1745 ppb	0.02178 12.48%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	13.8	1.3653 µg/L	0.25767	1.3653 ppb	0.25767 18.87%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	7.4	3.7126 µg/L	3.80675	3.7126 ppb	3.80675 102.53%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-10.1	-0.5677 µg/L	0.20335	-0.5677 ppb	0.20335 35.82%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-3.6	-6.0423 µg/L	4.68511	-6.0423 ppb	4.68511 77.54%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	5.8	1.5211 µg/L	1.25115	1.5211 ppb	1.25115 82.25%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	0.6	1.8421 µg/L	10.34123	1.8421 ppb	10.34123 561.37%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	5.0	4.5065 µg/L	0.30863	4.5065 ppb	0.30863 6.85%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-8.5	-7.9556 µg/L	3.26035	-7.9556 ppb	3.26035 40.98%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	-49.5	-8.9278 µg/L	6.80936	-8.9278 ppb	6.80936 76.27%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	1.2	0.0828 µg/L	0.38757	0.0828 ppb	0.38757 468.24%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	1.9	0.7327 µg/L	1.02917	0.7327 ppb	1.02917 140.47%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	-18.6	-0.1106 µg/L	0.10987	-0.1106 ppb	0.10987 99.38%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	86.0	0.2006 µg/L	0.05693	0.2006 ppb	0.05693 28.38%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	2.1	2.0129 µg/L	2.50739	2.0129 ppb	2.50739 124.56%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-2.7	-0.2456 µg/L	4.88446	-0.2456 ppb	4.88446 >999.9%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	-37.2	-0.4301 µg/L	0.44240	-0.4301 ppb	0.44240 102.87%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-331.7	-7.6372 µg/L	0.15187	-7.6372 ppb	0.15187 1.99%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: 1202047699|955132|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 301
 Date Collected: 3/16/2010 14:53:58
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202047699|955132|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98540.4	98540.4	102 %		14:54:31
1	Al 396.153Radial†	-134.0	-12.3	-5.8858 µg/L	-5.8858 ppb	14:54:31
1	Ca 317.933Radial†	375.6	-16.3	-5.9446 µg/L	-5.9446 ppb	14:54:51
1	Fe 238.204 Radial†	13.3	1.1	12.749 µg/L	12.749 ppb	14:54:51
1	K 766.490 Radial†	510.8	16.4	7.6351 µg/L	7.6351 ppb	14:54:31
1	Mg 279.077 IEC†	10.3	2.2	28.472 µg/L	28.472 ppb	14:54:51
1	Na 589.592 Radial†	186.1	2.2	1.0839 µg/L	1.0839 ppb	14:54:31
1	Sr 421.552†	132.3	-9.4	-0.0561 µg/L	-0.0561 ppb	14:54:31
1	Sc 361.383	2085522.1	2085522.1	99.638 %		14:55:53
1	Y 371.029	1424456.3	1424456.3	99.413 %		14:55:53
1	Ag 328.068†	-572.0	-113.9	-0.9147 µg/L	-0.9147 ppb	14:55:59
1	As 188.979†	-1.7	1.6	2.3290 µg/L	2.3290 ppb	14:56:19
1	B 249.677†	327.2	29.1	1.3139 µg/L	1.3139 ppb	14:55:59
1	Ba 233.527†	-0.2	8.2	0.1795 µg/L	0.1795 ppb	14:56:19
1	Be 313.107†	-1092.5	62.4	0.0366 µg/L	0.0366 ppb	14:55:59
1	Cd 226.502†	-178.4	-8.4	-0.2020 µg/L	-0.2020 ppb	14:56:19
1	Co 228.616†	46.7	-1.2	-0.0524 µg/L	-0.0524 ppb	14:56:19
1	Cr 267.716†	99.4	19.5	0.4249 µg/L	0.4249 ppb	14:55:59
1	Cu 324.752†	4382.0	21.3	0.1416 µg/L	0.1416 ppb	14:55:59
1	Mn 257.610†	-668.5	16.0	0.0469 µg/L	0.0469 ppb	14:56:19
1	Mo 202.031†	12.6	7.5	0.7403 µg/L	0.7403 ppb	14:56:19
1	Ni 231.604†	372.3	-3.3	-0.1848 µg/L	-0.1848 ppb	14:56:19
1	P 214.914†	283.9	12.5	20.799 µg/L	20.799 ppb	14:56:19
1	Pb 220.353†	33.6	3.6	0.9365 µg/L	0.9365 ppb	14:56:19
1	S 181.975 Axial†	19.3	-3.2	-10.201 µg/L	-10.201 ppb	14:56:19
1	Sb 206.836†	34.3	11.7	10.471 µg/L	10.471 ppb	14:56:19
1	Se 196.026†	31.1	3.9	3.6436 µg/L	3.6436 ppb	14:56:19
1	SiO2†	2919.7	150.6	27.180 µg/L	27.180 ppb	14:55:59
1	Si 251.611†	570.3	148.3	10.080 µg/L	10.080 ppb	14:56:19
1	Sn 189.927†	-6.9	0.5	0.1839 µg/L	0.1839 ppb	14:56:19
1	Ti 334.940†	-544.6	30.7	0.0694 µg/L	0.0694 ppb	14:55:59
1	Tl 190.801†	-26.5	7.5	7.3486 µg/L	7.3486 ppb	14:56:19
1	U 409.014†	-36.2	-30.6	-2.7759 µg/L	-2.7759 ppb	14:55:59
1	V 292.402†	95.7	-16.2	-0.1895 µg/L	-0.1895 ppb	14:55:59
1	Zn 213.857†	686.4	-320.0	-7.3686 µg/L	-7.3686 ppb	14:56:19
2	Sc RADIAL	98254.6	98254.6	102 %		14:54:57
2	Al 396.153Radial†	-98.8	21.9	10.453 µg/L	10.453 ppb	14:54:57
2	Ca 317.933Radial†	374.8	-16.1	-5.8442 µg/L	-5.8442 ppb	14:55:17
2	Fe 238.204 Radial†	12.7	0.6	6.8367 µg/L	6.8367 ppb	14:55:17
2	K 766.490 Radial†	408.3	-83.1	-38.790 µg/L	-38.790 ppb	14:54:57
2	Mg 279.077 IEC†	6.1	-2.0	-26.336 µg/L	-26.336 ppb	14:55:17
2	Na 589.592 Radial†	162.7	-20.3	-10.132 µg/L	-10.132 ppb	14:54:57
2	Sr 421.552†	157.0	15.2	0.0904 µg/L	0.0904 ppb	14:54:57
2	Sc 361.383	2089779.8	2089779.8	99.841 %		14:56:25
2	Y 371.029	1425083.3	1425083.3	99.457 %		14:56:25
2	Ag 328.068†	-527.2	-67.8	-0.5460 µg/L	-0.5460 ppb	14:56:31
2	As 188.979†	-2.4	0.8	1.2108 µg/L	1.2108 ppb	14:56:51
2	B 249.677†	348.4	49.6	2.2480 µg/L	2.2480 ppb	14:56:31
2	Ba 233.527†	-7.5	0.9	0.0190 µg/L	0.0190 ppb	14:56:51
2	Be 313.107†	-1089.6	67.5	0.0396 µg/L	0.0396 ppb	14:56:31
2	Cd 226.502†	-166.0	4.3	0.1005 µg/L	0.1005 ppb	14:56:51
2	Co 228.616†	41.5	-6.5	-0.2788 µg/L	-0.2788 ppb	14:56:51
2	Cr 267.716†	90.4	10.3	0.2230 µg/L	0.2230 ppb	14:56:31
2	Cu 324.752†	4343.4	-26.3	-0.1707 µg/L	-0.1707 ppb	14:56:31
2	Mn 257.610†	-663.3	22.6	0.0701 µg/L	0.0701 ppb	14:56:51
2	Mo 202.031†	16.5	11.4	1.1330 µg/L	1.1330 ppb	14:56:51
2	Ni 231.604†	368.3	-8.0	-0.4505 µg/L	-0.4505 ppb	14:56:51
2	P 214.914†	273.5	1.6	2.6240 µg/L	2.6240 ppb	14:56:51
2	Pb 220.353†	31.9	1.8	0.4651 µg/L	0.4651 ppb	14:56:51

2	S 181.975 Axial†	22.7	0.2	0.5568 µg/L	0.5568 ppb	14:56:51
2	Sb 206.836†	24.4	1.7	1.5227 µg/L	1.5227 ppb	14:56:51
2	Se 196.026†	22.9	-4.3	-4.0412 µg/L	-4.0412 ppb	14:56:51
2	SiO2†	2862.0	86.9	15.681 µg/L	15.681 ppb	14:56:31
2	Si 251.611†	583.6	160.4	10.905 µg/L	10.905 ppb	14:56:51
2	Sn 189.927†	-4.1	3.3	1.3033 µg/L	1.3033 ppb	14:56:51
2	Ti 334.940†	-563.9	12.5	0.0312 µg/L	0.0312 ppb	14:56:31
2	Tl 190.801†	-38.0	-4.0	-3.8659 µg/L	-3.8659 ppb	14:56:51
2	U 409.014†	-12.1	-6.3	-0.5748 µg/L	-0.5748 ppb	14:56:31
2	V 292.402†	87.3	-24.8	-0.2856 µg/L	-0.2856 ppb	14:56:31
2	Zn 213.857†	695.6	-312.2	-7.1842 µg/L	-7.1842 ppb	14:56:51
3	Sc RADIAL	97902.5	97902.5	101 %		14:55:22
3	Al 396.153Radial†	-123.7	-3.0	-1.4355 µg/L	-1.4355 ppb	14:55:22
3	Ca 317.933Radial†	378.0	-11.6	-4.2120 µg/L	-4.2120 ppb	14:55:43
3	Fe 238.204 Radial†	13.7	1.6	19.199 µg/L	19.199 ppb	14:55:43
3	K 766.490 Radial†	480.3	-10.5	-4.8869 µg/L	-4.8869 ppb	14:55:22
3	Mg 279.077 IEC†	10.1	2.0	25.795 µg/L	25.795 ppb	14:55:43
3	Na 589.592 Radial†	203.6	20.7	10.308 µg/L	10.308 ppb	14:55:22
3	Sr 421.552†	97.0	-43.6	-0.2590 µg/L	-0.2590 ppb	14:55:22
3	Sc 361.383	2094407.8	2094407.8	100.06 %		14:56:57
3	Y 371.029	1427929.7	1427929.7	99.655 %		14:56:57
3	Ag 328.068†	-595.3	-134.7	-1.0795 µg/L	-1.0795 ppb	14:57:03
3	As 188.979†	-2.0	1.3	1.9043 µg/L	1.9043 ppb	14:57:24
3	B 249.677†	317.4	17.9	0.8017 µg/L	0.8017 ppb	14:57:03
3	Ba 233.527†	-11.3	-2.9	-0.0633 µg/L	-0.0633 ppb	14:57:24
3	Be 313.107†	-1079.8	79.7	0.0468 µg/L	0.0468 ppb	14:57:03
3	Cd 226.502†	-180.0	-9.3	-0.2226 µg/L	-0.2226 ppb	14:57:24
3	Co 228.616†	39.7	-8.4	-0.3617 µg/L	-0.3617 ppb	14:57:24
3	Cr 267.716†	88.7	8.4	0.1835 µg/L	0.1835 ppb	14:57:03
3	Cu 324.752†	4408.8	29.3	0.1952 µg/L	0.1952 ppb	14:57:03
3	Mn 257.610†	-674.5	12.9	0.0381 µg/L	0.0381 ppb	14:57:24
3	Mo 202.031†	16.5	11.4	1.1272 µg/L	1.1272 ppb	14:57:24
3	Ni 231.604†	379.8	2.6	0.1486 µg/L	0.1486 ppb	14:57:24
3	P 214.914†	283.1	10.5	17.401 µg/L	17.401 ppb	14:57:24
3	Pb 220.353†	21.4	-8.8	-2.3088 µg/L	-2.3088 ppb	14:57:24
3	S 181.975 Axial†	19.8	-2.7	-8.6031 µg/L	-8.6031 ppb	14:57:24
3	Sb 206.836†	24.8	2.1	1.8935 µg/L	1.8935 ppb	14:57:24
3	Se 196.026†	18.9	-8.4	-7.8819 µg/L	-7.8819 ppb	14:57:24
3	SiO2†	2875.9	94.4	17.037 µg/L	17.037 ppb	14:57:03
3	Si 251.611†	588.7	164.2	11.166 µg/L	11.166 ppb	14:57:24
3	Sn 189.927†	-9.2	-1.7	-0.6736 µg/L	-0.6736 ppb	14:57:24
3	Ti 334.940†	-476.6	100.9	0.2339 µg/L	0.2339 ppb	14:57:03
3	Tl 190.801†	-40.2	-6.1	-5.9269 µg/L	-5.9269 ppb	14:57:24
3	U 409.014†	30.4	36.2	3.2838 µg/L	3.2838 ppb	14:57:03
3	V 292.402†	119.2	6.8	0.0907 µg/L	0.0907 ppb	14:57:03
3	Zn 213.857†	692.9	-316.4	-7.2889 µg/L	-7.2889 ppb	14:57:24

Mean Data: 1202047699|955132|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2089903.2	99.847 %		0.2123			0.21%
Sc RADIAL	98232.5	101 %		0.3			0.33%
Y 371.029	1425823.1	99.508 %		0.1292			0.13%
Ag 328.068†	-105.5	-0.8467 µg/L		0.27320	-0.8467 ppb	0.27320	32.26%
Al 396.153Radial†	2.2	1.0437 µg/L		8.44665	1.0437 ppb	8.44665	809.28%
As 188.979†	1.2	1.8147 µg/L		0.56445	1.8147 ppb	0.56445	31.10%
B 249.677†	32.2	1.4545 µg/L		0.73336	1.4545 ppb	0.73336	50.42%
Ba 233.527†	2.1	0.0451 µg/L		0.12347	0.0451 ppb	0.12347	273.98%
Be 313.107†	69.9	0.0410 µg/L		0.00520	0.0410 ppb	0.00520	12.69%
Ca 317.933Radial†	-14.7	-5.3336 µg/L		0.97263	-5.3336 ppb	0.97263	18.24%
Cd 226.502†	-4.5	-0.1080 µg/L		0.18089	-0.1080 ppb	0.18089	167.43%
Co 228.616†	-5.4	-0.2310 µg/L		0.16011	-0.2310 ppb	0.16011	69.31%
Cr 267.716†	12.7	0.2771 µg/L		0.12951	0.2771 ppb	0.12951	46.73%
Cu 324.752†	8.1	0.0554 µg/L		0.19760	0.0554 ppb	0.19760	356.82%
Fe 238.204 Radial†	1.1	12.928 µg/L		6.1830	12.928 ppb	6.1830	47.83%
K 766.490 Radial†	-25.7	-12.014 µg/L		24.0194	-12.014 ppb	24.0194	199.93%
Mg 279.077 IEC†	0.7	9.3105 µg/L		30.89945	9.3105 ppb	30.89945	331.88%
Mn 257.610†	17.2	0.0517 µg/L		0.01657	0.0517 ppb	0.01657	32.05%
Mo 202.031†	10.1	1.0002 µg/L		0.22507	1.0002 ppb	0.22507	22.50%
Na 589.592 Radial†	0.8	0.4202 µg/L		10.23597	0.4202 ppb	10.23597	>999.9%

Ni 231.604†	-2.9	-0.1622 µg/L	0.30021	-0.1622 ppb	0.30021	185.05%
P 214.914†	8.2	13.608 µg/L	9.6628	13.608 ppb	9.6628	71.01%
Pb 220.353†	-1.2	-0.3024 µg/L	1.75347	-0.3024 ppb	1.75347	579.84%
S 181.975 Axial†	-1.9	-6.0825 µg/L	5.80506	-6.0825 ppb	5.80506	95.44%
Sb 206.836†	5.2	4.6291 µg/L	5.06271	4.6291 ppb	5.06271	109.37%
Se 196.026†	-3.0	-2.7598 µg/L	5.86866	-2.7598 ppb	5.86866	212.64%
SiO2†	110.6	19.966 µg/L	6.2842	19.966 ppb	6.2842	31.47%
Si 251.611†	157.6	10.717 µg/L	0.5669	10.717 ppb	0.5669	5.29%
Sn 189.927†	0.7	0.2712 µg/L	0.99129	0.2712 ppb	0.99129	365.51%
Sr 421.552†	-12.6	-0.0749 µg/L	0.17546	-0.0749 ppb	0.17546	234.25%
Ti 334.940†	48.0	0.1115 µg/L	0.10772	0.1115 ppb	0.10772	96.65%
Tl 190.801†	-0.8	-0.8147 µg/L	7.14434	-0.8147 ppb	7.14434	876.88%
U 409.014†	-0.2	-0.0223 µg/L	3.06744	-0.0223 ppb	3.06744	>999.9%
V 292.402†	-11.4	-0.1281 µg/L	0.19550	-0.1281 ppb	0.19550	152.58%
Zn 213.857†	-316.2	-7.2805 µg/L	0.09243	-7.2805 ppb	0.09243	1.27%

Sequence No.: 7

Sample ID: 1202047700|955132|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 302

Date Collected: 3/16/2010 14:57:33

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047700|955132|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99181.9	99181.9	102 %		14:58:04
1	Al 396.153Radial†	10358.7	10228.0	4871.9 µg/L	4871.9 ppb	14:58:04
1	Ca 317.933Radial†	14058.0	13333.5	4852.3 µg/L	4852.3 ppb	14:58:04
1	Fe 238.204 Radial†	437.2	414.7	4915.0 µg/L	4915.0 ppb	14:58:24
1	K 766.490 Radial†	11085.8	10332.9	4822.2 µg/L	4822.2 ppb	14:58:04
1	Mg 279.077 IEC†	393.6	376.1	4962.3 µg/L	4962.3 ppb	14:58:24
1	Na 589.592 Radial†	10301.6	9872.4	4927.4 µg/L	4927.4 ppb	14:58:04
1	Sr 421.552†	84985.4	82795.0	492.21 µg/L	492.21 ppb	14:58:04
1	Sc 361.383	2108552.6	2108552.6	100.74 %		14:59:27
1	Y 371.029	1437371.9	1437371.9	100.31 %		14:59:27
1	Ag 328.068†	61217.2	61229.0	495.37 µg/L	495.37 ppb	14:59:33
1	As 188.979†	351.0	351.7	517.62 µg/L	517.62 ppb	14:59:53
1	B 249.677†	11253.5	10871.7	491.63 µg/L	491.63 ppb	14:59:33
1	Ba 233.527†	23265.5	23103.5	506.19 µg/L	506.19 ppb	14:59:33
1	Be 313.107†	851405.0	846327.7	497.08 µg/L	497.08 ppb	14:59:27
1	Cd 226.502†	20844.8	20862.7	495.86 µg/L	495.86 ppb	14:59:33
1	Co 228.616†	11412.4	11280.7	484.08 µg/L	484.08 ppb	14:59:53
1	Cr 267.716†	23662.2	23408.7	509.44 µg/L	509.44 ppb	14:59:33
1	Cu 324.752†	84005.6	79013.6	517.01 µg/L	517.01 ppb	14:59:33
1	Mn 257.610†	167147.5	166610.2	500.70 µg/L	500.70 ppb	14:59:33
1	Mo 202.031†	5259.6	5215.9	516.31 µg/L	516.31 ppb	14:59:53
1	Ni 231.604†	9382.4	8936.8	500.73 µg/L	500.73 ppb	14:59:53
1	P 214.914†	640.2	363.1	553.61 µg/L	553.61 ppb	14:59:53
1	Pb 220.353†	2005.9	1961.1	514.69 µg/L	514.69 ppb	14:59:53
1	S 181.975 Axial†	1651.4	1616.8	5145.3 µg/L	5145.3 ppb	14:59:53
1	Sb 206.836†	614.7	587.5	526.67 µg/L	526.67 ppb	14:59:53
1	Se 196.026†	556.2	524.8	504.69 µg/L	504.69 ppb	14:59:53
1	SiO2†	61084.2	57857.1	10445 µg/L	10445 ppb	14:59:33
1	Si 251.611†	72613.9	71657.9	4871.6 µg/L	4871.6 ppb	14:59:33
1	Sn 189.927†	1364.0	1361.4	530.51 µg/L	530.51 ppb	14:59:53
1	Ti 334.940†	210591.8	209626.6	489.87 µg/L	489.87 ppb	14:59:33
1	Tl 190.801†	489.1	519.6	512.25 µg/L	512.25 ppb	14:59:53
1	U 409.014†	5965.6	5927.7	537.25 µg/L	537.25 ppb	14:59:33
1	V 292.402†	43424.7	42994.4	512.60 µg/L	512.60 ppb	14:59:33
1	Zn 213.857†	22668.4	21493.5	491.30 µg/L	491.30 ppb	14:59:33
2	Sc RADIAL	99630.1	99630.1	103 %		14:58:30
2	Al 396.153Radial†	10415.3	10237.5	4876.7 µg/L	4876.7 ppb	14:58:30
2	Ca 317.933Radial†	14157.1	13368.0	4864.9 µg/L	4864.9 ppb	14:58:30
2	Fe 238.204 Radial†	442.3	417.8	4951.3 µg/L	4951.3 ppb	14:58:50
2	K 766.490 Radial†	11176.0	10371.9	4840.4 µg/L	4840.4 ppb	14:58:30
2	Mg 279.077 IEC†	386.1	367.1	4842.7 µg/L	4842.7 ppb	14:58:50
2	Na 589.592 Radial†	10434.2	9956.0	4969.1 µg/L	4969.1 ppb	14:58:30
2	Sr 421.552†	85578.5	82998.1	493.41 µg/L	493.41 ppb	14:58:30
2	Sc 361.383	2106521.7	2106521.7	100.64 %		15:00:00
2	Y 371.029	1434940.7	1434940.7	100.14 %		15:00:00
2	Ag 328.068†	61148.3	61219.2	495.30 µg/L	495.30 ppb	15:00:06
2	As 188.979†	340.2	341.3	502.31 µg/L	502.31 ppb	15:00:26
2	B 249.677†	11251.3	10880.3	492.00 µg/L	492.00 ppb	15:00:06
2	Ba 233.527†	23306.6	23166.6	507.57 µg/L	507.57 ppb	15:00:06
2	Be 313.107†	846994.8	842760.4	494.98 µg/L	494.98 ppb	15:00:00
2	Cd 226.502†	20817.1	20855.1	495.67 µg/L	495.67 ppb	15:00:06
2	Co 228.616†	11182.4	11063.1	474.72 µg/L	474.72 ppb	15:00:26
2	Cr 267.716†	23644.2	23413.4	509.54 µg/L	509.54 ppb	15:00:06
2	Cu 324.752†	83889.1	78978.2	516.78 µg/L	516.78 ppb	15:00:06
2	Mn 257.610†	167278.8	166900.6	501.58 µg/L	501.58 ppb	15:00:06
2	Mo 202.031†	5151.6	5113.7	506.20 µg/L	506.20 ppb	15:00:26
2	Ni 231.604†	9214.5	8778.9	491.89 µg/L	491.89 ppb	15:00:26
2	P 214.914†	633.1	356.7	542.76 µg/L	542.76 ppb	15:00:26
2	Pb 220.353†	1954.7	1912.0	501.81 µg/L	501.81 ppb	15:00:26

2	S 181.975 Axial†	1626.9	1594.0	5072.8 µg/L	5072.8 ppb	15:00:26
2	Sb 206.836†	609.8	583.2	522.69 µg/L	522.69 ppb	15:00:26
2	Se 196.026†	547.5	516.7	497.27 µg/L	497.27 ppb	15:00:26
2	SiO2†	61113.8	57944.9	10461 µg/L	10461 ppb	15:00:06
2	Si 251.611†	72702.3	71815.2	4882.3 µg/L	4882.3 ppb	15:00:06
2	Sn 189.927†	1321.8	1320.9	514.73 µg/L	514.73 ppb	15:00:26
2	Ti 334.940†	210522.6	209759.4	490.19 µg/L	490.19 ppb	15:00:06
2	Tl 190.801†	474.9	505.9	498.97 µg/L	498.97 ppb	15:00:26
2	U 409.014†	5929.4	5897.4	534.49 µg/L	534.49 ppb	15:00:06
2	V 292.402†	43542.3	43152.8	514.39 µg/L	514.39 ppb	15:00:06
2	Zn 213.857†	22663.9	21510.7	491.75 µg/L	491.75 ppb	15:00:06
3	Sc RADIAL	100280.8	100280.8	104 %		14:58:56
3	Al 396.153Radial†	10474.6	10229.1	4873.3 µg/L	4873.3 ppb	14:58:56
3	Ca 317.933Radial†	14262.5	13380.5	4869.5 µg/L	4869.5 ppb	14:58:56
3	Fe 238.204 Radial†	435.3	408.2	4837.7 µg/L	4837.7 ppb	14:59:16
3	K 766.490 Radial†	11186.0	10311.1	4812.0 µg/L	4812.0 ppb	14:58:56
3	Mg 279.077 IEC†	392.7	371.0	4893.7 µg/L	4893.7 ppb	14:59:16
3	Na 589.592 Radial†	10516.5	9969.7	4975.9 µg/L	4975.9 ppb	14:58:56
3	Sr 421.552†	86164.4	83024.1	493.57 µg/L	493.57 ppb	14:58:56
3	Sc 361.383	2116759.1	2116759.1	101.13 %		15:00:33
3	Y 371.029	1445540.4	1445540.4	100.88 %		15:00:33
3	Ag 328.068†	60507.2	60291.3	487.70 µg/L	487.70 ppb	15:00:39
3	As 188.979†	328.4	328.0	482.65 µg/L	482.65 ppb	15:00:59
3	B 249.677†	11070.3	10647.3	481.45 µg/L	481.45 ppb	15:00:39
3	Ba 233.527†	22651.0	22406.4	490.91 µg/L	490.91 ppb	15:00:39
3	Be 313.107†	829716.6	821605.0	482.56 µg/L	482.56 ppb	15:00:33
3	Cd 226.502†	20374.3	20317.3	482.86 µg/L	482.86 ppb	15:00:39
3	Co 228.616†	10540.0	10374.2	445.14 µg/L	445.14 ppb	15:00:59
3	Cr 267.716†	22583.9	22251.4	484.26 µg/L	484.26 ppb	15:00:39
3	Cu 324.752†	81391.2	76105.1	498.00 µg/L	498.00 ppb	15:00:39
3	Mn 257.610†	162065.1	160941.3	483.66 µg/L	483.66 ppb	15:00:39
3	Mo 202.031†	4858.7	4799.3	475.08 µg/L	475.08 ppb	15:00:59
3	Ni 231.604†	8695.0	8221.0	460.62 µg/L	460.62 ppb	15:00:59
3	P 214.914†	611.9	332.7	504.40 µg/L	504.40 ppb	15:00:59
3	Pb 220.353†	1879.2	1828.0	479.75 µg/L	479.75 ppb	15:00:59
3	S 181.975 Axial†	1564.6	1524.6	4852.0 µg/L	4852.0 ppb	15:00:59
3	Sb 206.836†	572.4	543.3	486.83 µg/L	486.83 ppb	15:00:59
3	Se 196.026†	538.6	505.3	486.13 µg/L	486.13 ppb	15:00:59
3	SiO2†	60055.5	56604.7	10219 µg/L	10219 ppb	15:00:39
3	Si 251.611†	71336.0	70114.9	4766.7 µg/L	4766.7 ppb	15:00:39
3	Sn 189.927†	1233.7	1227.3	478.32 µg/L	478.32 ppb	15:00:59
3	Ti 334.940†	202669.4	200982.2	469.66 µg/L	469.66 ppb	15:00:39
3	Tl 190.801†	459.4	488.4	481.64 µg/L	481.64 ppb	15:00:59
3	U 409.014†	5709.8	5651.8	512.21 µg/L	512.21 ppb	15:00:39
3	V 292.402†	41892.1	41311.7	492.35 µg/L	492.35 ppb	15:00:39
3	Zn 213.857†	22018.4	20763.5	474.71 µg/L	474.71 ppb	15:00:39

Mean Data: 1202047700|955132|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2110611.2	100.84 %	0.259			0.26%
Sc RADIAL	99697.6	103 %	0.6			0.55%
Y 371.029	1439284.3	100.45 %	0.388			0.39%
Ag 328.068†	60913.2	492.79 µg/L	4.408	492.79 ppb	4.408	0.89%
Al 396.153Radial†	10231.5	4873.9 µg/L	2.44	4873.9 ppb	2.44	0.05%
As 188.979†	340.3	500.86 µg/L	17.529	500.86 ppb	17.529	3.50%
B 249.677†	10799.8	488.36 µg/L	5.990	488.36 ppb	5.990	1.23%
Ba 233.527†	22892.2	501.56 µg/L	9.249	501.56 ppb	9.249	1.84%
Be 313.107†	836897.7	491.54 µg/L	7.847	491.54 ppb	7.847	1.60%
Ca 317.933Radial†	13360.7	4862.2 µg/L	8.87	4862.2 ppb	8.87	0.18%
Cd 226.502†	20678.4	491.46 µg/L	7.449	491.46 ppb	7.449	1.52%
Co 228.616†	10906.0	467.98 µg/L	20.327	467.98 ppb	20.327	4.34%
Cr 267.716†	23024.5	501.08 µg/L	14.570	501.08 ppb	14.570	2.91%
Cu 324.752†	78032.3	510.59 µg/L	10.912	510.59 ppb	10.912	2.14%
Fe 238.204 Radial†	413.6	4901.3 µg/L	58.02	4901.3 ppb	58.02	1.18%
K 766.490 Radial†	10338.6	4824.8 µg/L	14.37	4824.8 ppb	14.37	0.30%
Mg 279.077 IEC†	371.4	4899.6 µg/L	60.04	4899.6 ppb	60.04	1.23%
Mn 257.610†	164817.4	495.31 µg/L	10.101	495.31 ppb	10.101	2.04%
Mo 202.031†	5043.0	499.20 µg/L	21.486	499.20 ppb	21.486	4.30%
Na 589.592 Radial†	9932.7	4957.4 µg/L	26.27	4957.4 ppb	26.27	0.53%

Ni 231.604†	8645.6	484.41 µg/L	21.070	484.41 ppb	21.070	4.35%
P 214.914†	350.8	533.59 µg/L	25.855	533.59 ppb	25.855	4.85%
Pb 220.353†	1900.4	498.75 µg/L	17.670	498.75 ppb	17.670	3.54%
S 181.975 Axial†	1578.4	5023.4 µg/L	152.76	5023.4 ppb	152.76	3.04%
Sb 206.836†	571.3	512.07 µg/L	21.945	512.07 ppb	21.945	4.29%
Se 196.026†	515.6	496.03 µg/L	9.341	496.03 ppb	9.341	1.88%
SiO2†	57468.9	10375 µg/L	135.3	10375 ppb	135.3	1.30%
Si 251.611†	71196.0	4840.2 µg/L	63.88	4840.2 ppb	63.88	1.32%
Sn 189.927†	1303.2	507.86 µg/L	26.765	507.86 ppb	26.765	5.27%
Sr 421.552†	82939.1	493.06 µg/L	0.746	493.06 ppb	0.746	0.15%
Ti 334.940†	206789.4	483.24 µg/L	11.761	483.24 ppb	11.761	2.43%
Tl 190.801†	504.6	497.62 µg/L	15.349	497.62 ppb	15.349	3.08%
U 409.014†	5825.6	527.98 µg/L	13.730	527.98 ppb	13.730	2.60%
V 292.402†	42486.3	506.45 µg/L	12.241	506.45 ppb	12.241	2.42%
Zn 213.857†	21255.9	485.92 µg/L	9.709	485.92 ppb	9.709	2.00%

Sequence No.: 8

Sample ID: 247350001|955132|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 303

Date Collected: 3/16/2010 15:01:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247350001|955132|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98922.1	98922.1	102 %		15:01:39
1	Al 396.153Radial†	-104.0	17.5	8.3370 µg/L	8.3370 ppb	15:01:39
1	Ca 317.933Radial†	487.8	92.0	33.478 µg/L	33.478 ppb	15:01:59
1	Fe 238.204 Radial†	12.8	0.6	7.0636 µg/L	7.0636 ppb	15:01:59
1	K 766.490 Radial†	1206.3	694.9	324.32 µg/L	324.32 ppb	15:01:39
1	Mg 279.077 IEC†	6.8	-1.3	-17.649 µg/L	-17.649 ppb	15:01:59
1	Na 589.592 Radial†	675.7	480.6	239.86 µg/L	239.86 ppb	15:01:39
1	Sr 421.552†	143.1	0.6	0.0034 µg/L	0.0034 ppb	15:01:39
1	Sc 361.383	2109621.1	2109621.1	100.79 %		15:03:01
1	Y 371.029	1440031.3	1440031.3	100.50 %		15:03:01
1	Ag 328.068†	-507.2	-43.0	-0.3479 µg/L	-0.3479 ppb	15:03:07
1	As 188.979†	-0.0	3.2	4.7639 µg/L	4.7639 ppb	15:03:27
1	B 249.677†	785.3	479.8	21.769 µg/L	21.769 ppb	15:03:07
1	Ba 233.527†	-4.1	4.3	0.0935 µg/L	0.0935 ppb	15:03:27
1	Be 313.107†	-1172.7	-4.6	-0.0028 µg/L	-0.0028 ppb	15:03:07
1	Cd 226.502†	-177.9	-6.0	-0.1425 µg/L	-0.1425 ppb	15:03:27
1	Co 228.616†	38.0	-10.3	-0.4423 µg/L	-0.4423 ppb	15:03:27
1	Cr 267.716†	68.4	-12.3	-0.2686 µg/L	-0.2686 ppb	15:03:07
1	Cu 324.752†	4609.0	196.3	1.2834 µg/L	1.2834 ppb	15:03:07
1	Mn 257.610†	-600.3	91.3	0.2761 µg/L	0.2761 ppb	15:03:27
1	Mo 202.031†	20.8	15.5	1.5353 µg/L	1.5353 ppb	15:03:27
1	Ni 231.604†	379.4	-0.4	-0.0232 µg/L	-0.0232 ppb	15:03:27
1	P 214.914†	280.7	6.1	9.9808 µg/L	9.9808 ppb	15:03:27
1	Pb 220.353†	36.2	5.8	1.5127 µg/L	1.5127 ppb	15:03:27
1	S 181.975 Axial†	33.4	10.6	33.588 µg/L	33.588 ppb	15:03:27
1	Sb 206.836†	26.4	3.5	3.1161 µg/L	3.1161 ppb	15:03:27
1	Se 196.026†	26.2	-1.3	-1.2290 µg/L	-1.2290 ppb	15:03:27
1	SiO2†	21921.3	18970.0	3424.8 µg/L	3424.8 ppb	15:03:07
1	Si 251.611†	24161.1	23547.9	1600.9 µg/L	1600.9 ppb	15:03:07
1	Sn 189.927†	-5.7	1.8	0.6958 µg/L	0.6958 ppb	15:03:27
1	Ti 334.940†	-481.5	99.6	0.2347 µg/L	0.2347 ppb	15:03:07
1	Tl 190.801†	-33.3	1.0	1.0053 µg/L	1.0053 ppb	15:03:27
1	U 409.014†	37.9	43.4	3.9356 µg/L	3.9356 ppb	15:03:07
1	V 292.402†	74.8	-38.1	-0.4350 µg/L	-0.4350 ppb	15:03:07
1	Zn 213.857†	728.6	-285.9	-6.5841 µg/L	-6.5841 ppb	15:03:27
2	Sc RADIAL	99140.5	99140.5	102 %		15:02:05
2	Al 396.153Radial†	-119.4	2.7	1.2801 µg/L	1.2801 ppb	15:02:05
2	Ca 317.933Radial†	483.3	86.5	31.477 µg/L	31.477 ppb	15:02:25
2	Fe 238.204 Radial†	11.3	-0.9	-10.560 µg/L	-10.560 ppb	15:02:25
2	K 766.490 Radial†	1203.4	689.5	321.76 µg/L	321.76 ppb	15:02:05
2	Mg 279.077 IEC†	8.8	0.6	7.6958 µg/L	7.6958 ppb	15:02:25
2	Na 589.592 Radial†	649.5	453.5	226.36 µg/L	226.36 ppb	15:02:05
2	Sr 421.552†	163.1	19.8	0.1175 µg/L	0.1175 ppb	15:02:05
2	Sc 361.383	2110744.9	2110744.9	100.84 %		15:03:33
2	Y 371.029	1440057.8	1440057.8	100.50 %		15:03:33
2	Ag 328.068†	-526.6	-62.0	-0.4965 µg/L	-0.4965 ppb	15:03:39
2	As 188.979†	-2.6	0.7	1.0565 µg/L	1.0565 ppb	15:04:00
2	B 249.677†	775.9	470.0	21.335 µg/L	21.335 ppb	15:03:39
2	Ba 233.527†	10.5	18.8	0.4116 µg/L	0.4116 ppb	15:04:00
2	Be 313.107†	-1192.3	-23.5	-0.0140 µg/L	-0.0140 ppb	15:03:39
2	Cd 226.502†	-165.8	6.1	0.1471 µg/L	0.1471 ppb	15:04:00
2	Co 228.616†	38.6	-9.8	-0.4187 µg/L	-0.4187 ppb	15:04:00
2	Cr 267.716†	59.3	-21.5	-0.4663 µg/L	-0.4663 ppb	15:03:39
2	Cu 324.752†	4517.4	102.9	0.6703 µg/L	0.6703 ppb	15:03:39
2	Mn 257.610†	-600.8	91.2	0.2729 µg/L	0.2729 ppb	15:04:00
2	Mo 202.031†	20.6	15.3	1.5160 µg/L	1.5160 ppb	15:04:00
2	Ni 231.604†	379.9	-0.2	-0.0104 µg/L	-0.0104 ppb	15:04:00
2	P 214.914†	286.8	12.1	19.997 µg/L	19.997 ppb	15:04:00
2	Pb 220.353†	34.5	4.0	1.0597 µg/L	1.0597 ppb	15:04:00

2	S 181.975 Axial†	34.0	11.2	35.726 µg/L	35.726 ppb	15:04:00
2	Sb 206.836†	25.5	2.6	2.3595 µg/L	2.3595 ppb	15:04:00
2	Se 196.026†	26.1	-1.4	-1.3742 µg/L	-1.3742 ppb	15:04:00
2	SiO2†	21880.0	18917.4	3415.3 µg/L	3415.3 ppb	15:03:39
2	Si 251.611†	24093.0	23467.6	1595.4 µg/L	1595.4 ppb	15:03:39
2	Sn 189.927†	0.4	7.8	3.0496 µg/L	3.0496 ppb	15:04:00
2	Ti 334.940†	-388.4	192.1	0.4491 µg/L	0.4491 ppb	15:03:39
2	Tl 190.801†	-31.4	3.0	2.9235 µg/L	2.9235 ppb	15:04:00
2	U 409.014†	-54.9	-48.6	-4.4119 µg/L	-4.4119 ppb	15:03:39
2	V 292.402†	143.7	30.2	0.3642 µg/L	0.3642 ppb	15:03:39
2	Zn 213.857†	732.2	-282.8	-6.5120 µg/L	-6.5120 ppb	15:04:00
3	Sc RADIAL	99494.4	99494.4	103 %		15:02:30
3	Al 396.153Radial†	-135.0	-12.1	-5.8028 µg/L	-5.8028 ppb	15:02:30
3	Ca 317.933Radial†	492.2	93.6	34.049 µg/L	34.049 ppb	15:02:51
3	Fe 238.204 Radial†	13.7	1.4	16.251 µg/L	16.251 ppb	15:02:51
3	K 766.490 Radial†	1214.7	696.3	324.97 µg/L	324.97 ppb	15:02:30
3	Mg 279.077 IEC†	9.6	1.4	18.189 µg/L	18.189 ppb	15:02:51
3	Na 589.592 Radial†	669.0	470.2	234.69 µg/L	234.69 ppb	15:02:30
3	Sr 421.552†	125.3	-17.6	-0.1045 µg/L	-0.1045 ppb	15:02:30
3	Sc 361.383	2101725.6	2101725.6	100.41 %		15:04:06
3	Y 371.029	1434256.7	1434256.7	100.10 %		15:04:06
3	Ag 328.068†	-491.0	-28.7	-0.2348 µg/L	-0.2348 ppb	15:04:11
3	As 188.979†	-5.2	-1.9	-2.7943 µg/L	-2.7943 ppb	15:04:32
3	B 249.677†	747.0	444.6	20.166 µg/L	20.166 ppb	15:04:11
3	Ba 233.527†	6.5	14.9	0.3244 µg/L	0.3244 ppb	15:04:32
3	Be 313.107†	-1053.5	109.6	0.0644 µg/L	0.0644 ppb	15:04:11
3	Cd 226.502†	-173.2	-1.9	-0.0475 µg/L	-0.0475 ppb	15:04:32
3	Co 228.616†	47.9	-0.4	-0.0133 µg/L	-0.0133 ppb	15:04:32
3	Cr 267.716†	84.7	4.1	0.0891 µg/L	0.0891 ppb	15:04:11
3	Cu 324.752†	4583.4	188.0	1.2307 µg/L	1.2307 ppb	15:04:11
3	Mn 257.610†	-601.9	87.6	0.2630 µg/L	0.2630 ppb	15:04:32
3	Mo 202.031†	28.0	22.7	2.2492 µg/L	2.2492 ppb	15:04:32
3	Ni 231.604†	387.8	9.3	0.5233 µg/L	0.5233 ppb	15:04:32
3	P 214.914†	277.0	3.5	5.6935 µg/L	5.6935 ppb	15:04:32
3	Pb 220.353†	44.3	14.0	3.6789 µg/L	3.6789 ppb	15:04:32
3	S 181.975 Axial†	27.8	5.2	16.483 µg/L	16.483 ppb	15:04:32
3	Sb 206.836†	26.5	3.7	3.3068 µg/L	3.3068 ppb	15:04:32
3	Se 196.026†	24.9	-2.6	-2.3621 µg/L	-2.3621 ppb	15:04:32
3	SiO2†	21410.3	18542.8	3347.6 µg/L	3347.6 ppb	15:04:11
3	Si 251.611†	23543.1	23022.4	1565.2 µg/L	1565.2 ppb	15:04:11
3	Sn 189.927†	-4.1	3.3	1.3009 µg/L	1.3009 ppb	15:04:32
3	Ti 334.940†	-522.3	57.1	0.1325 µg/L	0.1325 ppb	15:04:11
3	Tl 190.801†	-31.0	3.3	3.1744 µg/L	3.1744 ppb	15:04:32
3	U 409.014†	-76.2	-70.1	-6.3704 µg/L	-6.3704 ppb	15:04:11
3	V 292.402†	43.8	-68.7	-0.8023 µg/L	-0.8023 ppb	15:04:11
3	Zn 213.857†	724.1	-287.7	-6.6311 µg/L	-6.6311 ppb	15:04:32

Mean Data: 247350001|955132|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2107363.8	100.68 %	0.235			0.23%
Sc RADIAL	99185.7	102 %	0.3			0.29%
Y 371.029	1438115.2	100.37 %	0.233			0.23%
Ag 328.068†	-44.6	-0.3597 µg/L	0.13121	-0.3597 ppb	0.13121	36.48%
Al 396.153Radial†	2.7	1.2715 µg/L	7.06989	1.2715 ppb	7.06989	556.04%
As 188.979†	0.7	1.0087 µg/L	3.77932	1.0087 ppb	3.77932	374.66%
B 249.677†	464.8	21.090 µg/L	0.8289	21.090 ppb	0.8289	3.93%
Ba 233.527†	12.7	0.2765 µg/L	0.16436	0.2765 ppb	0.16436	59.44%
Be 313.107†	27.2	0.0159 µg/L	0.04237	0.0159 ppb	0.04237	267.17%
Ca 317.933Radial†	90.7	33.002 µg/L	1.3507	33.002 ppb	1.3507	4.09%
Cd 226.502†	-0.6	-0.0143 µg/L	0.14765	-0.0143 ppb	0.14765	>999.9%
Co 228.616†	-6.8	-0.2914 µg/L	0.24114	-0.2914 ppb	0.24114	82.75%
Cr 267.716†	-9.9	-0.2153 µg/L	0.28151	-0.2153 ppb	0.28151	130.75%
Cu 324.752†	162.4	1.0615 µg/L	0.33980	1.0615 ppb	0.33980	32.01%
Fe 238.204 Radial†	0.4	4.2513 µg/L	13.62492	4.2513 ppb	13.62492	320.48%
K 766.490 Radial†	693.6	323.68 µg/L	1.696	323.68 ppb	1.696	0.52%
Mg 279.077 IEC†	0.2	2.7454 µg/L	18.42476	2.7454 ppb	18.42476	671.11%
Mn 257.610†	90.0	0.2707 µg/L	0.00686	0.2707 ppb	0.00686	2.54%
Mo 202.031†	17.9	1.7668 µg/L	0.41786	1.7668 ppb	0.41786	23.65%
Na 589.592 Radial†	468.1	233.64 µg/L	6.809	233.64 ppb	6.809	2.91%

Ni 231.604†	2.9	0.1632 µg/L	0.31188	0.1632 ppb	0.31188	191.07%
P 214.914†	7.2	11.890 µg/L	7.3405	11.890 ppb	7.3405	61.73%
Pb 220.353†	7.9	2.0838 µg/L	1.39986	2.0838 ppb	1.39986	67.18%
S 181.975 Axial†	9.0	28.599 µg/L	10.5469	28.599 ppb	10.5469	36.88%
Sb 206.836†	3.2	2.9275 µg/L	0.50103	2.9275 ppb	0.50103	17.11%
Se 196.026†	-1.8	-1.6551 µg/L	0.61659	-1.6551 ppb	0.61659	37.25%
SiO2†	18810.1	3395.9 µg/L	42.06	3395.9 ppb	42.06	1.24%
Si 251.611†	23346.0	1587.2 µg/L	19.24	1587.2 ppb	19.24	1.21%
Sn 189.927†	4.3	1.6821 µg/L	1.22231	1.6821 ppb	1.22231	72.67%
Sr 421.552†	0.9	0.0055 µg/L	0.11099	0.0055 ppb	0.11099	>999.9%
Ti 334.940†	116.2	0.2721 µg/L	0.16159	0.2721 ppb	0.16159	59.38%
Tl 190.801†	2.4	2.3677 µg/L	1.18655	2.3677 ppb	1.18655	50.11%
U 409.014†	-25.1	-2.2823 µg/L	5.47313	-2.2823 ppb	5.47313	239.81%
V 292.402†	-25.5	-0.2910 µg/L	0.59645	-0.2910 ppb	0.59645	204.96%
Zn 213.857†	-285.5	-6.5757 µg/L	0.05997	-6.5757 ppb	0.05997	0.91%

Sequence No.: 9

Sample ID: 1202047701|955132|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 304

Date Collected: 3/16/2010 15:04:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047701|955132|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98833.0	98833.0	102 %		15:05:12
1	Al 396.153Radial†	-160.1	-37.4	-17.897 µg/L	-17.897 ppb	15:05:12
1	Ca 317.933Radial†	488.8	93.4	33.998 µg/L	33.998 ppb	15:05:32
1	Fe 238.204 Radial†	14.8	2.5	29.474 µg/L	29.474 ppb	15:05:32
1	K 766.490 Radial†	1260.6	749.2	349.63 µg/L	349.63 ppb	15:05:12
1	Mg 279.077 IEC†	9.8	1.6	20.575 µg/L	20.575 ppb	15:05:32
1	Na 589.592 Radial†	652.1	458.1	228.62 µg/L	228.62 ppb	15:05:12
1	Sr 421.552†	170.6	27.7	0.1646 µg/L	0.1646 ppb	15:05:12
1	Sc 361.383	2105622.8	2105622.8	100.60 %		15:06:34
1	Y 371.029	1437478.1	1437478.1	100.32 %		15:06:34
1	Ag 328.068†	-562.0	-98.5	-0.7882 µg/L	-0.7882 ppb	15:06:40
1	As 188.979†	0.2	3.5	5.1149 µg/L	5.1149 ppb	15:07:00
1	B 249.677†	785.4	481.4	21.830 µg/L	21.830 ppb	15:06:40
1	Ba 233.527†	-3.1	5.3	0.1167 µg/L	0.1167 ppb	15:07:00
1	Be 313.107†	-1088.3	77.0	0.0452 µg/L	0.0452 ppb	15:06:40
1	Cd 226.502†	-186.2	-14.5	-0.3487 µg/L	-0.3487 ppb	15:07:00
1	Co 228.616†	45.4	-3.0	-0.1264 µg/L	-0.1264 ppb	15:07:00
1	Cr 267.716†	52.6	-27.9	-0.6074 µg/L	-0.6074 ppb	15:06:40
1	Cu 324.752†	4512.9	109.4	0.7199 µg/L	0.7199 ppb	15:06:40
1	Mn 257.610†	-618.7	72.0	0.2166 µg/L	0.2166 ppb	15:07:00
1	Mo 202.031†	15.5	10.3	1.0225 µg/L	1.0225 ppb	15:07:00
1	Ni 231.604†	374.6	-4.6	-0.2561 µg/L	-0.2561 ppb	15:07:00
1	P 214.914†	270.6	-3.4	-5.7517 µg/L	-5.7517 ppb	15:07:00
1	Pb 220.353†	36.6	6.2	1.6231 µg/L	1.6231 ppb	15:07:00
1	S 181.975 Axial†	31.0	8.3	26.298 µg/L	26.298 ppb	15:07:00
1	Sb 206.836†	22.1	-0.7	-0.6064 µg/L	-0.6064 ppb	15:07:00
1	Se 196.026†	22.0	-5.4	-5.0311 µg/L	-5.0311 ppb	15:07:00
1	SiO2†	22098.5	19187.4	3464.0 µg/L	3464.0 ppb	15:06:40
1	Si 251.611†	24394.1	23825.1	1619.7 µg/L	1619.7 ppb	15:06:40
1	Sn 189.927†	-8.2	-0.7	-0.2761 µg/L	-0.2761 ppb	15:07:00
1	Ti 334.940†	-537.6	42.9	0.0991 µg/L	0.0991 ppb	15:06:40
1	Tl 190.801†	-34.0	0.3	0.3401 µg/L	0.3401 ppb	15:07:00
1	U 409.014†	14.9	20.6	1.8663 µg/L	1.8663 ppb	15:06:40
1	V 292.402†	113.6	0.6	0.0121 µg/L	0.0121 ppb	15:06:40
1	Zn 213.857†	714.3	-298.8	-6.8828 µg/L	-6.8828 ppb	15:07:00
2	Sc RADIAL	99544.0	99544.0	103 %		15:05:38
2	Al 396.153Radial†	-126.4	-3.6	-1.7220 µg/L	-1.7220 ppb	15:05:38
2	Ca 317.933Radial†	494.9	95.9	34.910 µg/L	34.910 ppb	15:05:58
2	Fe 238.204 Radial†	12.1	-0.2	-2.2443 µg/L	-2.2443 ppb	15:05:58
2	K 766.490 Radial†	1310.1	788.5	367.98 µg/L	367.98 ppb	15:05:38
2	Mg 279.077 IEC†	6.2	-2.0	-26.040 µg/L	-26.040 ppb	15:05:58
2	Na 589.592 Radial†	597.5	400.3	199.81 µg/L	199.81 ppb	15:05:38
2	Sr 421.552†	143.4	-0.0	0.0000 µg/L	0.0000 ppb	15:05:38
2	Sc 361.383	2106525.1	2106525.1	100.64 %		15:07:06
2	Y 371.029	1438280.1	1438280.1	100.38 %		15:07:06
2	Ag 328.068†	-541.2	-77.5	-0.6282 µg/L	-0.6282 ppb	15:07:12
2	As 188.979†	-6.3	-3.0	-4.4931 µg/L	-4.4931 ppb	15:07:32
2	B 249.677†	770.5	466.2	21.160 µg/L	21.160 ppb	15:07:12
2	Ba 233.527†	13.2	21.5	0.4690 µg/L	0.4690 ppb	15:07:32
2	Be 313.107†	-1067.5	98.1	0.0576 µg/L	0.0576 ppb	15:07:12
2	Cd 226.502†	-178.8	-7.1	-0.1686 µg/L	-0.1686 ppb	15:07:32
2	Co 228.616†	45.4	-3.0	-0.1266 µg/L	-0.1266 ppb	15:07:32
2	Cr 267.716†	115.0	34.0	0.7393 µg/L	0.7393 ppb	15:07:12
2	Cu 324.752†	4545.9	140.3	0.9160 µg/L	0.9160 ppb	15:07:12
2	Mn 257.610†	-635.8	55.2	0.1675 µg/L	0.1675 ppb	15:07:32
2	Mo 202.031†	13.7	8.5	0.8367 µg/L	0.8367 ppb	15:07:32
2	Ni 231.604†	373.3	-6.0	-0.3360 µg/L	-0.3360 ppb	15:07:32
2	P 214.914†	284.1	9.9	16.407 µg/L	16.407 ppb	15:07:32
2	Pb 220.353†	33.8	3.4	0.8848 µg/L	0.8848 ppb	15:07:32

2	S 181.975 Axial†	32.1	9.4	29.759 µg/L	29.759 ppb	15:07:32
2	Sb 206.836†	27.9	5.0	4.4271 µg/L	4.4271 ppb	15:07:32
2	Se 196.026†	19.4	-8.0	-7.5332 µg/L	-7.5332 ppb	15:07:32
2	SiO2†	22317.9	19396.0	3501.7 µg/L	3501.7 ppb	15:07:12
2	Si 251.611†	24643.1	24062.1	1635.8 µg/L	1635.8 ppb	15:07:12
2	Sn 189.927†	-2.9	4.5	1.7621 µg/L	1.7621 ppb	15:07:32
2	Ti 334.940†	-537.4	43.3	0.1038 µg/L	0.1038 ppb	15:07:12
2	Tl 190.801†	-39.7	-5.3	-5.1991 µg/L	-5.1991 ppb	15:07:32
2	U 409.014†	-23.0	-17.0	-1.5491 µg/L	-1.5491 ppb	15:07:12
2	V 292.402†	38.9	-73.7	-0.8633 µg/L	-0.8633 ppb	15:07:12
2	Zn 213.857†	709.2	-304.2	-7.0025 µg/L	-7.0025 ppb	15:07:32
3	Sc RADIAL	98889.5	98889.5	102 %		15:06:03
3	Al 396.153Radial†	-131.1	-9.0	-4.3356 µg/L	-4.3356 ppb	15:06:03
3	Ca 317.933Radial†	481.6	86.0	31.314 µg/L	31.314 ppb	15:06:24
3	Fe 238.204 Radial†	14.6	2.3	27.205 µg/L	27.205 ppb	15:06:24
3	K 766.490 Radial†	1252.7	740.8	345.71 µg/L	345.71 ppb	15:06:03
3	Mg 279.077 IEC†	8.7	0.5	6.7878 µg/L	6.7878 ppb	15:06:24
3	Na 589.592 Radial†	611.4	417.8	208.53 µg/L	208.53 ppb	15:06:03
3	Sr 421.552†	183.1	39.8	0.2367 µg/L	0.2367 ppb	15:06:03
3	Sc 361.383	2094554.0	2094554.0	100.07 %		15:07:38
3	Y 371.029	1430421.5	1430421.5	99.829 %		15:07:38
3	Ag 328.068†	-516.3	-55.7	-0.4459 µg/L	-0.4459 ppb	15:07:44
3	As 188.979†	0.7	4.0	5.8670 µg/L	5.8670 ppb	15:08:04
3	B 249.677†	774.8	474.9	21.540 µg/L	21.540 ppb	15:07:44
3	Ba 233.527†	-1.0	7.4	0.1626 µg/L	0.1626 ppb	15:08:04
3	Be 313.107†	-1071.9	87.6	0.0514 µg/L	0.0514 ppb	15:07:44
3	Cd 226.502†	-176.0	-5.3	-0.1288 µg/L	-0.1288 ppb	15:08:04
3	Co 228.616†	47.9	-0.2	-0.0083 µg/L	-0.0083 ppb	15:08:04
3	Cr 267.716†	90.8	10.5	0.2284 µg/L	0.2284 ppb	15:07:44
3	Cu 324.752†	4530.9	151.1	0.9921 µg/L	0.9921 ppb	15:07:44
3	Mn 257.610†	-610.4	77.0	0.2325 µg/L	0.2325 ppb	15:08:04
3	Mo 202.031†	15.7	10.6	1.0488 µg/L	1.0488 ppb	15:08:04
3	Ni 231.604†	361.2	-16.0	-0.8968 µg/L	-0.8968 ppb	15:08:04
3	P 214.914†	283.2	10.6	17.419 µg/L	17.419 ppb	15:08:04
3	Pb 220.353†	41.0	10.8	2.8465 µg/L	2.8465 ppb	15:08:04
3	S 181.975 Axial†	35.6	13.0	41.407 µg/L	41.407 ppb	15:08:04
3	Sb 206.836†	25.2	2.5	2.2244 µg/L	2.2244 ppb	15:08:04
3	Se 196.026†	24.1	-3.3	-2.9966 µg/L	-2.9966 ppb	15:08:04
3	SiO2†	21806.6	19011.8	3432.3 µg/L	3432.3 ppb	15:07:44
3	Si 251.611†	23964.8	23524.2	1599.3 µg/L	1599.3 ppb	15:07:44
3	Sn 189.927†	-5.3	2.2	0.8483 µg/L	0.8483 ppb	15:08:04
3	Ti 334.940†	-465.5	112.1	0.2620 µg/L	0.2620 ppb	15:07:44
3	Tl 190.801†	-36.6	-2.5	-2.4352 µg/L	-2.4352 ppb	15:08:04
3	U 409.014†	-11.9	-6.0	-0.5536 µg/L	-0.5536 ppb	15:07:44
3	V 292.402†	105.1	-7.3	-0.0817 µg/L	-0.0817 ppb	15:07:44
3	Zn 213.857†	706.1	-303.2	-6.9805 µg/L	-6.9805 ppb	15:08:04

Mean Data: 1202047701|955132|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2102234.0	100.44 %	0.318			0.32%
Sc RADIAL	99088.8	102 %	0.4			0.40%
Y 371.029	1435393.2	100.18 %	0.302			0.30%
Ag 328.068†	-77.2	-0.6208 µg/L	0.17129	-0.6208 ppb	0.17129	27.59%
Al 396.153Radial†	-16.7	-7.9849 µg/L	8.68311	-7.9849 ppb	8.68311	108.74%
As 188.979†	1.5	2.1629 µg/L	5.77657	2.1629 ppb	5.77657	267.07%
B 249.677†	474.2	21.510 µg/L	0.3361	21.510 ppb	0.3361	1.56%
Ba 233.527†	11.4	0.2494 µg/L	0.19150	0.2494 ppb	0.19150	76.77%
Be 313.107†	87.6	0.0514 µg/L	0.00620	0.0514 ppb	0.00620	12.05%
Ca 317.933Radial†	91.8	33.407 µg/L	1.8689	33.407 ppb	1.8689	5.59%
Cd 226.502†	-9.0	-0.2154 µg/L	0.11713	-0.2154 ppb	0.11713	54.39%
Co 228.616†	-2.0	-0.0871 µg/L	0.06825	-0.0871 ppb	0.06825	78.36%
Cr 267.716†	5.5	0.1201 µg/L	0.67988	0.1201 ppb	0.67988	566.07%
Cu 324.752†	133.6	0.8760 µg/L	0.14046	0.8760 ppb	0.14046	16.03%
Fe 238.204 Radial†	1.5	18.145 µg/L	17.6938	18.145 ppb	17.6938	97.52%
K 766.490 Radial†	759.5	354.44 µg/L	11.888	354.44 ppb	11.888	3.35%
Mg 279.077 IEC†	0.0	0.4409 µg/L	23.94651	0.4409 ppb	23.94651	>999.9%
Mn 257.610†	68.0	0.2055 µg/L	0.03386	0.2055 ppb	0.03386	16.48%
Mo 202.031†	9.8	0.9693 µg/L	0.11558	0.9693 ppb	0.11558	11.92%
Na 589.592 Radial†	425.4	212.32 µg/L	14.774	212.32 ppb	14.774	6.96%

Ni 231.604†	-8.9	-0.4963 µg/L	0.34913	-0.4963 ppb	0.34913	70.35%
P 214.914†	5.7	9.3581 µg/L	13.09528	9.3581 ppb	13.09528	139.93%
Pb 220.353†	6.8	1.7848 µg/L	0.99082	1.7848 ppb	0.99082	55.51%
S 181.975 Axial†	10.2	32.488 µg/L	7.9152	32.488 ppb	7.9152	24.36%
Sb 206.836†	2.2	2.0151 µg/L	2.52327	2.0151 ppb	2.52327	125.22%
Se 196.026†	-5.6	-5.1870 µg/L	2.27233	-5.1870 ppb	2.27233	43.81%
SiO2†	19198.4	3466.0 µg/L	34.73	3466.0 ppb	34.73	1.00%
Si 251.611†	23803.8	1618.3 µg/L	18.33	1618.3 ppb	18.33	1.13%
Sn 189.927†	2.0	0.7781 µg/L	1.02088	0.7781 ppb	1.02088	131.20%
Sr 421.552†	22.5	0.1338 µg/L	0.12135	0.1338 ppb	0.12135	90.73%
Ti 334.940†	66.1	0.1550 µg/L	0.09272	0.1550 ppb	0.09272	59.82%
Tl 190.801†	-2.5	-2.4314 µg/L	2.76958	-2.4314 ppb	2.76958	113.91%
U 409.014†	-0.8	-0.0788 µg/L	1.75653	-0.0788 ppb	1.75653	>999.9%
V 292.402†	-26.8	-0.3110 µg/L	0.48065	-0.3110 ppb	0.48065	154.57%
Zn 213.857†	-302.1	-6.9552 µg/L	0.06375	-6.9552 ppb	0.06375	0.92%

Sequence No.: 10

Sample ID: 1202047702|955132|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 305

Date Collected: 3/16/2010 15:08:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202047702|955132|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	101320.2	101320.2	105 %		15:08:45
1	Al 396.153Radial†	10570.1	10216.6	4866.2 µg/L	4866.2 ppb	15:08:45
1	Ca 317.933Radial†	14514.8	13480.3	4905.8 µg/L	4905.8 ppb	15:08:45
1	Fe 238.204 Radial†	446.8	414.9	4917.3 µg/L	4917.3 ppb	15:09:05
1	K 766.490 Radial†	12145.2	11116.6	5187.9 µg/L	5187.9 ppb	15:08:45
1	Mg 279.077 IEC†	397.5	371.8	4904.8 µg/L	4904.8 ppb	15:09:05
1	Na 589.592 Radial†	11079.3	10403.2	5192.3 µg/L	5192.3 ppb	15:08:45
1	Sr 421.552†	87261.2	83218.7	494.72 µg/L	494.72 ppb	15:08:45
1	Sc 361.383	2084932.0	2084932.0	99.609 %		15:10:08
1	Y 371.029	1417461.7	1417461.7	98.925 %		15:10:08
1	Ag 328.068†	61682.4	62384.6	504.73 µg/L	504.73 ppb	15:10:14
1	As 188.979†	352.0	356.6	524.87 µg/L	524.87 ppb	15:10:35
1	B 249.677†	11886.9	11634.1	526.25 µg/L	526.25 ppb	15:10:14
1	Ba 233.527†	23534.3	23635.0	517.84 µg/L	517.84 ppb	15:10:14
1	Be 313.107†	853189.9	857694.6	503.75 µg/L	503.75 ppb	15:10:08
1	Cd 226.502†	20955.9	21208.7	504.10 µg/L	504.10 ppb	15:10:14
1	Co 228.616†	11582.4	11579.7	496.92 µg/L	496.92 ppb	15:10:35
1	Cr 267.716†	23925.2	23938.8	520.98 µg/L	520.98 ppb	15:10:14
1	Cu 324.752†	85048.9	81005.8	530.02 µg/L	530.02 ppb	15:10:14
1	Mn 257.610†	169629.3	170981.5	513.84 µg/L	513.84 ppb	15:10:14
1	Mo 202.031†	5341.1	5356.9	530.26 µg/L	530.26 ppb	15:10:35
1	Ni 231.604†	9524.2	9184.6	514.61 µg/L	514.61 ppb	15:10:35
1	P 214.914†	638.2	368.3	561.10 µg/L	561.10 ppb	15:10:35
1	Pb 220.353†	2029.5	2007.3	526.82 µg/L	526.82 ppb	15:10:35
1	S 181.975 Axial†	1664.0	1648.0	5244.6 µg/L	5244.6 ppb	15:10:35
1	Sb 206.836†	617.5	597.2	535.43 µg/L	535.43 ppb	15:10:35
1	Se 196.026†	546.2	521.1	501.23 µg/L	501.23 ppb	15:10:35
1	SiO2†	81577.2	79117.4	14284 µg/L	14284 ppb	15:10:14
1	Si 251.611†	98038.0	97998.3	6662.3 µg/L	6662.3 ppb	15:10:14
1	Sn 189.927†	1384.7	1397.6	544.61 µg/L	544.61 ppb	15:10:35
1	Ti 334.940†	212981.7	214394.2	501.03 µg/L	501.03 ppb	15:10:14
1	Tl 190.801†	494.9	531.0	523.46 µg/L	523.46 ppb	15:10:35
1	U 409.014†	5962.1	5991.3	543.02 µg/L	543.02 ppb	15:10:14
1	V 292.402†	43967.0	44027.1	524.93 µg/L	524.93 ppb	15:10:14
1	Zn 213.857†	22831.7	21912.4	500.87 µg/L	500.87 ppb	15:10:14
2	Sc RADIAL	100853.9	100853.9	104 %		15:09:11
2	Al 396.153Radial†	10601.2	10293.2	4902.9 µg/L	4902.9 ppb	15:09:11
2	Ca 317.933Radial†	14541.6	13570.2	4938.5 µg/L	4938.5 ppb	15:09:11
2	Fe 238.204 Radial†	448.7	418.6	4961.6 µg/L	4961.6 ppb	15:09:31
2	K 766.490 Radial†	12077.0	11104.8	5182.4 µg/L	5182.4 ppb	15:09:11
2	Mg 279.077 IEC†	402.0	377.8	4983.9 µg/L	4983.9 ppb	15:09:31
2	Na 589.592 Radial†	11039.6	10414.0	5197.6 µg/L	5197.6 ppb	15:09:11
2	Sr 421.552†	87120.1	83468.7	496.21 µg/L	496.21 ppb	15:09:11
2	Sc 361.383	2105301.5	2105301.5	100.58 %		15:10:41
2	Y 371.029	1432924.3	1432924.3	100.00 %		15:10:41
2	Ag 328.068†	62070.9	62171.7	503.01 µg/L	503.01 ppb	15:10:47
2	As 188.979†	350.3	351.6	517.43 µg/L	517.43 ppb	15:11:08
2	B 249.677†	11947.9	11579.3	523.73 µg/L	523.73 ppb	15:10:47
2	Ba 233.527†	23665.4	23536.7	515.68 µg/L	515.68 ppb	15:10:47
2	Be 313.107†	857893.2	854083.5	501.63 µg/L	501.63 ppb	15:10:41
2	Cd 226.502†	21161.7	21209.7	504.11 µg/L	504.11 ppb	15:10:47
2	Co 228.616†	11534.4	11419.5	490.03 µg/L	490.03 ppb	15:11:08
2	Cr 267.716†	24090.4	23870.7	519.50 µg/L	519.50 ppb	15:10:47
2	Cu 324.752†	85618.2	80745.7	528.33 µg/L	528.33 ppb	15:10:47
2	Mn 257.610†	171209.9	170905.2	513.61 µg/L	513.61 ppb	15:10:47
2	Mo 202.031†	5299.8	5264.0	521.07 µg/L	521.07 ppb	15:11:08
2	Ni 231.604†	9483.3	9051.4	507.15 µg/L	507.15 ppb	15:11:08
2	P 214.914†	640.7	364.6	554.99 µg/L	554.99 ppb	15:11:08
2	Pb 220.353†	2027.5	1985.6	521.11 µg/L	521.11 ppb	15:11:08

2	S 181.975 Axial†	1674.0	1641.8	5225.0 µg/L	5225.0 ppb	15:11:08
2	Sb 206.836†	616.7	590.4	529.23 µg/L	529.23 ppb	15:11:08
2	Se 196.026†	557.4	526.9	506.75 µg/L	506.75 ppb	15:11:08
2	SiO2†	82290.7	79034.4	14269 µg/L	14269 ppb	15:10:47
2	Si 251.611†	98844.6	97848.1	6652.1 µg/L	6652.1 ppb	15:10:47
2	Sn 189.927†	1376.5	1375.9	536.17 µg/L	536.17 ppb	15:11:08
2	Ti 334.940†	214494.6	213829.6	499.70 µg/L	499.70 ppb	15:10:47
2	Tl 190.801†	491.6	522.9	515.60 µg/L	515.60 ppb	15:11:08
2	U 409.014†	5997.7	5968.7	540.96 µg/L	540.96 ppb	15:10:47
2	V 292.402†	44326.6	43957.5	524.03 µg/L	524.03 ppb	15:10:47
2	Zn 213.857†	23023.1	21880.9	500.17 µg/L	500.17 ppb	15:10:47
3	Sc RADIAL	100605.1	100605.1	104 %		15:09:37
3	Al 396.153Radial†	10510.2	10230.8	4873.8 µg/L	4873.8 ppb	15:09:37
3	Ca 317.933Radial†	14397.3	13465.8	4900.5 µg/L	4900.5 ppb	15:09:37
3	Fe 238.204 Radial†	449.3	420.3	4980.5 µg/L	4980.5 ppb	15:09:57
3	K 766.490 Radial†	12020.1	11078.7	5170.2 µg/L	5170.2 ppb	15:09:37
3	Mg 279.077 IEC†	403.3	380.0	5012.2 µg/L	5012.2 ppb	15:09:57
3	Na 589.592 Radial†	11035.7	10436.5	5208.9 µg/L	5208.9 ppb	15:09:37
3	Sr 421.552†	86684.9	83256.8	494.95 µg/L	494.95 ppb	15:09:37
3	Sc 361.383	2108225.5	2108225.5	100.72 %		15:11:14
3	Y 371.029	1438019.5	1438019.5	100.36 %		15:11:14
3	Ag 328.068†	60652.9	60678.2	490.86 µg/L	490.86 ppb	15:11:20
3	As 188.979†	327.2	328.1	482.80 µg/L	482.80 ppb	15:11:40
3	B 249.677†	11656.4	11273.5	509.80 µg/L	509.80 ppb	15:11:20
3	Ba 233.527†	22850.8	22695.4	497.24 µg/L	497.24 ppb	15:11:20
3	Be 313.107†	841181.8	836308.9	491.20 µg/L	491.20 ppb	15:11:14
3	Cd 226.502†	20314.6	20339.5	483.39 µg/L	483.39 ppb	15:11:20
3	Co 228.616†	10796.2	10670.8	457.88 µg/L	457.88 ppb	15:11:40
3	Cr 267.716†	22815.1	22571.3	491.22 µg/L	491.22 ppb	15:11:20
3	Cu 324.752†	82483.8	77515.6	507.24 µg/L	507.24 ppb	15:11:20
3	Mn 257.610†	164256.5	163765.6	492.15 µg/L	492.15 ppb	15:11:20
3	Mo 202.031†	4970.8	4930.0	488.02 µg/L	488.02 ppb	15:11:40
3	Ni 231.604†	8889.2	8448.6	473.38 µg/L	473.38 ppb	15:11:40
3	P 214.914†	632.0	355.1	540.88 µg/L	540.88 ppb	15:11:40
3	Pb 220.353†	1918.6	1874.7	492.00 µg/L	492.00 ppb	15:11:40
3	S 181.975 Axial†	1598.8	1564.8	4980.1 µg/L	4980.1 ppb	15:11:40
3	Sb 206.836†	585.5	558.6	500.66 µg/L	500.66 ppb	15:11:40
3	Se 196.026†	527.7	496.6	478.40 µg/L	478.40 ppb	15:11:40
3	SiO2†	79980.3	76627.1	13834 µg/L	13834 ppb	15:11:20
3	Si 251.611†	96009.1	94896.6	6451.4 µg/L	6451.4 ppb	15:11:20
3	Sn 189.927†	1287.1	1285.3	500.91 µg/L	500.91 ppb	15:11:40
3	Ti 334.940†	205189.2	204295.2	477.40 µg/L	477.40 ppb	15:11:20
3	Tl 190.801†	465.9	496.7	489.85 µg/L	489.85 ppb	15:11:40
3	U 409.014†	5766.3	5730.8	519.36 µg/L	519.36 ppb	15:11:20
3	V 292.402†	42287.5	41871.9	499.07 µg/L	499.07 ppb	15:11:20
3	Zn 213.857†	22151.6	20983.9	479.70 µg/L	479.70 ppb	15:11:20

Mean Data: 1202047702|955132|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2099486.4	100.30 %	0.606			0.60%
Sc RADIAL	100926.4	104 %	0.4			0.36%
Y 371.029	1429468.5	99.763 %	0.7472			0.75%
Ag 328.068†	61744.8	499.53 µg/L	7.559	499.53 ppb	7.559	1.51%
Al 396.153Radial†	10246.9	4881.0 µg/L	19.38	4881.0 ppb	19.38	0.40%
As 188.979†	345.4	508.37 µg/L	22.448	508.37 ppb	22.448	4.42%
B 249.677†	11495.6	519.93 µg/L	8.860	519.93 ppb	8.860	1.70%
Ba 233.527†	23289.0	510.25 µg/L	11.321	510.25 ppb	11.321	2.22%
Be 313.107†	849362.3	498.86 µg/L	6.721	498.86 ppb	6.721	1.35%
Ca 317.933Radial†	13505.4	4914.9 µg/L	20.57	4914.9 ppb	20.57	0.42%
Cd 226.502†	20919.3	497.20 µg/L	11.961	497.20 ppb	11.961	2.41%
Co 228.616†	11223.3	481.61 µg/L	20.838	481.61 ppb	20.838	4.33%
Cr 267.716†	23460.2	510.56 µg/L	16.769	510.56 ppb	16.769	3.28%
Cu 324.752†	79755.7	521.86 µg/L	12.695	521.86 ppb	12.695	2.43%
Fe 238.204 Radial†	417.9	4953.1 µg/L	32.46	4953.1 ppb	32.46	0.66%
K 766.490 Radial†	11100.1	5180.2 µg/L	9.05	5180.2 ppb	9.05	0.17%
Mg 279.077 IEC†	376.5	4967.0 µg/L	55.64	4967.0 ppb	55.64	1.12%
Mn 257.610†	168550.8	506.53 µg/L	12.457	506.53 ppb	12.457	2.46%
Mo 202.031†	5183.6	513.12 µg/L	22.215	513.12 ppb	22.215	4.33%
Na 589.592 Radial†	10417.9	5199.6 µg/L	8.47	5199.6 ppb	8.47	0.16%

Ni 231.604†	8894.9	498.38 µg/L	21.973	498.38 ppb	21.973	4.41%
P 214.914†	362.7	552.32 µg/L	10.371	552.32 ppb	10.371	1.88%
Pb 220.353†	1955.9	513.31 µg/L	18.678	513.31 ppb	18.678	3.64%
S 181.975 Axial†	1618.2	5149.9 µg/L	147.41	5149.9 ppb	147.41	2.86%
Sb 206.836†	582.1	521.77 µg/L	18.546	521.77 ppb	18.546	3.55%
Se 196.026†	514.9	495.46 µg/L	15.028	495.46 ppb	15.028	3.03%
SiO2†	78259.6	14129 µg/L	255.4	14129 ppb	255.4	1.81%
Si 251.611†	96914.3	6588.6 µg/L	118.91	6588.6 ppb	118.91	1.80%
Sn 189.927†	1353.0	527.23 µg/L	23.186	527.23 ppb	23.186	4.40%
Sr 421.552†	83314.7	495.30 µg/L	0.801	495.30 ppb	0.801	0.16%
Ti 334.940†	210839.6	492.71 µg/L	13.273	492.71 ppb	13.273	2.69%
Tl 190.801†	516.9	509.64 µg/L	17.582	509.64 ppb	17.582	3.45%
U 409.014†	5896.9	534.45 µg/L	13.109	534.45 ppb	13.109	2.45%
V 292.402†	43285.5	516.01 µg/L	14.680	516.01 ppb	14.680	2.84%
Zn 213.857†	21592.4	493.58 µg/L	12.024	493.58 ppb	12.024	2.44%

Sequence No.: 11
 Sample ID: 1202047703|955132|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 306
 Date Collected: 3/16/2010 15:11:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202047703|955132|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97928.7	97928.7	101 %			15:12:20
1	Al 396.153Radial†	-129.3	-8.5	-4.1083 µg/L	-4.1083 ppb		15:12:20
1	Ca 317.933Radial†	393.0	3.2	1.1562 µg/L	1.1562 ppb		15:12:40
1	Fe 238.204 Radial†	13.3	1.2	13.914 µg/L	13.914 ppb		15:12:40
1	K 766.490 Radial†	563.3	71.4	33.335 µg/L	33.335 ppb		15:12:20
1	Mg 279.077 IEC†	8.0	-0.1	-1.5073 µg/L	-1.5073 ppb		15:12:40
1	Na 589.592 Radial†	284.4	100.5	50.173 µg/L	50.173 ppb		15:12:20
1	Sr 421.552†	166.2	24.9	0.1478 µg/L	0.1478 ppb		15:12:20
1	Sc 361.383	2105582.3	2105582.3	100.60 %			15:13:42
1	Y 371.029	1438261.9	1438261.9	100.38 %			15:13:42
1	Ag 328.068†	-510.5	-47.3	-0.3804 µg/L	-0.3804 ppb		15:13:48
1	As 188.979†	-1.8	1.4	2.1127 µg/L	2.1127 ppb		15:14:08
1	B 249.677†	418.1	116.2	5.2677 µg/L	5.2677 ppb		15:13:48
1	Ba 233.527†	-15.8	-7.3	-0.1595 µg/L	-0.1595 ppb		15:14:08
1	Be 313.107†	-1041.8	123.2	0.0723 µg/L	0.0723 ppb		15:13:48
1	Cd 226.502†	-174.4	-2.8	-0.0693 µg/L	-0.0693 ppb		15:14:08
1	Co 228.616†	48.6	0.2	0.0108 µg/L	0.0108 ppb		15:14:08
1	Cr 267.716†	81.7	0.9	0.0205 µg/L	0.0205 ppb		15:13:48
1	Cu 324.752†	4402.7	-0.1	0.0022 µg/L	0.0022 ppb		15:13:48
1	Mn 257.610†	-696.1	-5.0	-0.0140 µg/L	-0.0140 ppb		15:14:08
1	Mo 202.031†	26.8	21.6	2.1341 µg/L	2.1341 ppb		15:14:08
1	Ni 231.604†	361.2	-17.8	-0.9991 µg/L	-0.9991 ppb		15:14:08
1	P 214.914†	273.1	-0.9	-1.5757 µg/L	-1.5757 ppb		15:14:08
1	Pb 220.353†	33.8	3.5	0.9142 µg/L	0.9142 ppb		15:14:08
1	S 181.975 Axial†	27.9	5.2	16.486 µg/L	16.486 ppb		15:14:08
1	Sb 206.836†	22.3	-0.6	-0.4973 µg/L	-0.4973 ppb		15:14:08
1	Se 196.026†	19.0	-8.4	-7.8790 µg/L	-7.8790 ppb		15:14:08
1	SiO2†	6669.4	3850.1	695.09 µg/L	695.09 ppb		15:13:48
1	Si 251.611†	5306.2	4850.6	329.76 µg/L	329.76 ppb		15:13:48
1	Sn 189.927†	-11.2	-3.7	-1.4285 µg/L	-1.4285 ppb		15:14:08
1	Ti 334.940†	-512.3	68.0	0.1592 µg/L	0.1592 ppb		15:13:48
1	Tl 190.801†	-33.3	1.0	0.9844 µg/L	0.9844 ppb		15:14:08
1	U 409.014†	-37.7	-31.6	-2.8754 µg/L	-2.8754 ppb		15:13:48
1	V 292.402†	92.0	-20.9	-0.2349 µg/L	-0.2349 ppb		15:13:48
1	Zn 213.857†	702.3	-310.7	-7.1497 µg/L	-7.1497 ppb		15:14:08
2	Sc RADIAL	97954.5	97954.5	101 %			15:12:46
2	Al 396.153Radial†	-112.6	8.1	3.8329 µg/L	3.8329 ppb		15:12:46
2	Ca 317.933Radial†	405.8	15.7	5.6996 µg/L	5.6996 ppb		15:13:06
2	Fe 238.204 Radial†	12.4	0.3	3.8191 µg/L	3.8191 ppb		15:13:06
2	K 766.490 Radial†	552.6	60.7	28.324 µg/L	28.324 ppb		15:12:46
2	Mg 279.077 IEC†	10.1	2.0	25.824 µg/L	25.824 ppb		15:13:06
2	Na 589.592 Radial†	255.3	71.7	35.762 µg/L	35.762 ppb		15:12:46
2	Sr 421.552†	96.3	-44.3	-0.2633 µg/L	-0.2633 ppb		15:12:46
2	Sc 361.383	2103644.6	2103644.6	100.50 %			15:14:14
2	Y 371.029	1440062.4	1440062.4	100.50 %			15:14:14
2	Ag 328.068†	-486.2	-23.6	-0.1889 µg/L	-0.1889 ppb		15:14:20
2	As 188.979†	-2.0	1.2	1.7888 µg/L	1.7888 ppb		15:14:40
2	B 249.677†	394.9	93.6	4.2455 µg/L	4.2455 ppb		15:14:20
2	Ba 233.527†	-1.5	6.9	0.1509 µg/L	0.1509 ppb		15:14:40
2	Be 313.107†	-1027.3	136.7	0.0802 µg/L	0.0802 ppb		15:14:20
2	Cd 226.502†	-181.2	-9.7	-0.2325 µg/L	-0.2325 ppb		15:14:40
2	Co 228.616†	34.7	-13.6	-0.5819 µg/L	-0.5819 ppb		15:14:40
2	Cr 267.716†	70.0	-10.6	-0.2299 µg/L	-0.2299 ppb		15:14:20
2	Cu 324.752†	4346.9	-51.5	-0.3359 µg/L	-0.3359 ppb		15:14:20
2	Mn 257.610†	-683.6	6.8	0.0189 µg/L	0.0189 ppb		15:14:40
2	Mo 202.031†	16.5	11.3	1.1169 µg/L	1.1169 ppb		15:14:40
2	Ni 231.604†	371.8	-6.9	-0.3874 µg/L	-0.3874 ppb		15:14:40
2	P 214.914†	271.3	-2.4	-3.9650 µg/L	-3.9650 ppb		15:14:40
2	Pb 220.353†	31.2	0.8	0.2306 µg/L	0.2306 ppb		15:14:40

2	S 181.975 Axial†	22.9	0.3	0.8087 µg/L	0.8087 ppb	15:14:40
2	Sb 206.836†	25.8	2.9	2.6494 µg/L	2.6494 ppb	15:14:40
2	Se 196.026†	21.8	-5.6	-5.2689 µg/L	-5.2689 ppb	15:14:40
2	SiO2†	6613.4	3800.5	686.12 µg/L	686.12 ppb	15:14:20
2	Si 251.611†	5217.6	4767.4	324.10 µg/L	324.10 ppb	15:14:20
2	Sn 189.927†	-2.6	4.8	1.8733 µg/L	1.8733 ppb	15:14:40
2	Ti 334.940†	-473.2	106.4	0.2469 µg/L	0.2469 ppb	15:14:20
2	Tl 190.801†	-31.7	2.6	2.5215 µg/L	2.5215 ppb	15:14:40
2	U 409.014†	-86.4	-80.2	-7.2832 µg/L	-7.2832 ppb	15:14:20
2	V 292.402†	115.9	3.0	0.0359 µg/L	0.0359 ppb	15:14:20
2	Zn 213.857†	710.6	-301.8	-6.9483 µg/L	-6.9483 ppb	15:14:40
3	Sc RADIAL	98650.2	98650.2	102 %		15:13:12
3	Al 396.153Radial†	-105.5	15.8	7.5261 µg/L	7.5261 ppb	15:13:12
3	Ca 317.933Radial†	391.6	-1.1	-0.4037 µg/L	-0.4037 ppb	15:13:32
3	Fe 238.204 Radial†	13.1	0.9	10.972 µg/L	10.972 ppb	15:13:32
3	K 766.490 Radial†	597.6	101.0	47.136 µg/L	47.136 ppb	15:13:12
3	Mg 279.077 IEC†	9.9	1.7	22.091 µg/L	22.091 ppb	15:13:32
3	Na 589.592 Radial†	297.0	110.8	55.318 µg/L	55.318 ppb	15:13:12
3	Sr 421.552†	132.2	-9.7	-0.0579 µg/L	-0.0579 ppb	15:13:12
3	Sc 361.383	2112674.5	2112674.5	100.93 %		15:14:47
3	Y 371.029	1440930.8	1440930.8	100.56 %		15:14:47
3	Ag 328.068†	-502.1	-37.2	-0.2997 µg/L	-0.2997 ppb	15:14:52
3	As 188.979†	-4.9	-1.6	-2.3412 µg/L	-2.3412 ppb	15:15:13
3	B 249.677†	382.1	79.2	3.5899 µg/L	3.5899 ppb	15:14:52
3	Ba 233.527†	-6.0	2.5	0.0546 µg/L	0.0546 ppb	15:15:13
3	Be 313.107†	-1061.2	107.4	0.0630 µg/L	0.0630 ppb	15:14:52
3	Cd 226.502†	-179.3	-7.0	-0.1682 µg/L	-0.1682 ppb	15:15:13
3	Co 228.616†	41.2	-7.3	-0.3119 µg/L	-0.3119 ppb	15:15:13
3	Cr 267.716†	63.3	-17.5	-0.3812 µg/L	-0.3812 ppb	15:14:52
3	Cu 324.752†	4386.2	-31.1	-0.2011 µg/L	-0.2011 ppb	15:14:52
3	Mn 257.610†	-676.5	16.8	0.0496 µg/L	0.0496 ppb	15:15:13
3	Mo 202.031†	11.1	5.9	0.5847 µg/L	0.5847 ppb	15:15:13
3	Ni 231.604†	374.9	-5.5	-0.3079 µg/L	-0.3079 ppb	15:15:13
3	P 214.914†	273.3	-1.7	-2.6961 µg/L	-2.6961 ppb	15:15:13
3	Pb 220.353†	29.8	-0.6	-0.1681 µg/L	-0.1681 ppb	15:15:13
3	S 181.975 Axial†	26.4	3.6	11.438 µg/L	11.438 ppb	15:15:13
3	Sb 206.836†	21.1	-1.8	-1.6225 µg/L	-1.6225 ppb	15:15:13
3	Se 196.026†	21.4	-6.1	-5.6899 µg/L	-5.6899 ppb	15:15:13
3	SiO2†	6422.2	3583.0	646.85 µg/L	646.85 ppb	15:14:52
3	Si 251.611†	4948.7	4478.8	304.49 µg/L	304.49 ppb	15:14:52
3	Sn 189.927†	1.7	9.2	3.5697 µg/L	3.5697 ppb	15:15:13
3	Ti 334.940†	-500.1	81.7	0.1894 µg/L	0.1894 ppb	15:14:52
3	Tl 190.801†	-32.9	1.5	1.4547 µg/L	1.4547 ppb	15:15:13
3	U 409.014†	43.2	48.6	4.4110 µg/L	4.4110 ppb	15:14:52
3	V 292.402†	92.7	-20.5	-0.2346 µg/L	-0.2346 ppb	15:14:52
3	Zn 213.857†	713.7	-301.8	-6.9485 µg/L	-6.9485 ppb	15:15:13

Mean Data: 1202047703|955132|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2107300.5	100.68 %	0.227			0.23%
Sc RADIAL	98177.8	101 %	0.4			0.42%
Y 371.029	1439751.7	100.48 %	0.095			0.09%
Ag 328.068†	-36.0	-0.2897 µg/L	0.09613	-0.2897 ppb	0.09613	33.19%
Al 396.153Radial†	5.1	2.4169 µg/L	5.94507	2.4169 ppb	5.94507	245.98%
As 188.979†	0.4	0.5201 µg/L	2.48320	0.5201 ppb	2.48320	477.45%
B 249.677†	96.4	4.3677 µg/L	0.84553	4.3677 ppb	0.84553	19.36%
Ba 233.527†	0.7	0.0153 µg/L	0.15886	0.0153 ppb	0.15886	>999.9%
Be 313.107†	122.4	0.0719 µg/L	0.00859	0.0719 ppb	0.00859	11.95%
Ca 317.933Radial†	5.9	2.1507 µg/L	3.17090	2.1507 ppb	3.17090	147.43%
Cd 226.502†	-6.5	-0.1567 µg/L	0.08220	-0.1567 ppb	0.08220	52.46%
Co 228.616†	-6.9	-0.2943 µg/L	0.29677	-0.2943 ppb	0.29677	100.83%
Cr 267.716†	-9.0	-0.1969 µg/L	0.20287	-0.1969 ppb	0.20287	103.04%
Cu 324.752†	-27.6	-0.1782 µg/L	0.17022	-0.1782 ppb	0.17022	95.49%
Fe 238.204 Radial†	0.8	9.5684 µg/L	5.19190	9.5684 ppb	5.19190	54.26%
K 766.490 Radial†	77.7	36.265 µg/L	9.7422	36.265 ppb	9.7422	26.86%
Mg 279.077 IEC†	1.2	15.469 µg/L	14.8200	15.469 ppb	14.8200	95.80%
Mn 257.610†	6.2	0.0182 µg/L	0.03183	0.0182 ppb	0.03183	175.26%
Mo 202.031†	12.9	1.2786 µg/L	0.78724	1.2786 ppb	0.78724	61.57%
Na 589.592 Radial†	94.3	47.084 µg/L	10.1374	47.084 ppb	10.1374	21.53%

Ni 231.604†	-10.1	-0.5648 µg/L	0.37825	-0.5648 ppb	0.37825	66.97%
P 214.914†	-1.7	-2.7456 µg/L	1.19544	-2.7456 ppb	1.19544	43.54%
Pb 220.353†	1.2	0.3256 µg/L	0.54736	0.3256 ppb	0.54736	168.12%
S 181.975 Axial†	3.0	9.5776 µg/L	8.00257	9.5776 ppb	8.00257	83.55%
Sb 206.836†	0.2	0.1765 µg/L	2.21420	0.1765 ppb	2.21420	>999.9%
Se 196.026†	-6.7	-6.2793 µg/L	1.40129	-6.2793 ppb	1.40129	22.32%
SiO2†	3744.5	676.02 µg/L	25.656	676.02 ppb	25.656	3.80%
Si 251.611†	4698.9	319.45 µg/L	13.265	319.45 ppb	13.265	4.15%
Sn 189.927†	3.4	1.3382 µg/L	2.54171	1.3382 ppb	2.54171	189.94%
Sr 421.552†	-9.7	-0.0578 µg/L	0.20555	-0.0578 ppb	0.20555	355.73%
Ti 334.940†	85.4	0.1985 µg/L	0.04455	0.1985 ppb	0.04455	22.44%
Tl 190.801†	1.7	1.6536 µg/L	0.78761	1.6536 ppb	0.78761	47.63%
U 409.014†	-21.1	-1.9159 µg/L	5.90582	-1.9159 ppb	5.90582	308.26%
V 292.402†	-12.8	-0.1445 µg/L	0.15629	-0.1445 ppb	0.15629	108.14%
Zn 213.857†	-304.8	-7.0155 µg/L	0.11620	-7.0155 ppb	0.11620	1.66%

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/16/2010 15:15:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99922.9	99922.9	103 %		15:15:55
1	Al 396.153Radial†	10271.4	10068.4	4795.9 µg/L	4795.9 ppb	15:15:55
1	Ca 317.933Radial†	14072.7	13245.9	4820.5 µg/L	4820.5 ppb	15:15:55
1	Fe 238.204 Radial†	433.2	407.6	4831.8 µg/L	4831.8 ppb	15:16:16
1	K 766.490 Radial†	11078.1	10245.2	4781.3 µg/L	4781.3 ppb	15:15:55
1	Mg 279.077 IEC†	387.5	367.4	4846.7 µg/L	4846.7 ppb	15:16:16
1	Na 589.592 Radial†	20537.0	19712.2	9838.4 µg/L	9838.4 ppb	15:15:55
1	Sr 421.552†	84636.8	81842.3	486.54 µg/L	486.54 ppb	15:15:55
1	Sc 361.383	2120503.0	2120503.0	101.31 %		15:17:20
1	Y 371.029	1447741.8	1447741.8	101.04 %		15:17:20
1	Ag 328.068†	60931.6	60604.7	490.26 µg/L	490.26 ppb	15:17:25
1	As 188.979†	348.5	347.3	511.11 µg/L	511.11 ppb	15:17:46
1	B 249.677†	11168.5	10724.8	484.99 µg/L	484.99 ppb	15:17:25
1	Ba 233.527†	22741.8	22456.5	492.01 µg/L	492.01 ppb	15:17:25
1	Be 313.107†	845424.2	835661.0	490.81 µg/L	490.81 ppb	15:17:20
1	Cd 226.502†	20831.1	20732.6	492.77 µg/L	492.77 ppb	15:17:25
1	Co 228.616†	11718.9	11519.5	494.34 µg/L	494.34 ppb	15:17:25
1	Cr 267.716†	23264.3	22883.5	498.01 µg/L	498.01 ppb	15:17:25
1	Cu 324.752†	81115.9	75691.3	495.29 µg/L	495.29 ppb	15:17:25
1	Mn 257.610†	167386.2	165910.8	498.60 µg/L	498.60 ppb	15:17:20
1	Mo 202.031†	5221.9	5149.3	509.71 µg/L	509.71 ppb	15:17:46
1	Ni 231.604†	9272.9	8776.2	491.71 µg/L	491.71 ppb	15:17:25
1	P 214.914†	1818.2	1522.3	2480.3 µg/L	2480.3 ppb	15:17:46
1	Pb 220.353†	1967.3	1911.7	501.81 µg/L	501.81 ppb	15:17:46
1	S 181.975 Axial†	336.4	309.5	984.90 µg/L	984.90 ppb	15:17:46
1	Sb 206.836†	587.1	556.8	499.36 µg/L	499.36 ppb	15:17:46
1	Se 196.026†	563.2	528.6	508.06 µg/L	508.06 ppb	15:17:46
1	SiO2†	32357.2	29159.5	5264.3 µg/L	5264.3 ppb	15:17:25
1	Si 251.611†	37104.2	36200.8	2461.1 µg/L	2461.1 ppb	15:17:25
1	Sn 189.927†	1306.7	1297.3	505.54 µg/L	505.54 ppb	15:17:46
1	Ti 334.940†	211614.7	209458.2	489.49 µg/L	489.49 ppb	15:17:20
1	Tl 190.801†	486.2	514.0	506.73 µg/L	506.73 ppb	15:17:46
1	U 409.014†	5546.0	5480.2	496.63 µg/L	496.63 ppb	15:17:25
1	V 292.402†	42541.4	41879.5	499.33 µg/L	499.33 ppb	15:17:25
1	Zn 213.857†	22910.7	21605.9	493.98 µg/L	493.98 ppb	15:17:25
2	Sc RADIAL	100127.6	100127.6	103 %		15:16:21
2	Al 396.153Radial†	10275.5	10052.1	4788.2 µg/L	4788.2 ppb	15:16:21
2	Ca 317.933Radial†	14104.7	13249.0	4821.6 µg/L	4821.6 ppb	15:16:21
2	Fe 238.204 Radial†	438.1	411.5	4877.7 µg/L	4877.7 ppb	15:16:42
2	K 766.490 Radial†	11126.3	10269.9	4792.8 µg/L	4792.8 ppb	15:16:21
2	Mg 279.077 IEC†	394.9	373.8	4930.9 µg/L	4930.9 ppb	15:16:42
2	Na 589.592 Radial†	20578.8	19711.9	9838.3 µg/L	9838.3 ppb	15:16:21
2	Sr 421.552†	84624.1	81662.5	485.47 µg/L	485.47 ppb	15:16:21
2	Sc 361.383	2096292.7	2096292.7	100.15 %		15:17:53
2	Y 371.029	1430240.6	1430240.6	99.816 %		15:17:53
2	Ag 328.068†	61186.5	61553.8	497.93 µg/L	497.93 ppb	15:17:59
2	As 188.979†	339.7	342.4	503.96 µg/L	503.96 ppb	15:18:19
2	B 249.677†	11194.1	10877.7	491.92 µg/L	491.92 ppb	15:17:59
2	Ba 233.527†	22805.4	22779.2	499.09 µg/L	499.09 ppb	15:17:59
2	Be 313.107†	838460.9	838346.1	492.39 µg/L	492.39 ppb	15:17:53
2	Cd 226.502†	20927.3	21066.1	500.70 µg/L	500.70 ppb	15:17:59
2	Co 228.616†	11703.4	11637.5	499.40 µg/L	499.40 ppb	15:17:59
2	Cr 267.716†	23345.7	23230.0	505.55 µg/L	505.55 ppb	15:17:59
2	Cu 324.752†	81302.6	76802.4	502.56 µg/L	502.56 ppb	15:17:59
2	Mn 257.610†	166032.9	166467.7	500.27 µg/L	500.27 ppb	15:17:53
2	Mo 202.031†	5132.8	5119.9	506.81 µg/L	506.81 ppb	15:18:19
2	Ni 231.604†	9311.1	8920.1	499.77 µg/L	499.77 ppb	15:17:59
2	P 214.914†	1778.1	1503.0	2447.5 µg/L	2447.5 ppb	15:18:19
2	Pb 220.353†	1953.8	1920.7	504.13 µg/L	504.13 ppb	15:18:19

2	S 181.975 Axial†	334.2	311.1	990.09 µg/L	990.09 ppb	15:18:19
2	Sb 206.836†	578.6	555.0	497.54 µg/L	497.54 ppb	15:18:19
2	Se 196.026†	560.8	532.6	511.91 µg/L	511.91 ppb	15:18:19
2	SiO2†	32338.5	29509.6	5327.5 µg/L	5327.5 ppb	15:17:59
2	Si 251.611†	37284.9	36804.2	2502.1 µg/L	2502.1 ppb	15:17:59
2	Sn 189.927†	1294.0	1299.4	506.38 µg/L	506.38 ppb	15:18:19
2	Ti 334.940†	210114.0	210372.0	491.62 µg/L	491.62 ppb	15:17:53
2	Tl 190.801†	476.2	509.6	502.42 µg/L	502.42 ppb	15:18:19
2	U 409.014†	5554.5	5551.9	503.13 µg/L	503.13 ppb	15:17:59
2	V 292.402†	42704.3	42527.1	506.97 µg/L	506.97 ppb	15:17:59
2	Zn 213.857†	23020.3	21976.5	502.46 µg/L	502.46 ppb	15:17:59
3	Sc RADIAL	100973.8	100973.8	104 %		15:16:47
3	Al 396.153Radial†	10356.6	10046.6	4787.3 µg/L	4787.3 ppb	15:16:47
3	Ca 317.933Radial†	14208.5	13234.3	4816.2 µg/L	4816.2 ppb	15:16:47
3	Fe 238.204 Radial†	438.6	408.5	4840.9 µg/L	4840.9 ppb	15:17:08
3	K 766.490 Radial†	11175.0	10226.4	4772.5 µg/L	4772.5 ppb	15:16:47
3	Mg 279.077 IEC†	389.2	365.1	4815.1 µg/L	4815.1 ppb	15:17:08
3	Na 589.592 Radial†	20628.4	19592.7	9778.8 µg/L	9778.8 ppb	15:16:47
3	Sr 421.552†	85323.4	81647.2	485.38 µg/L	485.38 ppb	15:16:47
3	Sc 361.383	2099637.5	2099637.5	100.31 %		15:18:26
3	Y 371.029	1433165.2	1433165.2	100.02 %		15:18:26
3	Ag 328.068†	57070.6	57353.3	463.83 µg/L	463.83 ppb	15:18:32
3	As 188.979†	288.6	291.0	428.09 µg/L	428.09 ppb	15:18:52
3	B 249.677†	10398.9	10067.2	455.04 µg/L	455.04 ppb	15:18:32
3	Ba 233.527†	20731.1	20675.1	452.97 µg/L	452.97 ppb	15:18:32
3	Be 313.107†	776465.5	775209.8	455.31 µg/L	455.31 ppb	15:18:26
3	Cd 226.502†	18808.1	18920.2	449.64 µg/L	449.64 ppb	15:18:32
3	Co 228.616†	10500.5	10419.8	447.09 µg/L	447.09 ppb	15:18:32
3	Cr 267.716†	20224.9	20081.7	437.04 µg/L	437.04 ppb	15:18:32
3	Cu 324.752†	73337.0	68732.2	449.84 µg/L	449.84 ppb	15:18:32
3	Mn 257.610†	154562.0	154768.3	465.11 µg/L	465.11 ppb	15:18:26
3	Mo 202.031†	4257.3	4238.9	419.63 µg/L	419.63 ppb	15:18:52
3	Ni 231.604†	8367.4	7964.5	446.24 µg/L	446.24 ppb	15:18:32
3	P 214.914†	1549.8	1272.6	2069.1 µg/L	2069.1 ppb	15:18:52
3	Pb 220.353†	1683.8	1648.4	432.63 µg/L	432.63 ppb	15:18:52
3	S 181.975 Axial†	292.8	269.4	857.23 µg/L	857.23 ppb	15:18:52
3	Sb 206.836†	506.9	482.6	432.38 µg/L	432.38 ppb	15:18:52
3	Se 196.026†	491.5	462.6	446.15 µg/L	446.15 ppb	15:18:52
3	SiO2†	29973.8	27100.9	4892.7 µg/L	4892.7 ppb	15:18:32
3	Si 251.611†	34271.6	33741.0	2293.8 µg/L	2293.8 ppb	15:18:32
3	Sn 189.927†	1060.9	1065.0	415.11 µg/L	415.11 ppb	15:18:52
3	Ti 334.940†	193256.2	193232.5	451.55 µg/L	451.55 ppb	15:18:26
3	Tl 190.801†	431.7	464.5	457.99 µg/L	457.99 ppb	15:18:52
3	U 409.014†	4922.7	4913.2	445.14 µg/L	445.14 ppb	15:18:32
3	V 292.402†	37916.3	37686.1	448.95 µg/L	448.95 ppb	15:18:32
3	Zn 213.857†	20707.4	19634.2	448.86 µg/L	448.86 ppb	15:18:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2105477.7	100.59 %	0.627			0.62%
Sc RADIAL	100341.4	104 %	0.6			0.56%
Y 371.029	1437049.2	100.29 %	0.654			0.65%
Ag 328.068†	59837.3	484.01 µg/L	17.893	484.01 ppb	17.893	3.70%
QC value within limits for Ag 328.068 Recovery = 96.80%						
Al 396.153Radial†	10055.7	4790.5 µg/L	4.72	4790.5 ppb	4.72	0.10%
QC value within limits for Al 396.153Radial Recovery = 95.81%						
As 188.979†	326.9	481.06 µg/L	46.007	481.06 ppb	46.007	9.56%
QC value within limits for As 188.979 Recovery = 96.21%						
B 249.677†	10556.6	477.32 µg/L	19.597	477.32 ppb	19.597	4.11%
QC value within limits for B 249.677 Recovery = 95.46%						
Ba 233.527†	21970.3	481.36 µg/L	24.839	481.36 ppb	24.839	5.16%
QC value within limits for Ba 233.527 Recovery = 96.27%						
Be 313.107†	816405.7	479.50 µg/L	20.968	479.50 ppb	20.968	4.37%
QC value within limits for Be 313.107 Recovery = 95.90%						
Ca 317.933Radial†	13243.1	4819.4 µg/L	2.83	4819.4 ppb	2.83	0.06%
QC value within limits for Ca 317.933Radial Recovery = 96.39%						
Cd 226.502†	20239.6	481.04 µg/L	27.477	481.04 ppb	27.477	5.71%
QC value within limits for Cd 226.502 Recovery = 96.21%						
Co 228.616†	11192.3	480.28 µg/L	28.851	480.28 ppb	28.851	6.01%

QC value within limits for Co 228.616 Recovery = 96.06%						
Cr 267.716†	22065.1	480.20 µg/L	37.566	480.20 ppb	37.566	7.82%
QC value within limits for Cr 267.716 Recovery = 96.04%						
Cu 324.752†	73742.0	482.56 µg/L	28.571	482.56 ppb	28.571	5.92%
QC value within limits for Cu 324.752 Recovery = 96.51%						
Fe 238.204 Radial†	409.2	4850.1 µg/L	24.30	4850.1 ppb	24.30	0.50%
QC value within limits for Fe 238.204 Radial Recovery = 97.00%						
K 766.490 Radial†	10247.2	4782.2 µg/L	10.17	4782.2 ppb	10.17	0.21%
QC value within limits for K 766.490 Radial Recovery = 95.64%						
Mg 279.077 IEC†	368.8	4864.2 µg/L	59.81	4864.2 ppb	59.81	1.23%
QC value within limits for Mg 279.077 IEC Recovery = 97.28%						
Mn 257.610†	162382.3	487.99 µg/L	19.833	487.99 ppb	19.833	4.06%
QC value within limits for Mn 257.610 Recovery = 97.60%						
Mo 202.031†	4836.0	478.72 µg/L	51.190	478.72 ppb	51.190	10.69%
QC value within limits for Mo 202.031 Recovery = 95.74%						
Na 589.592 Radial†	19672.3	9818.5 µg/L	34.38	9818.5 ppb	34.38	0.35%
QC value within limits for Na 589.592 Radial Recovery = 98.19%						
Ni 231.604†	8553.6	479.24 µg/L	28.864	479.24 ppb	28.864	6.02%
QC value within limits for Ni 231.604 Recovery = 95.85%						
P 214.914†	1432.6	2332.3 µg/L	228.52	2332.3 ppb	228.52	9.80%
QC value within limits for P 214.914 Recovery = 93.29%						
Pb 220.353†	1826.9	479.52 µg/L	40.628	479.52 ppb	40.628	8.47%
QC value within limits for Pb 220.353 Recovery = 95.90%						
S 181.975 Axial†	296.6	944.08 µg/L	75.252	944.08 ppb	75.252	7.97%
QC value within limits for S 181.975 Axial Recovery = 94.41%						
Sb 206.836†	531.5	476.43 µg/L	38.155	476.43 ppb	38.155	8.01%
QC value within limits for Sb 206.836 Recovery = 95.29%						
Se 196.026†	507.9	488.71 µg/L	36.909	488.71 ppb	36.909	7.55%
QC value within limits for Se 196.026 Recovery = 97.74%						
SiO2†	28590.0	5161.5 µg/L	234.95	5161.5 ppb	234.95	4.55%
QC value within limits for SiO2 Recovery = 96.52%						
Si 251.611†	35582.0	2419.0 µg/L	110.31	2419.0 ppb	110.31	4.56%
QC value within limits for Si 251.611 Recovery = 96.76%						
Sn 189.927†	1220.6	475.68 µg/L	52.454	475.68 ppb	52.454	11.03%
QC value within limits for Sn 189.927 Recovery = 95.14%						
Sr 421.552†	81717.3	485.80 µg/L	0.645	485.80 ppb	0.645	0.13%
QC value within limits for Sr 421.552 Recovery = 97.16%						
Ti 334.940†	204354.2	477.55 µg/L	22.545	477.55 ppb	22.545	4.72%
QC value within limits for Ti 334.940 Recovery = 95.51%						
Tl 190.801†	496.0	489.05 µg/L	26.983	489.05 ppb	26.983	5.52%
QC value within limits for Tl 190.801 Recovery = 97.81%						
U 409.014†	5315.1	481.63 µg/L	31.768	481.63 ppb	31.768	6.60%
QC value within limits for U 409.014 Recovery = 96.33%						
V 292.402†	40697.6	485.08 µg/L	31.529	485.08 ppb	31.529	6.50%
QC value within limits for V 292.402 Recovery = 97.02%						
Zn 213.857†	21072.2	481.76 µg/L	28.812	481.76 ppb	28.812	5.98%
QC value within limits for Zn 213.857 Recovery = 96.35%						

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/16/2010 15:19:02

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	101273.1	101273.1	105 %		15:19:32
1	Al 396.153Radial†	-125.9	-1.0	-0.5166 µg/L	-0.5166 ppb	15:19:32
1	Ca 317.933Radial†	379.9	-22.2	-8.0940 µg/L	-8.0940 ppb	15:19:52
1	Fe 238.204 Radial†	14.2	1.6	19.469 µg/L	19.469 ppb	15:19:52
1	K 766.490 Radial†	435.5	-69.2	-32.277 µg/L	-32.277 ppb	15:19:32
1	Mg 279.077 IEC†	6.0	-2.2	-29.120 µg/L	-29.120 ppb	15:19:52
1	Na 589.592 Radial†	241.5	50.2	25.063 µg/L	25.063 ppb	15:19:32
1	Sr 421.552†	102.6	-41.3	-0.2457 µg/L	-0.2457 ppb	15:19:32
1	Sc 361.383	2096378.6	2096378.6	100.16 %		15:20:54
1	Y 371.029	1434737.4	1434737.4	100.13 %		15:20:54
1	Ag 328.068†	-497.8	-36.8	-0.2981 µg/L	-0.2981 ppb	15:21:00
1	As 188.979†	1.7	4.9	7.2616 µg/L	7.2616 ppb	15:21:20
1	B 249.677†	328.7	28.8	1.2969 µg/L	1.2969 ppb	15:21:00
1	Ba 233.527†	-3.8	4.6	0.0990 µg/L	0.0990 ppb	15:21:20
1	Be 313.107†	-1021.6	138.8	0.0815 µg/L	0.0815 ppb	15:21:00
1	Cd 226.502†	-154.7	16.1	0.3799 µg/L	0.3799 ppb	15:21:20
1	Co 228.616†	40.4	-7.7	-0.3309 µg/L	-0.3309 ppb	15:21:20
1	Cr 267.716†	47.8	-32.5	-0.7074 µg/L	-0.7074 ppb	15:21:00
1	Cu 324.752†	4345.1	-38.3	-0.2466 µg/L	-0.2466 ppb	15:21:00
1	Mn 257.610†	-618.7	69.2	0.2112 µg/L	0.2112 ppb	15:21:20
1	Mo 202.031†	23.5	18.4	1.8197 µg/L	1.8197 ppb	15:21:20
1	Ni 231.604†	365.5	-11.9	-0.6687 µg/L	-0.6687 ppb	15:21:20
1	P 214.914†	264.3	-8.5	-14.144 µg/L	-14.144 ppb	15:21:20
1	Pb 220.353†	21.5	-8.7	-2.2740 µg/L	-2.2740 ppb	15:21:20
1	S 181.975 Axial†	22.8	0.2	0.6761 µg/L	0.6761 ppb	15:21:20
1	Sb 206.836†	30.6	7.9	7.0486 µg/L	7.0486 ppb	15:21:20
1	Se 196.026†	19.1	-8.3	-7.6821 µg/L	-7.6821 ppb	15:21:20
1	SiO2†	2666.6	-117.3	-21.170 µg/L	-21.170 ppb	15:21:00
1	Si 251.611†	415.9	-8.9	-0.6040 µg/L	-0.6040 ppb	15:21:20
1	Sn 189.927†	-7.6	-0.1	-0.0414 µg/L	-0.0414 ppb	15:21:20
1	Ti 334.940†	-440.8	137.1	0.3229 µg/L	0.3229 ppb	15:21:00
1	Tl 190.801†	-28.8	5.4	5.2646 µg/L	5.2646 ppb	15:21:20
1	U 409.014†	4.8	10.6	0.9567 µg/L	0.9567 ppb	15:21:00
1	V 292.402†	56.0	-56.4	-0.6551 µg/L	-0.6551 ppb	15:21:00
1	Zn 213.857†	672.9	-337.0	-7.7546 µg/L	-7.7546 ppb	15:21:20
2	Sc RADIAL	101341.2	101341.2	105 %		15:19:58
2	Al 396.153Radial†	-134.2	-8.9	-4.2893 µg/L	-4.2893 ppb	15:19:58
2	Ca 317.933Radial†	384.4	-18.1	-6.5959 µg/L	-6.5959 ppb	15:20:18
2	Fe 238.204 Radial†	13.9	1.3	15.131 µg/L	15.131 ppb	15:20:18
2	K 766.490 Radial†	481.8	-25.2	-11.744 µg/L	-11.744 ppb	15:19:58
2	Mg 279.077 IEC†	7.4	-1.0	-12.637 µg/L	-12.637 ppb	15:20:18
2	Na 589.592 Radial†	221.7	31.2	15.568 µg/L	15.568 ppb	15:19:58
2	Sr 421.552†	147.5	1.4	0.0085 µg/L	0.0085 ppb	15:19:58
2	Sc 361.383	2085947.6	2085947.6	99.658 %		15:21:26
2	Y 371.029	1427335.5	1427335.5	99.614 %		15:21:26
2	Ag 328.068†	-489.2	-30.7	-0.2478 µg/L	-0.2478 ppb	15:21:32
2	As 188.979†	-4.9	-1.7	-2.4564 µg/L	-2.4564 ppb	15:21:52
2	B 249.677†	288.7	-9.7	-0.4478 µg/L	-0.4478 ppb	15:21:32
2	Ba 233.527†	-5.8	2.6	0.0562 µg/L	0.0562 ppb	15:21:52
2	Be 313.107†	-1022.7	132.7	0.0778 µg/L	0.0778 ppb	15:21:32
2	Cd 226.502†	-172.3	-2.3	-0.0572 µg/L	-0.0572 ppb	15:21:52
2	Co 228.616†	37.6	-10.3	-0.4409 µg/L	-0.4409 ppb	15:21:52
2	Cr 267.716†	69.3	-10.7	-0.2328 µg/L	-0.2328 ppb	15:21:32
2	Cu 324.752†	4425.1	63.6	0.4185 µg/L	0.4185 ppb	15:21:32
2	Mn 257.610†	-630.2	54.6	0.1658 µg/L	0.1658 ppb	15:21:52
2	Mo 202.031†	24.7	19.7	1.9466 µg/L	1.9466 ppb	15:21:52
2	Ni 231.604†	356.3	-19.4	-1.0864 µg/L	-1.0864 ppb	15:21:52
2	P 214.914†	269.3	-2.2	-3.5731 µg/L	-3.5731 ppb	15:21:52
2	Pb 220.353†	38.4	8.4	2.1901 µg/L	2.1901 ppb	15:21:52

2	S 181.975 Axial†	22.4	-0.0	-0.0824 µg/L	-0.0824 ppb	15:21:52
2	Sb 206.836†	30.5	7.8	7.0283 µg/L	7.0283 ppb	15:21:52
2	Se 196.026†	19.8	-7.5	-6.9805 µg/L	-6.9805 ppb	15:21:52
2	SiO2†	2718.0	-52.4	-9.4558 µg/L	-9.4558 ppb	15:21:32
2	Si 251.611†	411.4	-11.3	-0.7694 µg/L	-0.7694 ppb	15:21:52
2	Sn 189.927†	2.3	9.7	3.7860 µg/L	3.7860 ppb	15:21:52
2	Ti 334.940†	-454.3	121.4	0.2847 µg/L	0.2847 ppb	15:21:32
2	Tl 190.801†	-23.9	10.1	9.8677 µg/L	9.8677 ppb	15:21:52
2	U 409.014†	59.2	65.2	5.9166 µg/L	5.9166 ppb	15:21:32
2	V 292.402†	81.9	-30.1	-0.3365 µg/L	-0.3365 ppb	15:21:32
2	Zn 213.857†	665.2	-341.4	-7.8561 µg/L	-7.8561 ppb	15:21:52
3	Sc RADIAL	101508.0	101508.0	105 %		15:20:24
3	Al 396.153Radial†	-131.2	-5.8	-2.8214 µg/L	-2.8214 ppb	15:20:24
3	Ca 317.933Radial†	393.8	-9.8	-3.5524 µg/L	-3.5524 ppb	15:20:44
3	Fe 238.204 Radial†	12.7	0.1	1.4170 µg/L	1.4170 ppb	15:20:44
3	K 766.490 Radial†	458.1	-48.5	-22.647 µg/L	-22.647 ppb	15:20:24
3	Mg 279.077 IEC†	4.2	-4.0	-52.777 µg/L	-52.777 ppb	15:20:44
3	Na 589.592 Radial†	218.2	27.5	13.707 µg/L	13.707 ppb	15:20:24
3	Sr 421.552†	139.5	-6.4	-0.0380 µg/L	-0.0380 ppb	15:20:24
3	Sc 361.383	2118833.1	2118833.1	101.23 %		15:21:58
3	Y 371.029	1449748.8	1449748.8	101.18 %		15:21:58
3	Ag 328.068†	-508.4	-42.0	-0.3404 µg/L	-0.3404 ppb	15:22:04
3	As 188.979†	-0.9	2.3	3.4165 µg/L	3.4165 ppb	15:22:25
3	B 249.677†	297.9	-5.1	-0.2316 µg/L	-0.2316 ppb	15:22:04
3	Ba 233.527†	-8.0	0.5	0.0094 µg/L	0.0094 ppb	15:22:25
3	Be 313.107†	-1075.9	96.0	0.0563 µg/L	0.0563 ppb	15:22:04
3	Cd 226.502†	-165.6	7.0	0.1662 µg/L	0.1662 ppb	15:22:25
3	Co 228.616†	42.1	-6.5	-0.2757 µg/L	-0.2757 ppb	15:22:25
3	Cr 267.716†	67.6	-13.5	-0.2930 µg/L	-0.2930 ppb	15:22:04
3	Cu 324.752†	4436.8	6.3	0.0412 µg/L	0.0412 ppb	15:22:04
3	Mn 257.610†	-622.1	72.4	0.2213 µg/L	0.2213 ppb	15:22:25
3	Mo 202.031†	30.3	24.8	2.4526 µg/L	2.4526 ppb	15:22:25
3	Ni 231.604†	373.3	-8.1	-0.4541 µg/L	-0.4541 ppb	15:22:25
3	P 214.914†	266.3	-9.3	-15.478 µg/L	-15.478 ppb	15:22:25
3	Pb 220.353†	25.2	-5.3	-1.3747 µg/L	-1.3747 ppb	15:22:25
3	S 181.975 Axial†	21.8	-1.0	-3.1695 µg/L	-3.1695 ppb	15:22:25
3	Sb 206.836†	27.9	4.8	4.3400 µg/L	4.3400 ppb	15:22:25
3	Se 196.026†	20.6	-7.0	-6.5418 µg/L	-6.5418 ppb	15:22:25
3	SiO2†	2720.2	-92.6	-16.710 µg/L	-16.710 ppb	15:22:04
3	Si 251.611†	417.1	-12.0	-0.8170 µg/L	-0.8170 ppb	15:22:25
3	Sn 189.927†	1.4	8.8	3.4358 µg/L	3.4358 ppb	15:22:25
3	Ti 334.940†	-427.2	155.2	0.3670 µg/L	0.3670 ppb	15:22:04
3	Tl 190.801†	-33.0	1.6	1.5267 µg/L	1.5267 ppb	15:22:25
3	U 409.014†	-5.9	-0.0	-0.0033 µg/L	-0.0033 ppb	15:22:04
3	V 292.402†	72.8	-40.4	-0.4587 µg/L	-0.4587 ppb	15:22:04
3	Zn 213.857†	670.0	-347.0	-7.9848 µg/L	-7.9848 ppb	15:22:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2100386.5	100.35 %	0.803			0.80%
Sc RADIAL	101374.1	105 %	0.1			0.12%
Y 371.029	1437273.9	100.31 %	0.797			0.79%
Ag 328.068†	-36.5	-0.2954 µg/L	0.04633	-0.2954 ppb	0.04633	15.68%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.2	-2.5424 µg/L	1.90175	-2.5424 ppb	1.90175	74.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.9	2.7406 µg/L	4.89412	2.7406 ppb	4.89412	178.58%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	4.7	0.2058 µg/L	0.95107	0.2058 ppb	0.95107	462.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.6	0.0549 µg/L	0.04482	0.0549 ppb	0.04482	81.65%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	122.5	0.0719 µg/L	0.01362	0.0719 ppb	0.01362	18.95%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-16.7	-6.0808 µg/L	2.31421	-6.0808 ppb	2.31421	38.06%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1630 µg/L	0.21855	0.1630 ppb	0.21855	134.08%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.2	-0.3492 µg/L	0.08411	-0.3492 ppb	0.08411	24.09%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-18.9	-0.4111 µg/L	0.25842	-0.4111 ppb	0.25842	62.87%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	10.5	0.0710 µg/L	0.33355	0.0710 ppb	0.33355	469.64%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.0	12.006 µg/L	9.4229	12.006 ppb	9.4229	78.49%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-47.6	-22.223 µg/L	10.2730	-22.223 ppb	10.2730	46.23%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-2.4	-31.511 µg/L	20.1763	-31.511 ppb	20.1763	64.03%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	65.4	0.1994 µg/L	0.02954	0.1994 ppb	0.02954	14.81%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	20.9	2.0730 µg/L	0.33488	2.0730 ppb	0.33488	16.15%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	36.3	18.113 µg/L	6.0908	18.113 ppb	6.0908	33.63%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-13.1	-0.7364 µg/L	0.32155	-0.7364 ppb	0.32155	43.67%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-6.7	-11.065 µg/L	6.5221	-11.065 ppb	6.5221	58.95%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-1.9	-0.4862 µg/L	2.36099	-0.4862 ppb	2.36099	485.62%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-0.3	-0.8586 µg/L	2.03688	-0.8586 ppb	2.03688	237.23%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	6.8	6.1390 µg/L	1.55796	6.1390 ppb	1.55796	25.38%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-7.6	-7.0681 µg/L	0.57517	-7.0681 ppb	0.57517	8.14%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-87.4	-15.779 µg/L	5.9126	-15.779 ppb	5.9126	37.47%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-10.7	-0.7302 µg/L	0.11179	-0.7302 ppb	0.11179	15.31%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	6.1	2.3935 µg/L	2.11591	2.3935 ppb	2.11591	88.40%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-15.4	-0.0917 µg/L	0.13537	-0.0917 ppb	0.13537	147.58%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	137.9	0.3249 µg/L	0.04121	0.3249 ppb	0.04121	12.68%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	5.7	5.5530 µg/L	4.17795	5.5530 ppb	4.17795	75.24%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	25.2	2.2900 µg/L	3.17718	2.2900 ppb	3.17718	138.74%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-42.3	-0.4834 µg/L	0.16071	-0.4834 ppb	0.16071	33.24%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-341.8	-7.8652 µg/L	0.11537	-7.8652 ppb	0.11537	1.47%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

ICPMS#3 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, March 17, 2010 11:29:49

Sample Description:

Method File: C:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.7527

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	471.8	471.808	16.239	3.4
Mg	24.0	5042.9	5042.890	124.438	2.5
Co	58.9	7261.0	7261.046	198.314	2.7
Rh	102.9	16804.1	16804.083	431.451	2.6
In	114.9	24734.2	24734.201	522.538	2.1
Pb	208.0	14057.1	14057.114	175.371	1.2
[> Ba	137.9	18780.9	18780.938	448.169	2.4
[Ba++	69.0	291.4	0.016	0.001	4.2
[> Ce	139.9	24812.3	24812.333	376.713	1.5
[CeO	155.9	488.3	0.020	0.000	2.1
Bkgd	220.0	0.6	0.600	0.224	37.3

Current Optimization File Data

Current Value	Description
1.09	Nebulizer Gas Flow
8.40	Lens Voltage
1450.00	ICP RF Power
-1855.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	8.3	601.0
Co	59	25	10.5	9090.6
In	115	25	11.8	46012.6

ICPMS#3 Instrument Tuning Report

File Name: 100317.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.1	591	2060	0.646
Be	9.0	9.0	2056	2040	0.667
Mg	24.0	24.0	5708	2110	0.618
Mg	25.0	25.0	5896	2020	0.662
Mg	26.0	26.0	6230	2140	0.650
Co	58.9	58.9	14201	2115	0.625
Rh	102.9	102.9	24906	2165	0.659
In	114.9	114.9	27827	2180	0.649
Ce	139.9	139.9	33907	2220	0.619
Pb	206.0	206.0	50004	2280	0.674
Pb	207.0	207.0	50272	2310	0.664
Pb	208.0	208.0	50486	2300	0.646
U	238.1	238.0	57837	2340	0.669

ICPMS#3 - Summary Report

Sample ID: Blank

Sample Date/Time: Wednesday, March 17, 2010 20:19:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\Blank.183

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		53646	
| TI 205		ug/L		57	
| Pb 208		ug/L		16	
[U 238		ug/L		24	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	
Pb	208Linear Thru Zero	
U	238Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
| TI 205					
| Pb 208					
[U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Wednesday, March 17, 2010 20:20:21

Page 1

ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Wednesday, March 17, 2010 20:22:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\Standard 1.184

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		53451	53451.315
|	TI 205	10.000	ug/L	0.811	18257	0.341
|	Pb 208	10.000	ug/L	1.875	21671	0.405
[	U 238	10.000	ug/L	1.789	23180	0.434

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175					
|	TI 205					
|	Pb 208					
[	U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Wednesday, March 17, 2010 20:22:41

Page 1

ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Wednesday, March 17, 2010 20:24:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\Standard 2.185

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		52958	52958.316
| TI 205	100.026	ug/L	2.206	185125	3.499
| Pb 208	100.018	ug/L	2.962	218273	4.128
[U 238	100.032	ug/L	2.580	237032	4.482

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
| TI 205					
| Pb 208					
[U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Wednesday, March 17, 2010 20:27:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 1.186

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		53328	53328.211
| TI	205	49.724	ug/L	2.540	92716	1.739
| Pb	208	50.459	ug/L	2.275	110957	2.083
[U	238	51.585	ug/L	1.912	123170	2.311

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			99.4		
| TI	205	99.448				
| Pb	208	100.918				
[U	238	103.171				

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: Wednesday, March 17, 2010 20:27:25

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Wednesday, March 17, 2010 20:29:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 2.187

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		52610	52609.575
| TI 205	0.273	ug/L	1.756	557	0.010
| Pb 208	0.005	ug/L	67.702	26	0.000
[U 238	0.047	ug/L	11.195	133	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		98.1			
| TI 205					
| Pb 208					
[U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Wednesday, March 17, 2010 20:29:51

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Wednesday, March 17, 2010 20:31:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 3.188

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		52404	52404.049
| TI 205	1.170	ug/L	3.676	2196	0.041
| Pb 208	2.235	ug/L	3.558	4842	0.092
[U 238	0.277	ug/L	0.251	673	0.012

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		97.7			
| TI 205	116.961				
| Pb 208	111.741				
[U 238	138.253				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Wednesday, March 17, 2010 20:34:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 4.189

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		42223	42222.908
|	Tl 205	0.052	ug/L	23.145	123	0.002
|	Pb 208	0.231	ug/L	2.820	415	0.010
[	U 238	0.012	ug/L	21.963	42	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175			78.7		
|	Tl 205					
|	Pb 208	122.246				
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Lu 175 Int Std for Q(Lu		175

QC Action

QC Action Line: Continue

Sample ID: QC Std 4

Report Date/Time: Wednesday, March 17, 2010 20:34:37

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Wednesday, March 17, 2010 20:36:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 5.190

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		41702	41702.150
| TI 205	20.991	ug/L	1.938	30633	0.734
| Pb 208	22.089	ug/L	3.958	37946	0.912
[U 238	24.271	ug/L	5.236	45240	1.087

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			77.7		
| TI 205	104.956				
| Pb 208	109.411				
[U 238	121.356				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Lu 175 Int Std for Q(Lu		175
QC Std 5	U	238ICSAB is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 5

Report Date/Time: Wednesday, March 17, 2010 20:37:01

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 17, 2010 20:39:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 6.191

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		49228	49228.453
|	Tl 205	49.353	ug/L	0.386	85053	1.726
|	Pb 208	50.154	ug/L	1.903	101825	2.070
[	U 238	49.948	ug/L	2.069	110089	2.238

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		91.8			
|	Tl 205	98.707				
|	Pb 208	100.308				
[	U 238	99.896				

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: Wednesday, March 17, 2010 20:39:26

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 17, 2010 20:41:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 7.192

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		49410	49410.467
|	Tl 205	0.385	ug/L	4.539	718	0.013
|	Pb 208	0.008	ug/L	28.858	31	0.000
[	U 238	0.027	ug/L	14.023	83	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		92.1			
|	Tl 205					
|	Pb 208					
[	U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, March 17, 2010 20:41:53

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 17, 2010 21:10:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 6.203

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		50876	50875.907
| TI 205	48.392	ug/L	3.126	86074	1.693
| Pb 208	49.112	ug/L	2.196	103050	2.027
[U 238	48.692	ug/L	2.778	110875	2.182

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			94.8		
| TI 205	96.784				
| Pb 208	98.223				
[U 238	97.384				

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: Wednesday, March 17, 2010 21:10:54

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 17, 2010 21:12:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 7.204

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		50834	50834.014
|	Tl 205	0.335	ug/L	6.126	648	0.012
|	Pb 208	0.007	ug/L	25.330	30	0.000
[	U 238	0.019	ug/L	27.542	67	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		94.8			
|	Tl 205					
|	Pb 208					
[	U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, March 17, 2010 21:13:21

Page 1

ICPMS#3 - Summary Report

Sample ID: 1202047704

Sample Date/Time: Wednesday, March 17, 2010 21:15:21

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 955134|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\1202047704.205

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		48641	48640.741
|	Tl	205	0.077 ug/L	10.355	183	0.003
|	Pb	208	0.012 ug/L	23.684	38	0.000
[	U	238	0.002 ug/L	228.289	26	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		90.7		
|	Tl	205				
|	Pb	208				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202047704

Report Date/Time: Wednesday, March 17, 2010 21:15:44

Page 1

ICPMS#3 - Summary Report

Sample ID: 1202047705

Sample Date/Time: Wednesday, March 17, 2010 21:17:44

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 955134|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\1202047705.206

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		49496	49496.047
| TI 205	50.174	ug/L	1.750	86857	1.755
| Pb 208	54.159	ug/L	2.104	110555	2.235
[U 238	53.988	ug/L	2.787	119592	2.419

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		92.3			
| TI 205					
| Pb 208					
[U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202047705

Report Date/Time: Wednesday, March 17, 2010 21:18:08

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 17, 2010 21:37:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 6.214

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		49568	49567.728
|	Tl 205	47.660	ug/L	1.560	82620	1.667
|	Pb 208	49.096	ug/L	3.910	100245	2.026
[	U 238	49.111	ug/L	3.148	108905	2.200

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		92.4			
|	Tl 205	95.320				
|	Pb 208	98.192				
[	U 238	98.222				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 17, 2010 21:39:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100317\QC Std 7.215

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		49341	49340.558
| TI 205	0.410	ug/L	6.874	758	0.014
| Pb 208	0.010	ug/L	13.276	35	0.000
| U 238	0.050	ug/L	6.639	132	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		92.0			
| TI 205					
| Pb 208					
| U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, March 17, 2010 21:40:02

Page 1

ICPMS#3 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, March 18, 2010 12:58:10

Sample Description:

Method File: C:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.7542

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		479.6		479.608		16.891		3.5
	Mg	24.0		4271.4		4271.439		42.045		1.0
	Co	58.9		10678.4		10678.390		76.095		0.7
	Rh	102.9		28410.6		28410.633		597.377		2.1
	In	114.9		44449.7		44449.661		764.269		1.7
	Pb	208.0		29337.9		29337.898		386.066		1.3
[>	Ba	137.9		34356.6		34356.586		585.954		1.7
[	Ba++	69.0		403.2		0.012		0.000		3.3
[>	Ce	139.9		44738.8		44738.765		843.521		1.9
[	CeO	155.9		791.1		0.018		0.001		3.6
	Bkgd	220.0		1.2		1.200		0.758		63.2

Current Optimization File Data

Current Value	Description
1.07	Nebulizer Gas Flow
8.40	Lens Voltage
1450.00	ICP RF Power
-1984.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	8.3	685.0
Co	59	25	10.5	11350.2
In	115	25	11.5	64331.2

ICPMS#3 Instrument Tuning Report

File Name: 100318.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	584	2060	0.645
Be	9.0	9.0	2063	2040	0.664
Mg	24.0	23.9	5704	2110	0.638
Mg	25.0	25.0	5892	2020	0.646
Mg	26.0	25.9	6216	2140	0.654
Co	58.9	59.0	14209	2115	0.627
Rh	102.9	102.9	24904	2165	0.659
In	114.9	114.9	27825	2180	0.654
Ce	139.9	139.9	33905	2220	0.621
Pb	206.0	206.0	50004	2280	0.690
Pb	207.0	207.0	50260	2310	0.646
Pb	208.0	208.0	50498	2300	0.637
U	238.1	238.1	57849	2340	0.668

ICPMS#3 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 18, 2010 13:19:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\Blank.435

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		123041	
|	Tl	205	ug/L		265	
[	Pb	208	ug/L		45	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	
Pb	208Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
|	Tl	205				
[Pb	208				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Thursday, March 18, 2010 13:19:52

Page 1

ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 18, 2010 13:21:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\Standard 1.436

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		128413	128412.637
|	Tl	205	10.000 ug/L	6.063	48327	0.375
[	Pb	208	10.000 ug/L	9.085	57571	0.451

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
|	Tl	205				
[	Pb	208				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 18, 2010 13:24:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\Standard 2.437

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		130015	130014.881
|	Tl	205	99.995 ug/L	7.465	484250	3.736
|	Pb	208	99.991 ug/L	5.175	579873	4.467

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
|	Tl	205				
	Pb	208				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, March 18, 2010 13:24:28

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 18, 2010 13:26:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 1.438

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		130501	130500.682
|	Tl	205	49.146 ug/L	6.758	239189	1.836
|	Pb	208	50.836 ug/L	6.802	296064	2.271

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		106.1		
|	Tl	205	98.292			
	Pb	208	101.671			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, March 18, 2010 13:26:47

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, March 18, 2010 13:28:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 2.439

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		126173	126172.954
|	Tl	205	0.346 ug/L	4.545	1899	0.013
[	Pb	208	0.015 ug/L	69.666	129	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		102.5		
|	Tl	205				
[	Pb	208				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 18, 2010 13:31:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 3.440

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		128821	128820.664
|	Tl	205	1.160 ug/L	8.323	5844	0.043
|	Pb	208	2.216 ug/L	6.069	12775	0.099

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		104.7		
|	Tl	205	115.987			
	Pb	208	110.782			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 18, 2010 13:33:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 4.441

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		105433	105433.237
|	Tl	205	0.073 ug/L	20.684	514	0.003
|	Pb	208	0.228 ug/L	7.000	1112	0.010

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		85.7		
|	Tl	205				
|	Pb	208	120.797			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, March 18, 2010 13:35:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 5.442

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175	ug/L		104189	104188.866
|	Tl	205	21.274 ug/L	5.898	83111	0.795
|	Pb	208	22.273 ug/L	5.662	103486	0.995

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		84.7		
|	Tl	205	106.369			
|	Pb	208	110.321			

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Thursday, March 18, 2010 13:36:11

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 13:38:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.443

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		125613	125613.205
|	Tl	205	50.011 ug/L	6.600	234299	1.868
L	Pb	208	51.041 ug/L	5.083	286134	2.280

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		102.1		
|	Tl	205	100.021			
L	Pb	208	102.083			

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: Thursday, March 18, 2010 13:38:33

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ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 13:40:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 7.444

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		122230	122229.575
|	Tl	205	0.292 ug/L	7.898	1601	0.011
L	Pb	208	0.010 ug/L	29.281	99	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		99.3		
|	Tl	205				
L	Pb	208				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, March 18, 2010 13:40:57

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ICPMS#3 - Summary Report

Sample ID: 247350001

Sample Date/Time: Thursday, March 18, 2010 13:50:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955134|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\247350001.448

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		115106	115105.732
|	Tl	205	0.008 ug/L	52.621	285	0.000
|	Pb	208	0.067 ug/L	12.724	382	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		93.6		
|	Tl	205				
	Pb	208				

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: 247350001

Report Date/Time: Thursday, March 18, 2010 13:50:24

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ICPMS#3 - Summary Report

Sample ID: 1202047706

Sample Date/Time: Thursday, March 18, 2010 13:52:25

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 955134|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\1202047706.449

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		116646	116645.931
|	Tl	205	ug/L	72.673	229	-0.000
|	Pb	208	ug/L	2.749	411	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		94.8		
|	Tl	205				
|	Pb	208				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202047707

Sample Date/Time: Thursday, March 18, 2010 13:54:49

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 955134|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\1202047707.450

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		118958	118957.744
|	Tl	205	ug/L	6.950	318822	2.681
|	Pb	208	ug/L	4.875	224120	1.883

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		96.7		
|	Tl	205				
	Pb	208				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202047708

Sample Date/Time: Thursday, March 18, 2010 13:57:11

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 955134|5|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\1202047708.451

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		123476	123476.334
|	Tl 205	3.174	ug/L	6.677	14886	0.119
[	Pb 208	0.051	ug/L	9.535	324	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		100.4			
|	Tl 205					
[Pb 208					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 18, 2010 13:59:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 6.452

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		127052	127052.305
|	Tl	205	48.738 ug/L	7.663	230359	1.821
L	Pb	208	50.110 ug/L	10.121	282275	2.239

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		103.3		
|	Tl	205	97.477			
L	Pb	208	100.220			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 18, 2010 14:01:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: c:\elandata\Dataset\100317\QC Std 7.453

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		123596	123595.514
|	Tl	205	1.160 ug/L	8.988	5625	0.043
[	Pb	208	0.010 ug/L	15.470	102	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		100.5		
|	Tl	205				
[	Pb	208				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 7	Tl	205CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 7

Report Date/Time: Thursday, March 18, 2010 14:02:18

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ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, March 15, 2010 11:49:49

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.731

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		3870.9		3870.924		21.944		0.6
Mg	24.0		48922.4		48922.432		465.568		1.0
Co	58.9		88703.4		88703.374		1147.297		1.3
Rh	102.9		170324.8		170324.804		1372.464		0.8
In	114.9		234972.6		234972.563		1929.394		0.8
Pb	208.0		237752.2		237752.248		2423.747		1.0
[> Ba	137.9		225503.8		225503.775		1300.803		0.6
[Ba++	69.0		3607.1		0.016		0.000		1.0
[> Ce	139.9		277260.6		277260.595		1748.070		0.6
[CeO	155.9		5905.0		0.021		0.000		1.9
Bkgd	220.0		20.5		20.500		3.571		17.4

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
7.25	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	7.0	4285.0
Co	59	13	8.0	88894.1
In	115	13	8.8	222733.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	584	2050	0.668
Be	9.0	9.0	2050	2075	0.629
Mg	24.0	24.0	5691	2080	0.604
Mg	25.0	25.0	5955	2080	0.659
Mg	26.0	26.0	6150	2080	0.641
Co	58.9	58.9	14185	2110	0.626
Rh	102.9	102.9	24870	2160	0.641
In	114.9	114.9	27796	2180	0.638
Ce	139.9	139.9	33868	2200	0.646
Pb	206.0	206.0	49948	2295	0.597
Pb	207.0	207.0	50171	2240	0.634
Pb	208.0	208.0	50451	2265	0.694
U	238.1	238.0	57725	2275	0.730

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, March 16, 2010 04:13:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\NanI er.mth

Dataset File: C:\elandata\Dataset\100315\Blank.312

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		14	
|>	Sc	45		ug/L		276185	
[	Mn	55		ug/L		982	
[	Cd	111		ug/L		13	
|	Cd	114		ug/L		39	
|>	In	115		ug/L		222407	
|	Sb	121		ug/L		128	
[	Sb	123		ug/L		109	
[>	Lu	175		ug/L		428405	
|	Tl	205		ug/L		1004	
|	Pb	208		ug/L		516	
[	U	238		ug/L		259	

Sample ID: Blank

Report Date/Time: Tuesday, March 16, 2010 04:14:18

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Simple Linear	
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	
Pb	208Simple Linear	0.9999
U	238Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45					
|	Mn	55					
[	Cd	111					
|	Cd	114					
|>	In	115					
|	Sb	121					
|	Sb	123					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, March 16, 2010 04:17:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\Standard 1.313

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	10.000	ug/L	1.370	3514	0.013
[> Sc	45		ug/L		269284	269283.784
[Mn	55	10.000	ug/L	1.898	67241	0.246
[Cd	111	10.000	ug/L	1.647	12198	0.056
| Cd	114		ug/L		29359	0.134
[> In	115		ug/L		218214	218213.854
| Sb	121	10.000	ug/L	1.251	40633	0.186
[Sb	123		ug/L		31622	0.144
[> Lu	175		ug/L		420379	420378.861
| Tl	205	10.000	ug/L	1.162	183902	0.435
| Pb	208	10.000	ug/L	1.696	321160	0.763
[U	238	10.000	ug/L	0.790	433254	1.030

Sample ID: Standard 1

Report Date/Time: Tuesday, March 16, 2010 04:18:14

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Mn	55					
[	Cd	111					
|	Cd	114					
[>	In	115					
|	Sb	121					
[	Sb	123					
[>	Lu	175					
|	Tl	205					
|	Pb	208					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, March 16, 2010 04:21:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanier.mth

Dataset File: C:\elandata\Dataset\100315\Standard 2.314

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	99.940	ug/L	1.024	35384	0.123
|>	Sc	45		ug/L		288559	288558.553
[	Mn	55	99.900	ug/L	0.594	646119	2.236
[	Cd	111	99.950	ug/L	0.730	123298	0.532
|	Cd	114		ug/L		291495	1.257
|>	In	115		ug/L		231951	231951.221
|	Sb	121	99.995	ug/L	1.067	428452	1.847
[	Sb	123		ug/L		334988	1.444
[>	Lu	175		ug/L		449491	449491.060
|	Tl	205	99.798	ug/L	0.858	1625284	3.614
|	Pb	208	99.821	ug/L	1.074	2903446	6.459
[	U	238	99.729	ug/L	0.867	3634435	8.084

Sample ID: Standard 2

Report Date/Time: Tuesday, March 16, 2010 04:22:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

Sample ID: Standard 2

Report Date/Time: Tuesday, March 16, 2010 04:22:11

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Mn	55					
[	Cd	111					
[	Cd	114					
[>	In	115					
[	Sb	121					
[	Sb	123					
[>	Lu	175					
[	Tl	205					
[	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, March 16, 2010 04:25:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 1.315

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.978	ug/L	0.517	18648	0.063
[>	Sc	45		ug/L		297979	297978.882
[	Mn	55	53.536	ug/L	0.138	358075	1.198
[	Cd	111	51.944	ug/L	1.150	65706	0.276
|	Cd	114		ug/L		158509	0.666
[>	In	115		ug/L		237840	237839.739
|	Sb	121	53.092	ug/L	0.248	233337	0.981
[	Sb	123		ug/L		180328	0.758
[>	Lu	175		ug/L		451737	451737.162
|	Tl	205	54.098	ug/L	1.630	885846	1.959
|	Pb	208	54.377	ug/L	0.835	1589843	3.518
[	U	238	54.367	ug/L	1.744	1990900	4.407

Sample ID: QC Std 1

Report Date/Time: Tuesday, March 16, 2010 04:26:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	101.956				
|>	Sc	45		107.9			
[	Mn	55	107.073				
[	Cd	111	103.887				
|	Cd	114					
|>	In	115		106.9			
|	Sb	121	106.183				
[	Sb	123					
|>	Lu	175		105.4			
|	Tl	205	108.196				
|	Pb	208	108.754				
[	U	238	108.734				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, March 16, 2010 04:29:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 2.316

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.002	ug/L	233.421	16	0.000
>	Sc	45		ug/L		292572	292571.905
{	Mn	55	-0.009	ug/L	15.192	981	-0.000
[	Cd	111	0.009	ug/L	89.009	24	0.000
|	Cd	114		ug/L		37	-0.000
>	In	115		ug/L		230214	230213.605
|	Sb	121	0.271	ug/L	1.943	1283	0.005
[	Sb	123		ug/L		1007	0.004
>	Lu	175		ug/L		440258	440257.956
|	Tl	205	0.289	ug/L	8.837	5636	0.010
|	Pb	208	0.002	ug/L	44.150	591	0.000
[	U	238	0.004	ug/L	3.709	393	0.000

Sample ID: QC Std 2

Report Date/Time: Tuesday, March 16, 2010 04:30:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate	Rel. % Difference
[	Be	9						
|>	Sc	45			105.9			
[	Mn	55						
[	Cd	111						
|	Cd	114						
|>	In	115			103.5			
|	Sb	121						
[	Sb	123						
[>	Lu	175			102.8			
|	Tl	205						
|	Pb	208						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, March 16, 2010 04:33:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 3.317

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.544	ug/L	3.060	217	0.001
>	Sc	45		ug/L		302136	302135.933
[	Mn	55	5.857	ug/L	1.968	40678	0.131
[	Cd	111	1.128	ug/L	2.249	1490	0.006
|	Cd	114		ug/L		3518	0.014
>	In	115		ug/L		246106	246106.254
|	Sb	121	3.132	ug/L	1.733	14377	0.058
[	Sb	123		ug/L		10996	0.044
>	Lu	175		ug/L		458917	458916.862
|	Tl	205	1.287	ug/L	1.484	22466	0.047
|	Pb	208	2.451	ug/L	0.800	73317	0.159
[	U	238	0.295	ug/L	0.579	11252	0.024

Sample ID: QC Std 3

Report Date/Time: Tuesday, March 16, 2010 04:34:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	108.821				
|>	Sc	45		109.4			
[	Mn	55	117.146				
[	Cd	111	112.812				
|	Cd	114					
|>	In	115		110.7			
|	Sb	121	104.395				
[	Sb	123					
[>	Lu	175		107.1			
|	Tl	205	128.727				
|	Pb	208	122.526				
[	U	238	147.502				

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: Tuesday, March 16, 2010 04:37:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 4.318

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.111	ug/L	13.242	53	0.000
[>	Sc	45		ug/L		282771	282770.617
[	Mn	55	6.320	ug/L	1.018	40998	0.141
[	Cd	111	0.580	ug/L	20.574	704	0.003
[	Cd	114		ug/L		7739	0.034
[>	In	115		ug/L		224581	224580.926
[	Sb	121	0.136	ug/L	4.988	695	0.003
[	Sb	123		ug/L		541	0.002
[>	Lu	175		ug/L		425219	425219.080
[	Tl	205	0.054	ug/L	1.527	1831	0.002
[	Pb	208	0.234	ug/L	0.773	6944	0.015
[	U	238	-0.003	ug/L	23.875	152	-0.000

Sample ID: QC Std 4

Report Date/Time: Tuesday, March 16, 2010 04:38:06

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45			102.4		
[	Mn	55	108.958				
[	Cd	111	130.608				
|	Cd	114					
|>	In	115			101.0		
|	Sb	121					
[	Sb	123					
[>	Lu	175			99.3		
|	Tl	205					
|	Pb	208	123.699				
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, March 16, 2010 04:41:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanier.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 5.319

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	19.506	ug/L	2.939	6665	0.024
[> Sc	45		ug/L		278066	278065.650
[Mn	55	28.722	ug/L	2.504	179667	0.643
[Cd	111	20.629	ug/L	0.268	24885	0.110
[Cd	114		ug/L		66278	0.292
[> In	115		ug/L		226719	226718.869
[Sb	121	22.466	ug/L	0.480	94196	0.415
[Sb	123		ug/L		73026	0.322
[> Lu	175		ug/L		426558	426558.436
[Tl	205	22.088	ug/L	0.651	342143	0.800
[Pb	208	22.424	ug/L	1.168	619384	1.451
[U	238	24.959	ug/L	0.878	863321	2.023

Sample ID: QC Std 5

Report Date/Time: Tuesday, March 16, 2010 04:42:05

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	97.529				
[>	Sc	45		100.7			
[	Mn	55	111.327				
[	Cd	111	100.903				
|	Cd	114					
[>	In	115		101.9			
|	Sb	121	112.329				
[	Sb	123					
[>	Lu	175		99.6			
|	Tl	205	110.441				
|	Pb	208	111.071				
[	U	238	124.796				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	U	238	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, March 16, 2010 04:45:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 6.320

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.389	ug/L	0.827	18469	0.063
[>	Sc	45		ug/L		292787	292786.701
[	Mn	55	54.464	ug/L	1.335	357862	1.219
[	Cd	111	52.093	ug/L	0.383	65579	0.277
|	Cd	114		ug/L		157680	0.666
[>	In	115		ug/L		236665	236665.089
|	Sb	121	53.707	ug/L	0.683	234876	0.992
[	Sb	123		ug/L		181107	0.765
[>	Lu	175		ug/L		446405	446404.981
|	Tl	205	54.021	ug/L	1.115	874217	1.956
|	Pb	208	55.176	ug/L	0.754	1594215	3.570
[	U	238	55.415	ug/L	0.205	2005562	4.492

Sample ID: QC Std 6

Report Date/Time: Tuesday, March 16, 2010 04:46:04

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	102.777					
|>	Sc	45		106.0				
[	Mn	55	108.928					
[	Cd	111	104.187					
|	Cd	114						
|>	In	115		106.4				
|	Sb	121	107.415					
[	Sb	123						
|>	Lu	175		104.2				
|	Tl	205	108.042					
|	Pb	208	110.352					
[	U	238	110.830					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Pb	208	CCV is out of limits (+/- 10%)
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, March 16, 2010 04:49:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 7.321

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.006	ug/L	117.633	17	0.000
[>	Sc	45		ug/L		292805	292805.256
[	Mn	55	-0.006	ug/L	104.234	998	-0.000
[	Cd	111	0.004	ug/L	295.441	18	0.000
|	Cd	114		ug/L		50	0.000
[>	In	115		ug/L		234233	234232.683
|	Sb	121	0.127	ug/L	2.629	685	0.002
[	Sb	123		ug/L		519	0.002
[>	Lu	175		ug/L		445298	445297.622
|	Tl	205	0.367	ug/L	8.690	6956	0.013
|	Pb	208	0.003	ug/L	10.276	617	0.000
[	U	238	0.005	ug/L	6.064	431	0.000

Sample ID: QC Std 7

Report Date/Time: Tuesday, March 16, 2010 04:50:06

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45			106.0			
[	Mn	55						
[	Cd	111						
|	Cd	114						
|>	In	115			105.3			
|	Sb	121						
[	Sb	123						
|>	Lu	175			103.9			
|	Tl	205						
|	Pb	208						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202047704

Sample Date/Time: Tuesday, March 16, 2010 04:53:04

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 955134|1|baj

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\1202047704.322

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.004		ug/L	110.294	17	0.000
[>	Sc	45			ug/L		298817	298816.583
[	Mn	55	0.132		ug/L	3.499	1944	0.003
[	Cd	111	0.011		ug/L	39.863	26	0.000
|	Cd	114			ug/L		39	-0.000
[>	In	115			ug/L		224388	224387.748
|	Sb	121	0.073		ug/L	4.859	433	0.001
[	Sb	123			ug/L		371	0.001
[>	Lu	175			ug/L		435213	435212.895
|	Tl	205	0.095		ug/L	4.565	2515	0.003
|	Pb	208	-0.003		ug/L	17.445	450	-0.000
[	U	238	-0.005		ug/L	7.658	89	-0.000

Sample ID: 1202047704

Report Date/Time: Tuesday, March 16, 2010 04:54:05

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
|>	Sc	45			108.2			
[	Mn	55						
[	Cd	111						
|	Cd	114						
|>	In	115			100.9			
|	Sb	121						
[	Sb	123						
|>	Lu	175			101.6			
|	Tl	205						
|	Pb	208						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202047705

Sample Date/Time: Tuesday, March 16, 2010 04:57:03

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 955134|1|baj

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100315\1202047705.323

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.563	ug/L	1.530	19285	0.066
|>	Sc	45		ug/L		293297	293296.910
[	Mn	55	57.019	ug/L	1.698	375280	1.276
[	Cd	111	55.906	ug/L	2.462	64834	0.297
|	Cd	114		ug/L		156876	0.719
|>	In	115		ug/L		218083	218082.730
|	Sb	121	0.038	ug/L	21.334	278	0.001
[	Sb	123		ug/L		248	0.001
[>	Lu	175		ug/L		421803	421802.974
|	Tl	205	54.252	ug/L	1.294	829545	1.964
|	Pb	208	59.068	ug/L	2.101	1612166	3.822
[	U	238	57.999	ug/L	2.685	1982702	4.702

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		106.2			
|	Mn	55					
[	Cd	111					
|	Cd	114					
|>	In	115		98.1			
|	Sb	121					
|	Sb	123					
[>	Lu	175		98.5			
|	Tl	205					
|	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, March 16, 2010 05:24:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 8.330

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.005	ug/L	1.353	18265	0.063
[>	Sc	45		ug/L		291694	291694.457
[	Mn	55	53.353	ug/L	1.123	349328	1.194
[	Cd	111	51.419	ug/L	2.195	64622	0.273
|	Cd	114		ug/L		156325	0.661
[>	In	115		ug/L		236344	236344.108
|	Sb	121	52.811	ug/L	2.222	230574	0.975
[	Sb	123		ug/L		179177	0.758
[>	Lu	175		ug/L		451974	451974.457
|	Tl	205	51.129	ug/L	1.743	837723	1.851
|	Pb	208	53.469	ug/L	1.894	1563942	3.460
[	U	238	53.685	ug/L	1.355	1966981	4.352

Sample ID: QC Std 8

Report Date/Time: Tuesday, March 16, 2010 05:25:54

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	102.009				
|>	Sc	45		105.6			
[	Mn	55	106.707				
[	Cd	111	102.838				
|	Cd	114					
|>	In	115		106.3			
|	Sb	121	105.623				
[	Sb	123					
|>	Lu	175		105.5			
|	Tl	205	102.259				
|	Pb	208	106.937				
[	U	238	107.370				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, March 16, 2010 05:28:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 9.331

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.009	ug/L	91.940	18	0.000
[>	Sc	45		ug/L		289691	289691.329
[	Mn	55	-0.006	ug/L	180.966	989	-0.000
[	Cd	111	0.013	ug/L	38.416	30	0.000
|	Cd	114		ug/L		48	0.000
[>	In	115		ug/L		232771	232770.839
|	Sb	121	0.105	ug/L	0.830	583	0.002
[	Sb	123		ug/L		475	0.002
[>	Lu	175		ug/L		439626	439626.310
|	Tl	205	0.381	ug/L	7.980	7089	0.014
|	Pb	208	0.003	ug/L	40.711	611	0.000
[	U	238	0.003	ug/L	15.019	362	0.000

Sample ID: QC Std 9

Report Date/Time: Tuesday, March 16, 2010 05:29:55

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		104.9			
[	Mn	55					
[	Cd	111					
|	Cd	114					
|>	In	115		104.7			
|	Sb	121					
[	Sb	123					
|>	Lu	175		102.6			
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247350001

Sample Date/Time: Tuesday, March 16, 2010 05:44:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 955134|1|ba|

Method File: c:\elandata\Method\VanI er.mth

Dataset File: C:\elandata\Dataset\100315\247350001.335

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.012	ug/L	65.278	19	0.000
|>	Sc	45		ug/L		285466	285465.928
[	Mn	55	0.463	ug/L	1.904	3976	0.010
[	Cd	111	0.006	ug/L	102.805	18	0.000
|	Cd	114		ug/L		49	0.000
|>	In	115		ug/L		209315	209314.705
|	Sb	121	0.008	ug/L	66.793	151	0.000
[	Sb	123		ug/L		123	0.000
|>	Lu	175		ug/L		402383	402383.292
|	Tl	205	0.009	ug/L	65.188	1075	0.000
|	Pb	208	0.055	ug/L	4.541	1904	0.004
[	U	238	-0.004	ug/L	7.949	100	-0.000

Sample ID: 247350001

Report Date/Time: Tuesday, March 16, 2010 05:45:51

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45						103.4
[	Mn	55						
[	Cd	111						
|	Cd	114						
|>	In	115						94.1
|	Sb	121						
[	Sb	123						
|>	Lu	175						93.9
|	Tl	205						
|	Pb	208						
[	U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202047706

Sample Date/Time: Tuesday, March 16, 2010 05:48:49

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 955134|1|baj

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100315\1202047706.336

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.002	ug/L	518.300	16	0.000
[>	Sc	45		ug/L		289906	289906.494
[	Mn	55	0.403	ug/L	3.036	3647	0.009
[	Cd	111	0.007	ug/L	167.141	19	0.000
|	Cd	114		ug/L		45	0.000
[>	In	115		ug/L		207890	207890.170
|	Sb	121	0.001	ug/L	326.146	125	0.000
[	Sb	123		ug/L		104	0.000
[>	Lu	175		ug/L		405894	405893.932
|	Tl	205	-0.009	ug/L	57.654	816	-0.000
|	Pb	208	0.070	ug/L	1.615	2315	0.004
[	U	238	-0.005	ug/L	5.660	84	-0.000

Sample ID: 1202047706

Report Date/Time: Tuesday, March 16, 2010 05:49:50

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
|>	Sc	45		105.0				
[	Mn	55						
[	Cd	111						
|	Cd	114						
|>	In	115		93.5				
|	Sb	121						
[	Sb	123						
[>	Lu	175		94.7				
|	Tl	205						
|	Pb	208						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202047707

Sample Date/Time: Tuesday, March 16, 2010 05:52:48

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 955134|1|ba|

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100315\1202047707.337

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	47.978	ug/L	1.147	17092	0.059
|>	Sc	45		ug/L		290186	290185.922
[	Mn	55	50.830	ug/L	0.241	331137	1.138
[	Cd	111	11.010	ug/L	0.403	12222	0.059
|	Cd	114		ug/L		27948	0.134
|>	In	115		ug/L		208523	208522.577
|	Sb	121	214.752	ug/L	0.848	827112	3.966
[	Sb	123		ug/L		654773	3.140
[>	Lu	175		ug/L		403416	403415.951
|	Tl	205	79.699	ug/L	4.724	1164910	2.886
|	Pb	208	44.273	ug/L	1.117	1156069	2.865
[	U	238	54.518	ug/L	1.096	1783027	4.419

Sample ID: 1202047707

Report Date/Time: Tuesday, March 16, 2010 05:53:48

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
|>	Sc	45			105.1			
[	Mn	55						
[	Cd	111						
|	Cd	114						
|>	In	115			93.8			
|	Sb	121						
[	Sb	123						
|>	Lu	175			94.2			
|	Tl	205						
|	Pb	208						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202047708

Sample Date/Time: Tuesday, March 16, 2010 05:56:47

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 955134|5|ba|

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100315\1202047708.338

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.014	ug/L	55.862	19	0.000
[> Sc	45		ug/L		274889	274888.611
[Mn	55	0.104	ug/L	13.615	1620	0.002
[Cd	111	0.006	ug/L	177.791	19	0.000
[Cd	114		ug/L		42	0.000
[> In	115		ug/L		216338	216338.084
[Sb	121	0.024	ug/L	30.034	220	0.000
[Sb	123		ug/L		181	0.000
[> Lu	175		ug/L		415119	415118.860
[Tl	205	2.663	ug/L	4.685	41002	0.096
[Pb	208	0.008	ug/L	5.632	705	0.000
[U	238	-0.003	ug/L	44.481	160	-0.000

Sample ID: 1202047708

Report Date/Time: Tuesday, March 16, 2010 05:57:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		99.5			
[	Mn	55					
[	Cd	111					
|	Cd	114					
|>	In	115		97.3			
|	Sb	121					
[	Sb	123					
|>	Lu	175		96.9			
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, March 16, 2010 06:00:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanier.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 8.339

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.658	ug/L	1.216	17895	0.062
|> Sc	45		ug/L		287763	287763.030
[Mn	55	53.558	ug/L	0.102	345940	1.199
[Cd	111	51.265	ug/L	2.503	63523	0.273
| Cd	114		ug/L		151785	0.651
|> In	115		ug/L		233007	233007.099
| Sb	121	52.243	ug/L	2.052	224904	0.965
[Sb	123		ug/L		175434	0.753
|> Lu	175		ug/L		433828	433827.704
| Tl	205	47.518	ug/L	2.798	747405	1.721
| Pb	208	54.622	ug/L	0.666	1533754	3.534
[U	238	54.932	ug/L	1.102	1932052	4.453

Sample ID: QC Std 8

Report Date/Time: Tuesday, March 16, 2010 06:01:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9	101.315				
|>	Sc	45		104.2			
[	Mn	55	107.116				
[	Cd	111	102.529				
|	Cd	114					
|>	In	115		104.8			
|	Sb	121	104.485				
[	Sb	123					
[>	Lu	175		101.3			
|	Tl	205	95.037				
|	Pb	208	109.244				
[	U	238	109.863				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, March 16, 2010 06:04:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 9.340

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.043	ug/L	37.232	30	0.000
|>	Sc	45		ug/L		283169	283169.213
[	Mn	55	-0.006	ug/L	118.489	968	-0.000
[	Cd	111	0.000	ug/L	6595.069	13	0.000
|	Cd	114		ug/L		53	0.000
|>	In	115		ug/L		226022	226021.504
|	Sb	121	0.111	ug/L	10.131	592	0.002
[	Sb	123		ug/L		459	0.002
|>	Lu	175		ug/L		428364	428364.066
|	Tl	205	1.516	ug/L	2.421	24512	0.055
|	Pb	208	0.004	ug/L	25.713	636	0.000
[	U	238	0.006	ug/L	39.600	477	0.001

Sample ID: QC Std 9

Report Date/Time: Tuesday, March 16, 2010 06:05:48

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9996

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		102.5			
[	Mn	55					
[	Cd	111					
|	Cd	114					
|>	In	115		101.6			
|	Sb	121					
[	Sb	123					
[>	Lu	175		100.0			
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte
QC Std 9 TI

MassOut of Limits Message
205CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Friday, March 19, 2010 20:10:42

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100318\Sample.301

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		2092.8		2092.753	42.063	2.0
Mg	24.0		26958.0		26958.016	371.179	1.4
Co	58.9		36322.5		36322.523	413.529	1.1
Rh	102.9		69674.5		69674.505	596.093	0.9
In	114.9		76811.3		76811.350	372.060	0.5
Pb	208.0		41087.0		41087.007	505.911	1.2
[> Ba	137.9		69276.7		69276.726	941.574	1.4
[Ba++	69.0		1977.3		0.029	0.001	2.1
[> Ce	139.9		89510.2		89510.194	1302.404	1.5
[CeO	155.9		1337.6		0.015	0.000	2.4
Bkgd	220.0		13.9		13.900	1.194	8.6

Current Optimization File Data

Current Value	Description
0.80	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	6.5	4422.0
Co	59	21	7.3	57833.8
In	115	21	8.5	116713.8

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	584	2080	0.651
Be	9.0	9.0	2025	2080	0.673
Mg	24.0	24.0	5686	2120	0.636
Mg	25.0	25.0	5918	2080	0.717
Mg	26.0	26.1	6161	2120	0.680
Co	58.9	58.9	14184	2170	0.661
Rh	102.9	102.8	24853	2230	0.722
In	114.9	114.8	27769	2260	0.706
Ce	139.9	139.9	33854	2280	0.760
Pb	206.0	206.0	49936	2420	0.665
Pb	207.0	206.9	50147	2385	0.708
Pb	208.0	208.0	50427	2430	0.725
U	238.1	238.0	57729	2470	0.707

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, March 20, 2010 03:37:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\Blank.115

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115	ug/L		121666	
|	Sb	121	ug/L		1106	
|	Sb	123	ug/L		845	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115				
|	Sb	121				
	Sb	123				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, March 20, 2010 03:40:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\Standard 1.116

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		122850	122850.273
|	Sb 121	10.000	ug/L	15.351	24635	0.193
[	Sb 123		ug/L		18854	0.147

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115					
|	Sb 121					
[Sb 123					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, March 20, 2010 03:43:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\Standard 2.117

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115	ug/L		119912	119911.854
|	Sb	121	100.064 ug/L	11.312	247249	2.063
[	Sb	123	ug/L		192788	1.606

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	In	115				
|	Sb	121				
[Sb	123				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, March 20, 2010 03:46:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 1.118

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		121031	121030.645
|	Sb 121	46.500	ug/L	12.697	116511	0.958
[	Sb 123		ug/L		89436	0.735

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	In 115			99.5			
|	Sb 121	93.000					
[Sb 123						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, March 20, 2010 03:50:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 2.119

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In 115		ug/L		120724	120724.276
| Sb 121	0.072	ug/L	52.366	1273	0.001
| Sb 123		ug/L		1004	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[> In 115		99.2			
| Sb 121					
Sb 123					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, March 20, 2010 03:53:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 3.120

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115	ug/L		124196	124196.420
|	Sb	121	2.009 ug/L	13.160	6247	0.041
|	Sb	123	ug/L		4905	0.033

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		102.1		
|	Sb	121	100.455			
|	Sb	123				

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, March 20, 2010 03:56:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 4.121

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		116778	116778.084
|	Sb 121	0.003	ug/L	895.738	1066	0.000
|	Sb 123		ug/L		848	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In 115			96.0			
|	Sb 121	2.942					
|	Sb 123						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, March 20, 2010 03:59:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 5.122

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		117124	117124.439
|	Sb 121	21.624	ug/L	12.327	53012	0.446
[	Sb 123		ug/L		40519	0.340

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
[>	In	115				96.3					
|	Sb	121	107.583								
[Sb	123									

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 20, 2010 04:03:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 6.123

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		118879	118878.589
|	Sb 121	47.908	ug/L	14.506	117545	0.987
|	Sb 123		ug/L		91213	0.765

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		97.7			
|	Sb 121	95.815				
|	Sb 123					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 20, 2010 04:06:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 7.124

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		118426	118426.331
|	Sb 121	-0.224	ug/L	12.405	526	-0.005
[	Sb 123		ug/L		418	-0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		97.3			
|	Sb 121					
[Sb 123					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202075029

Sample Date/Time: Saturday, March 20, 2010 04:09:36

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 966864|1|rmj

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\1202075029.125

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		118352	118351.872
|	Sb 121	0.196	ug/L	33.079	1545	0.004
[	Sb 123		ug/L		1220	0.003

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		97.3			
|	Sb 121					
[Sb 123					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202075030

Sample Date/Time: Saturday, March 20, 2010 04:12:50

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 966864|1|rmj

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\1202075030.126

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		119101	119101.144
|	Sb 121	54.136	ug/L	12.661	133227	1.116
L	Sb 123		ug/L		103801	0.869

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		97.9			
|	Sb 121					
L	Sb 123					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 20, 2010 04:16:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 6.127

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		122147	122147.386
|	Sb 121	45.188	ug/L	13.039	114174	0.931
L	Sb 123		ug/L		89073	0.726

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In 115		100.4				
|	Sb 121	90.375					
L	Sb 123						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits	Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 20, 2010 04:19:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 7.128

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		119000	118999.993
|	Sb 121	-0.287	ug/L	4.112	378	-0.006
[	Sb 123		ug/L		297	-0.004

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		97.8			
|	Sb 121					
[	Sb 123					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 20, 2010 04:48:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 6.137

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		122331	122330.687
|	Sb 121	47.863	ug/L	9.592	121403	0.987
[	Sb 123		ug/L		93429	0.760

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		100.5			
|	Sb 121	95.726				
[	Sb 123					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 20, 2010 04:51:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 7.138

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		121455	121454.501
|	Sb 121	-0.327	ug/L	3.072	283	-0.007
[	Sb 123		ug/L		232	-0.005

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115			99.8		
|	Sb 121					
[Sb 123					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247350001

Sample Date/Time: Saturday, March 20, 2010 04:58:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 966864|1|rmj

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\247350001.140

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		120213	120212.650
|	Sb 121	-0.161	ug/L	6.767	693	-0.003
[	Sb 123		ug/L		529	-0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115			98.8		
|	Sb 121					
[	Sb 123					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202075031

Sample Date/Time: Saturday, March 20, 2010 05:01:15

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 966864[1|rm]

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\1202075031.141

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		117363	117363.313
|	Sb 121	-0.148	ug/L	18.223	705	-0.003
|	Sb 123		ug/L		587	-0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115		96.5			
|	Sb 121					
	Sb 123					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202075032

Sample Date/Time: Saturday, March 20, 2010 05:04:29

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 966864|1|rmj

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\1202075032.142

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In 115		ug/L		117320	117320.229
|	Sb 121	208.350	ug/L	14.047	501327	4.295
|	Sb 123		ug/L		390901	3.349

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
>	In 115			96.4		
|	Sb 121					
	Sb 123					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202075033

Sample Date/Time: Saturday, March 20, 2010 05:07:43

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 966864|5|rmj

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\1202075033.143

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		120210	120210.298
|	Sb 121	-0.281	ug/L	5.074	396	-0.006
[	Sb 123		ug/L		315	-0.004

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	In 115		98.8				
|	Sb 121						
[	Sb 123						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 20, 2010 05:10:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 6.144

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		121600	121599.722
|	Sb 121	47.061	ug/L	13.287	118382	0.970
[	Sb 123		ug/L		91762	0.751

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
[>	In 115		99.9				
|	Sb 121	94.122					
[	Sb 123						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 20, 2010 05:14:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb.mth

Dataset File: C:\elandata\Dataset\100319\QC Std 7.145

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		121391	121390.527
|	Sb 121	-0.341	ug/L	1.449	249	-0.007
|	Sb 123		ug/L		204	-0.005

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	In 115		99.8				
|	Sb 121						
|	Sb 123						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: WATER

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

Element: Hg

Date: 02/25/2010

Technique: FI-MHS

Calibration Type:

Hg, Calc. Intercept : Linear

Wavelength: 253.7 nm

Sample Info Name: 022510W1.SIF

Results Data Set Name: 022510W1

Element: Hg Seq. No.: 36 AS Loc.: 1 Date: 02/25/2010

Sample ID: Calib Blank

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1			0.0015	0.0015	10:54:34	No
2			0.0014	0.0014	10:55:09	No
Mean:			0.0015			
SD :			0.0001			
%RSD:			5.3762			

Auto-zero performed.

Element: Hg Seq. No.: 37 AS Loc.: 2 Date: 02/25/2010

Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1			0.0011	0.0026	10:56:32	No
2			0.0011	0.0026	10:57:07	No
Mean:			0.0011			
SD :			0.0000			
%RSD:			2.3514			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00551
Intercept : 0.00000

Element: Hg Seq. No.: 38 AS Loc.: 3 Date: 02/25/2010

Sample ID: S0.5

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1			0.0035	0.0049	10:58:31	No
2			0.0033	0.0048	10:59:06	No
Mean:			0.0034			
SD :			0.0001			
%RSD:			3.7263			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99653 Slope: 0.00682
Intercept : -0.00010

Element: Hg Seq. No.: 39 AS Loc.: 4 Date: 02/25/2010

Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1			0.0133	0.0148	11:00:31	No
2			0.0133	0.0148	11:01:05	No
Mean:			0.0133			
SD :			0.0000			
%RSD:			0.2404			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99980
Intercept : -0.00007

Slope: 0.00670

=====

Element: Hg Seq. No.: 40 AS Loc.: 5 Date: 02/25/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0332	0.0346	11:02:31	No
2			0.0330	0.0345	11:03:06	No
Mean:			0.0331			
SD :			0.0001			
%RSD:			0.2985			

[Hg] Standard number 4 applied. [5.000]

Correlation Coefficient: 0.99996

Slope: 0.00663

Intercept : -0.00004

=====

Element: Hg Seq. No.: 41 AS Loc.: 6 Date: 02/25/2010
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0658	0.0673	11:04:33	No
2			0.0657	0.0672	11:05:07	No
Mean:			0.0658			
SD :			0.0001			
%RSD:						

[Hg] Standard number 5 applied. [10.00]

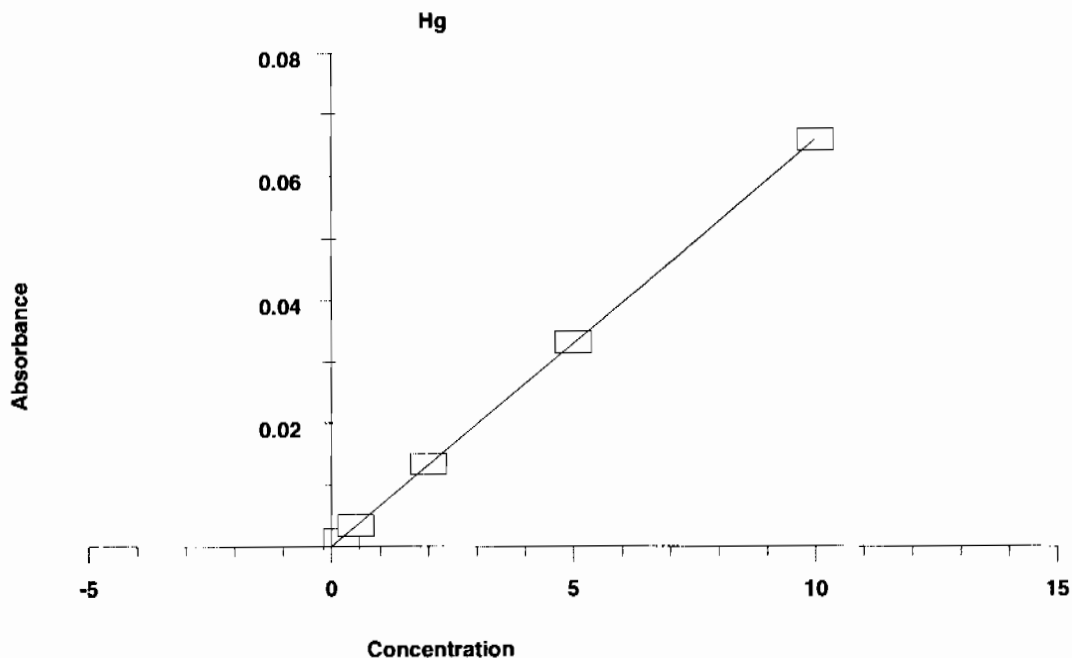
Correlation Coefficient: 0.99998

Slope: 0.00658

Intercept : 0.00002

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0015	---	---	---	---
S0.2	0.0011	0.200	0.165	0.0000	2.4
S0.5	0.0034	0.500	0.510	0.0001	3.7
S2.0	0.0133	2.000	2.019	0.0000	0.2
S5.0	0.0331	5.000	5.024	0.0001	0.3
S10	0.0658	10.000	9.984	0.0001	---
Correlation Coefficient: 0.99998		Slope:	0.00658	Intercept:	0.0000



=====
 Element: Hg Seq. No.: 42 AS Loc.: 9 Date: 02/25/2010

Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.138	5.138	0.0338	0.0353	11:06:35	No
2	5.110	5.110	0.0337	0.0351	11:07:09	No
Mean:	5.124	5.124	0.0338			
SD :	0.0203	0.0203	0.0001			
%RSD:	0.4	0.4	0.3959			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 43 AS Loc.: 10 Date: 02/25/2010

Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0015	11:08:31	No
2	-0.010	-0.010	0.0000	0.0014	11:09:06	No
Mean:	-0.002	-0.002	0.0000			
SD :	0.0111	0.0111	0.0001			
%RSD:	647.6	647.6	1145.2686			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 44 AS Loc.: 11 Date: 02/25/2010

Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0017	0.0032	11:10:28	No
2	0.257	0.257	0.0017	0.0032	11:11:03	No
Mean:	0.257	0.257	0.0017			
SD :	0.0012	0.0012	0.0000			
%RSD:	0.4	0.4	0.4436			

QC value within specified limits.

=====

Element: Hg Seq. No.: 45 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.949	4.949	0.0326	0.0341	11:12:28	No
2	4.924	4.924	0.0324	0.0339	11:13:03	No
Mean:	4.937	4.937	0.0325			
SD :	0.0175	0.0175	0.0001			
%RSD:	0.4	0.4	0.3545			

QC value within specified limits.

=====

Element: Hg Seq. No.: 46 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0003	0.0018	11:14:31	No
2	0.017	0.017	0.0001	0.0016	11:15:06	No
Mean:	0.031	0.031	0.0002			
SD :	0.0186	0.0186	0.0001			
%RSD:	60.9	60.9	56.0211			

QC value within specified limits.

=====

Element: Hg Seq. No.: 47 AS Loc.: 22 Date: 02/25/2010
Sample ID: 1202051914|i||956984|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.040	0.040	0.0003	0.0018	11:16:31	No
2	0.002	0.002	0.0000	0.0015	11:17:06	No
Mean:	0.021	0.021	0.0002			
SD :	0.0270	0.0270	0.0002			
%RSD:	129.8	129.8	114.9934			

=====

Element: Hg Seq. No.: 48 AS Loc.: 23 Date: 02/25/2010
Sample ID: 1202051915|i||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.109	2.109	0.0139	0.0154	11:18:30	No
2	2.117	2.117	0.0140	0.0154	11:19:05	No
Mean:	2.113	2.113	0.0139			
SD :	0.0053	0.0053	0.0000			
%RSD:	0.3	0.3	0.2514			

=====

Element: Hg Seq. No.: 49 AS Loc.: 24 Date: 02/25/2010
Sample ID: 247850001|i||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0003	0.0018	11:20:29	No
2	0.023	0.023	0.0002	0.0016	11:21:04	No
Mean:	0.032	0.032	0.0002			
SD :	0.0127	0.0127	0.0001			
%RSD:	40.1	40.1	36.9422			

=====

Element: Hg Seq. No.: 50 AS Loc.: 25 Date: 02/25/2010
Sample ID: 1202051916|i||DUP

%RSD: 67.0 67.0 31.8435

=====
 Element: Hg Seq. No.: 56 AS Loc.: 31 Date: 02/25/2010
 Sample ID: 247850005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.477	0.477	0.0032	0.0046	11:34:35	No
2	0.440	0.440	0.0029	0.0044	11:35:10	No
Mean:	0.459	0.459	0.0030			
SD :	0.0260	0.0260	0.0002			
%RSD:	5.7	5.7	5.6376			

=====
 Element: Hg Seq. No.: 57 AS Loc.: 7 Date: 02/25/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.027	5.027	0.0331	0.0346	11:36:37	No
2	5.029	5.029	0.0331	0.0346	11:37:11	No
Mean:	5.028	5.028	0.0331			
SD :	0.0012	0.0012	0.0000			

%RSD:
 QC value within specified limits.

=====
 Element: Hg Seq. No.: 58 AS Loc.: 8 Date: 02/25/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0002	0.0017	11:38:39	No
2	0.004	0.004	0.0000	0.0015	11:39:14	No
Mean:	0.015	0.015	0.0001			
SD :	0.0162	0.0162	0.0001			
%RSD:	105.3	105.3	89.6157			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 59 AS Loc.: 32 Date: 02/25/2010
 Sample ID: 247850006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.452	0.452	0.0030	0.0045	11:40:38	No
2	0.437	0.437	0.0029	0.0044	11:41:13	No
Mean:	0.444	0.444	0.0029			
SD :	0.0107	0.0107	0.0001			
%RSD:	2.4	2.4	2.3869			

=====
 Element: Hg Seq. No.: 60 AS Loc.: 33 Date: 02/25/2010
 Sample ID: 247850007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0015	11:42:33	No
2	-0.009	-0.009	0.0000	0.0014	11:43:07	No
Mean:	-0.006	-0.006	0.0000			
SD :	0.0034	0.0034	0.0000			
%RSD:	52.8	52.8	91.2736			

=====
 Element: Hg Seq. No.: 61 AS Loc.: 34 Date: 02/25/2010
 Sample ID: 247850008|i|||

%RSD: 64.2 64.2 73.9600

=====
 Element: Hg Seq. No.: 67 AS Loc.: 40 Date: 02/25/2010
 Sample ID: 246883001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0015	11:56:13	No
2	-0.011	-0.011	-0.0001	0.0014	11:56:48	No
Mean:	-0.002	-0.002	0.0000			
SD :	0.0131	0.0131	0.0001			
%RSD:	702.5	702.5	1607.0531			

=====
 Element: Hg Seq. No.: 68 AS Loc.: 41 Date: 02/25/2010
 Sample ID: 246883002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0001	0.0016	11:58:12	No
2	0.010	0.010	0.0001	0.0016	11:58:47	No
Mean:	0.012	0.012	0.0001			
SD :	0.0033	0.0033	0.0000			
%RSD:	27.1	27.1	22.1377			

=====
 Element: Hg Seq. No.: 69 AS Loc.: 7 Date: 02/25/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.321	5.321	0.0351	0.0365	12:00:13	No
2	5.286	5.286	0.0348	0.0363	12:00:47	No
Mean:	5.304	5.304	0.0349			
SD :	0.0249	0.0249	0.0002			
%RSD:	0.5	0.5	0.4690			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 70 AS Loc.: 8 Date: 02/25/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0002	0.0017	12:02:15	No
2	0.037	0.037	0.0003	0.0017	12:02:50	No
Mean:	0.035	0.035	0.0002			
SD :	0.0030	0.0030	0.0000			
%RSD:	8.6	8.6	8.0146			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 71 AS Loc.: 42 Date: 02/25/2010
 Sample ID: 246883003|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0001	0.0016	12:04:16	No
2	0.019	0.019	0.0001	0.0016	12:04:51	No
Mean:	0.017	0.017	0.0001			
SD :	0.0024	0.0024	0.0000			
%RSD:	14.0	14.0	12.0684			

=====
 Element: Hg Seq. No.: 72 AS Loc.: 43 Date: 02/25/2010
 Sample ID: 246883004|i|||

%RSD: 36.0 36.0 20.1861

=====
 Element: Hg Seq. No.: 78 AS Loc.: 49 Date: 02/25/2010
 Sample ID: 247039002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0002	0.0017	12:18:12	No
2	0.010	0.010	0.0001	0.0016	12:18:47	No
Mean:	0.018	0.018	0.0001			
SD :	0.0119	0.0119	0.0001			
%RSD:	64.7	64.7	56.4602			

=====
 Element: Hg Seq. No.: 79 AS Loc.: 50 Date: 02/25/2010
 Sample ID: 247039003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0001	0.0016	12:20:07	No
2	0.005	0.005	0.0001	0.0015	12:20:42	No
Mean:	0.010	0.010	0.0001			
SD :	0.0068	0.0068	0.0000			
%RSD:	68.3	68.3	53.8421			

=====
 Element: Hg Seq. No.: 80 AS Loc.: 51 Date: 02/25/2010
 Sample ID: 247039004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0015	12:22:03	No
2	-0.014	-0.014	-0.0001	0.0014	12:22:39	No
Mean:	-0.006	-0.006	0.0000			
SD :	0.0115	0.0115	0.0001			
%RSD:	192.3	192.3	348.5142			

=====
 Element: Hg Seq. No.: 81 AS Loc.: 7 Date: 02/25/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.031	5.031	0.0331	0.0346	12:24:03	No
2	5.034	5.034	0.0332	0.0346	12:24:38	No
Mean:	5.032	5.032	0.0332			
SD :	0.0018	0.0018	0.0000			
%RSD:						

QC value within specified limits.

=====
 Element: Hg Seq. No.: 82 AS Loc.: 8 Date: 02/25/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0002	0.0017	12:26:06	No
2	0.016	0.016	0.0001	0.0016	12:26:41	No
Mean:	0.022	0.022	0.0002			
SD :	0.0087	0.0087	0.0001			
%RSD:	39.1	39.1	34.9168			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 83 AS Loc.: 52 Date: 02/25/2010
 Sample ID: 247098001|i|||

%RSD: 78.9 78.9 64.7392

=====
 Element: Hg Seq. No.: 89 AS Loc.: 58 Date: 02/25/2010
 Sample ID: 247098004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0015	12:39:55	No
2	-0.002	-0.002	0.0000	0.0015	12:40:30	No
Mean:	0.002	0.002	0.0000			
SD :	0.0058	0.0058	0.0000			
%RSD:	251.8	251.8	116.7255			

=====
 Element: Hg Seq. No.: 90 AS Loc.: 59 Date: 02/25/2010
 Sample ID: 1202052034|i||957034|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0002	0.0017	12:41:55	No
2	-0.003	-0.003	0.0000	0.0015	12:42:30	No
Mean:	0.012	0.012	0.0001			
SD :	0.0209	0.0209	0.0001			
%RSD:	176.4	176.4	143.7482			

=====
 Element: Hg Seq. No.: 91 AS Loc.: 60 Date: 02/25/2010
 Sample ID: 1202052035|i||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.345	2.345	0.0155	0.0169	12:43:56	No
2	2.330	2.330	0.0154	0.0168	12:44:31	No
Mean:	2.338	2.338	0.0154			
SD :	0.0108	0.0108	0.0001			
%RSD:	0.5	0.5	0.4613			

=====
 Element: Hg Seq. No.: 92 AS Loc.: 61 Date: 02/25/2010
 Sample ID: 247182001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0015	12:45:57	No
2	-0.003	-0.003	0.0000	0.0015	12:46:31	No
Mean:	-0.003	-0.003	0.0000			
SD :	0.0009	0.0009	0.0000			
%RSD:	27.6	27.6	131.6391			

=====
 Element: Hg Seq. No.: 93 AS Loc.: 7 Date: 02/25/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.071	5.071	0.0334	0.0349	12:47:58	No
2	5.094	5.094	0.0336	0.0350	12:48:32	No
Mean:	5.083	5.083	0.0335			
SD :	0.0159	0.0159	0.0001			
%RSD:	0.3	0.3	0.3128			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 94 AS Loc.: 8 Date: 02/25/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.006	-0.006	0.0000	0.0015	12:50:00	No
2	-0.002	-0.002	0.0000	0.0015	12:50:35	No
Mean:	-0.004	-0.004	0.0000			
SD :	0.0023	0.0023	0.0000			
%RSD:	57.3	57.3	177.8653			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 95 AS Loc.: 62 Date: 02/25/2010
 Sample ID: 247192001|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0002	0.0012	12:52:02	No
2	-0.039	-0.039	-0.0002	0.0012	12:52:37	No
Mean:	-0.039	-0.039	-0.0002			
SD :	0.0013	0.0013	0.0000			
%RSD:	3.2	3.2	3.4875			

=====
 Element: Hg Seq. No.: 96 AS Loc.: 63 Date: 02/25/2010
 Sample ID: 247250001|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0003	0.0012	12:54:00	No
2	-0.057	-0.057	-0.0004	0.0011	12:54:35	No
Mean:	-0.049	-0.049	-0.0003			
SD :	0.0115	0.0115	0.0001			
%RSD:	23.5	23.5	24.8640			

=====
 Element: Hg Seq. No.: 97 AS Loc.: 64 Date: 02/25/2010
 Sample ID: 247250002|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0002	0.0013	12:55:55	No
2	-0.051	-0.051	-0.0003	0.0012	12:56:30	No
Mean:	-0.043	-0.043	-0.0003			
SD :	0.0105	0.0105	0.0001			
%RSD:	24.2	24.2	25.8362			

=====
 Element: Hg Seq. No.: 98 AS Loc.: 65 Date: 02/25/2010
 Sample ID: 247256001|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0003	0.0012	12:57:49	No
2	-0.056	-0.056	-0.0004	0.0011	12:58:25	No
Mean:	-0.049	-0.049	-0.0003			
SD :	0.0103	0.0103	0.0001			
%RSD:	21.0	21.0	22.2172			

=====
 Element: Hg Seq. No.: 99 AS Loc.: 66 Date: 02/25/2010
 Sample ID: 247256002|i|||
 =====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0002	0.0013	12:59:46	No
2	-0.038	-0.038	-0.0002	0.0012	13:00:21	No
Mean:	-0.032	-0.032	-0.0002			
SD :	0.0077	0.0077	0.0001			

%RSD: 23.7 23.7 25.8136

=====
 Element: Hg Seq. No.: 100 AS Loc.: 67 Date: 02/25/2010
 Sample ID: 247322001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0000	0.0014	13:01:42	No
2	-0.016	-0.016	-0.0001	0.0014	13:02:16	No
Mean:	-0.012	-0.012	-0.0001			
SD :	0.0051	0.0051	0.0000			
%RSD:	42.3	42.3	54.3606			

=====
 Element: Hg Seq. No.: 101 AS Loc.: 68 Date: 02/25/2010
 Sample ID: 247322002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0002	0.0012	13:03:37	No
2	-0.016	-0.016	-0.0001	0.0014	13:04:11	No
Mean:	-0.028	-0.028	-0.0002			
SD :	0.0170	0.0170	0.0001			
%RSD:	61.5	61.5	68.0719			

=====
 Element: Hg Seq. No.: 102 AS Loc.: 69 Date: 02/25/2010
 Sample ID: 247335001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0003	0.0012	13:05:33	No
2	-0.033	-0.033	-0.0002	0.0013	13:06:08	No
Mean:	-0.039	-0.039	-0.0002			
SD :	0.0094	0.0094	0.0001			
%RSD:	23.8	23.8	25.4861			

=====
 Element: Hg Seq. No.: 103 AS Loc.: 70 Date: 02/25/2010
 Sample ID: 247339001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.063	-0.063	-0.0004	0.0011	13:07:30	No
2	-0.074	-0.074	-0.0005	0.0010	13:08:05	No
Mean:	-0.068	-0.068	-0.0004			
SD :	0.0077	0.0077	0.0001			
%RSD:	11.3	11.3	11.7966			

=====
 Element: Hg Seq. No.: 104 AS Loc.: 71 Date: 02/25/2010
 Sample ID: 247339002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.066	-0.066	-0.0004	0.0011	13:09:28	No
2	-0.070	-0.070	-0.0004	0.0010	13:10:03	No
Mean:	-0.068	-0.068	-0.0004			
SD :	0.0029	0.0029	0.0000			
%RSD:	4.2	4.2	4.3655			

=====
 Element: Hg Seq. No.: 105 AS Loc.: 7 Date: 02/25/2010
 Sample ID: CCV

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
------	------------	---------	---------	------	------	------

#	µg/L	µg/L	Signal	Height		Stored
1	5.211	5.211	0.0343	0.0358	13:11:29	No
2	5.179	5.179	0.0341	0.0356	13:12:04	No
Mean:	5.195	5.195	0.0342			
SD :	0.0223	0.0223	0.0001			
%RSD:	0.4	0.4	0.4289			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 106 AS Loc.: 8 Date: 02/25/2010
 Sample ID: CCB

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
#	µg/L	µg/L	Signal	Height		Stored
1	-0.046	-0.046	-0.0003	0.0012	13:13:32	No
2	-0.053	-0.053	-0.0003	0.0011	13:14:07	No
Mean:	-0.050	-0.050	-0.0003			
SD :	0.0052	0.0052	0.0000			
%RSD:	10.6	10.6	11.1757			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 107 AS Loc.: 72 Date: 02/25/2010
 Sample ID: 247350001|i|||

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
#	µg/L	µg/L	Signal	Height		Stored
1	-0.061	-0.061	-0.0004	0.0011	13:15:32	No
2	-0.057	-0.057	-0.0004	0.0011	13:16:06	No
Mean:	-0.059	-0.059	-0.0004			
SD :	0.0028	0.0028	0.0000			
%RSD:	4.8	4.8	5.0087			

=====
 Element: Hg Seq. No.: 108 AS Loc.: 73 Date: 02/25/2010
 Sample ID: 247424001|i|||

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
#	µg/L	µg/L	Signal	Height		Stored
1	-0.039	-0.039	-0.0002	0.0012	13:17:30	No
2	-0.037	-0.037	-0.0002	0.0013	13:18:05	No
Mean:	-0.038	-0.038	-0.0002			
SD :	0.0016	0.0016	0.0000			
%RSD:	4.2	4.2	4.5125			

=====
 Element: Hg Seq. No.: 109 AS Loc.: 74 Date: 02/25/2010
 Sample ID: 247458001|i|||

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
#	µg/L	µg/L	Signal	Height		Stored
1	-0.037	-0.037	-0.0002	0.0013	13:19:29	No
2	-0.043	-0.043	-0.0003	0.0012	13:20:03	No
Mean:	-0.040	-0.040	-0.0002			
SD :	0.0042	0.0042	0.0000			
%RSD:	10.4	10.4	11.1477			

=====
 Element: Hg Seq. No.: 110 AS Loc.: 75 Date: 02/25/2010
 Sample ID: 247540001|i|||

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
#	µg/L	µg/L	Signal	Height		Stored
1	-0.039	-0.039	-0.0002	0.0012	13:21:27	No
2	-0.061	-0.061	-0.0004	0.0011	13:22:02	No
Mean:	-0.050	-0.050	-0.0003			
SD :	0.0156	0.0156	0.0001			

%RSD: 31.2 31.2 32.9893

=====
 Element: Hg Seq. No.: 111 AS Loc.: 76 Date: 02/25/2010
 Sample ID: 247548001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0003	0.0012	13:23:29	No
2	-0.042	-0.042	-0.0003	0.0012	13:24:04	No
Mean:	-0.045	-0.045	-0.0003			
SD :	0.0045	0.0045	0.0000			
%RSD:	9.9	9.9	10.4989			

=====
 Element: Hg Seq. No.: 112 AS Loc.: 77 Date: 02/25/2010
 Sample ID: 1202052036|i|||DUP

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0011	13:25:30	No
2	-0.063	-0.063	-0.0004	0.0011	13:26:05	No
Mean:	-0.062	-0.062	-0.0004			
SD :	0.0003	0.0003	0.0000			
%RSD:	0.5	0.5	0.5072			

=====
 Element: Hg Seq. No.: 113 AS Loc.: 78 Date: 02/25/2010
 Sample ID: 1202052037|i|||MS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	2.257	2.257	0.0149	0.0164	13:27:27	No
2	2.246	2.246	0.0148	0.0163	13:28:02	No
Mean:	2.252	2.252	0.0148			
SD :	0.0078	0.0078	0.0001			
%RSD:	0.3	0.3	0.3455			

=====
 Element: Hg Seq. No.: 114 AS Loc.: 79 Date: 02/25/2010
 Sample ID: 1202052041|i|5||SDILT

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.109	-0.109	-0.0007	0.0008	13:29:21	No
2	-0.095	-0.095	-0.0006	0.0009	13:29:56	No
Mean:	-0.102	-0.102	-0.0007			
SD :	0.0094	0.0094	0.0001			
%RSD:	9.3	9.3	9.5254			

=====
 Element: Hg Seq. No.: 115 AS Loc.: 80 Date: 02/25/2010
 Sample ID: 247548002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.073	-0.073	-0.0005	0.0010	13:31:16	No
2	-0.037	-0.037	-0.0002	0.0013	13:31:50	No
Mean:	-0.055	-0.055	-0.0003			
SD :	0.0256	0.0256	0.0002			
%RSD:	46.6	46.6	48.9887			

=====
 Element: Hg Seq. No.: 116 AS Loc.: 81 Date: 02/25/2010
 Sample ID: 247559001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
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#	µg/L	µg/L	Signal	Height		Stored
1	-0.055	-0.055	-0.0003	0.0011	13:33:10	No
2	-0.060	-0.060	-0.0004	0.0011	13:33:46	No
Mean:	-0.057	-0.057	-0.0004			
SD :	0.0031	0.0031	0.0000			
%RSD:	5.4	5.4	5.6309			

=====
 Element: Hg Seq. No.: 117 AS Loc.: 7 Date: 02/25/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.524	5.524	0.0364	0.0379	13:35:10	No
2	5.556	5.556	0.0366	0.0381	13:35:45	No
Mean:	5.540	5.540	0.0365			
SD :	0.0221	0.0221	0.0001			
%RSD:	0.4	0.4	0.3993			

QC failed, value greater than upper limit for Hg.
 Current analysis method being continued.

=====
 Element: Hg Seq. No.: 118 AS Loc.: 8 Date: 02/25/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0000	0.0015	13:37:13	No
2	-0.142	-0.142	-0.0009	0.0006	13:37:48	No
Mean:	-0.069	-0.069	-0.0004			
SD :	0.1036	0.1036	0.0007			
%RSD:	151.1	151.1	157.2977			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 119 AS Loc.: 82 Date: 02/25/2010
 Sample ID: 247560001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	0.0014	13:39:12	No
2	0.012	0.012	0.0001	0.0016	13:39:47	No
Mean:	0.000	0.000	0.0000			
SD :	0.0172	0.0172	0.0001			
%RSD:	7437	7437	589.4619			

=====
 Element: Hg Seq. No.: 120 AS Loc.: 83 Date: 02/25/2010
 Sample ID: 247567001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0015	13:41:09	No
2	-0.006	-0.006	0.0000	0.0015	13:41:44	No
Mean:	0.000	0.000	0.0000			
SD :	0.0087	0.0087	0.0001			
%RSD:	2194	2194	281.1419			

=====
 Element: Hg Seq. No.: 121 AS Loc.: 84 Date: 02/25/2010
 Sample ID: 1202049850|i||956966|TB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0001	0.0016	13:43:06	No
2	0.028	0.028	0.0002	0.0017	13:43:41	No
Mean:	0.024	0.024	0.0002			

Miscellaneous

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 955131.0
 Analyst: Francena Armstrong
 Method: SW846 3005A
 Lab SOP: GL-MA-E-006 REV# 9
 Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202047700	Metals Spike Mix I	U1100205-01	.25	mL
LCS	1202047700	Metals Spike Mix II	U1100205-06	.25	mL
MS	1202047702	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202047702	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202047699 MB	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047700 LCS	24-FEB-2010 14:00:00	Water	50	50	1	<2
247250001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247250002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247256001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247256002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247322001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247322002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247335001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247339001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247339002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247350001	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047701 DUP (247350001)	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047702 MS (247350001)	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047703 SDILT (247350001)	24-FEB-2010 14:00:00	Water	50	50	1	<2

Comments:

Reagent/Solvent Lot ID	Description	Amount
1265209	HYDROCHLORIC ACID	2.5 mL
1268732	Nitric Acid CONC.	1 mL

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 955133.0		Verified by:			
Analyst: Francena Armstrong					
Method: SW846 3005A					
Lab SOP: GL-MA-E-006 REV# 9					
Instrument: Sartorius Balance B-001					
Type	Sample Id	Description	Serial Number	Spike Amount	Spike Unit
LCS	1202047705	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	U1100205-A	.5	mL
LCS	1202047705	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	U1100205-B	.5	mL
MS	1202047707	ICP-MS DOE liquid Spike Solution A	U1090930-A	.5	mL
MS	1202047707	ICP-MS DOE Liquid Spike Solution B	U1090930-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202047704 MB	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047705 LCS	24-FEB-2010 14:00:00	Water	50	50	1	<2
247250001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247250002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247256001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247256002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247322001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247322002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247335001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247339001	24-FEB-2010 14:00:00	Water	50	50	1	<2
247339002	24-FEB-2010 14:00:00	Water	50	50	1	<2
247350001	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047706 DUP (247350001)	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047707 MS (247350001)	24-FEB-2010 14:00:00	Water	50	50	1	<2
1202047708 SDILT (247350001)	24-FEB-2010 14:00:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1265209	HYDROCHLORIC ACID	2.5 mL	
1268732	Nitric Acid CONC.	1 mL	

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 957032.0
Analyst: Tara Griffin
Method: SW846 7470A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: No analytical instrument

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202052035	Mercury working intermediate standard for LCS/MS	WHG100224-13	.2	mL
MS	1202052037	Mercury working intermediate standard for LCS/MS	WHG100224-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202052034 MB	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052035 LCS	24-FEB-2010 12:10:00	Water	20	20	1	<2
247182001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247192001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247250001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247250002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247256001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247256002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247322001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247322002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247335001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247339001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247339002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247350001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247424001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247458001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247540001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247548001	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052036 DUP (247548001)	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052037 MS (247548001)	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052041 SDILT (247548001)	24-FEB-2010 12:10:00	Water	20	20	1	<2
247548002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247559001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247560001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247567001	24-FEB-2010 12:10:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
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GEL Laboratories LLC

Prep Logbook

Batch ID: 957032.0

Analyst: Tara Griffin

Method: SW846 7470A Prep

Lab SOP: GL-MA-E-010 REV# 23

Instrument: No analytical instrument

Verified by:

Type

LCS

MS

Sample Id

1202052035

1202052037

Description

Mercury working intermediate standard for LCS/MS

Mercury working intermediate standard for LCS/MS

Serial Number

WHG100224-13

WHG100224-13

Spike Amount

.2 mL

.2 mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1176183	Sulfuric Acid, Concentrated	1 mL				
1255532-C	Hg reducing agent	1 mL				
1261483-C	5% Potassium Persulfate	1.5 mL				
1274391-1	NITRIC ACID	.5 mL				
1274397-C	5% KMnO4 solution	3 mL				
WHG100224-01a	Mercury Working 1st Source CAL 0.2/CRA	20 uL				
WHG100224-02	Mercury Working 1st Source CAL 0.5	50 uL				
WHG100224-03	Mercury Working 1st Source CAL 2.0	200 uL				
WHG100224-04	Mercury Working 1st Source CAL 5.0/CCV	500 uL				
WHG100224-05	Mercury Working 1st Source CAL 10.0	1 mL				
WHG100224-06	Mercury Working 2nd Source 5.0/FCV	500 uL				

Digestion Start Date: 24-FEB-10 12:10

Digestion End Date: 24-FEB-10 14:10

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID:	966863.0	Verified by:	
Analyst:	Anthony Green		
Method:	SW846 3005A		
Lab SOP:	GL-MA-E-006 REV# 9		
Instrument:	Metals Manual Instrument		
Type	Sample Id	Description	Serial Number
LCS	1202075030	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	U11268746-A
LCS	1202075030	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	U11268749-B
MS	1202075032	ICP-MS DOE Liquid Spike Solution A	U1090930-A
MS	1202075032	ICP-MS DOE Liquid Spike Solution B	U1090930-B
			Spike Amount
			Spike Units
			.25 mL
			.25 mL
			.25 mL
			.25 mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202075029 MB	19-MAR-2010 07:45:00	Water	25	25	1	<2
1202075030 LCS	19-MAR-2010 07:45:00	Water	25	25	1	<2
247250001 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247250002 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247256001 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247256002 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247322001 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247322002 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247335001 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247339001 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247339002 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
247350001 - 2	19-MAR-2010 07:45:00	Water	25	25	1	<2
1202075031 - 2 DUP (247350001)	19-MAR-2010 07:45:00	Water	25	25	1	<2
1202075032 - 2 MS (247350001)	19-MAR-2010 07:45:00	Water	25	25	1	<2
1202075033 - 2 SDILT (247350001)	19-MAR-2010 07:45:00	Water	25	25	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1277916	HYDROCHLORIC ACID	1.25 mL	
1277919	Nitric Acid CONC.	.5 mL	

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GEL Laboratories LLC

DATA EXCEPTION REPORT

Mo. Day Yr. 18-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3005/6020	Matrix Type: Liquid	Client Code: LANL
Batch ID: 955134	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 247250(10-1877-1),247256(10-1879-1),247322(10-1893-1),247335(10-1906),247339(10-1909-1),247350(10-1912-1) Application Issues: Failed Recovery for MS/PS Specification and Requirements Exception Description:			
DER Disposition: 1. Failed Recovery for MS/PS: QC 1202047707MS		The matrix spike recovery failed outside of the control limits for TI due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

Originator's Name:

Paul Boyd

21-MAR-10

Data Validator/Group Leader:

Rose Jenkins

22-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: UI090421-40 **Opened:** 09-OCT-09 **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 21-APR-09 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 09-OCT-10 **Lot Number :** 0830227
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Standard Logbook

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 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
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L +/- 0.3% in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Standard Logbook

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: 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: Q2SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Standard Logbook

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100205-06 **Opened:** 05-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI100205-A **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI100205-B **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Standard Logbook

Serial ID: UI100217-48 **Opened:** 04-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 17-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-10 **Lot Number :** 1018878
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: 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: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI100310-49.1 **Opened:** 16-MAR-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 12-MAR-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 17-MAR-10 **Lot Number :** 1019142
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI100312-40 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: Q2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100312-41 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: Q2SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Standard Logbook

Serial ID: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 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: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 18-MAR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 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: UI1268746-A **Opened:** 11-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 11-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI1268749-B **Opened:** 11-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 11-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: O2sj
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMSCaSPIKEB **Received:** 26-FEB-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-104JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS100226-02 **Opened:** 26-FEB-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCaSPIKEA **Received:** 26-FEB-10 **Lot Number :** 21-103JB
Type: Source Material **Expires:** 26-FEB-11
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 26-FEB-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-102JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: 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 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: 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: WHG100224-01a **Opened:** 24-FEB-10 **Pipet Id :** Hq1289245
Name: MHGWORKCAL0.2CRA **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Standard Logbook

Serial ID: WHG100224-02 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100224-03 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **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 Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100224-04 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **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 Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100224-05 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **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 Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Standard Logbook

Serial ID: WHG100224-06 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100224-13 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **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 working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100316-42 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
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.
WI100316-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100316-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100316-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100316-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100316-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100316-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100316-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100316-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100316-43 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1%HNO3 --1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100316-44 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1285629
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100316-45 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L

Serial ID: WI100316-46 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100316-47 **Opened:** 16-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 17-MAR-10 **Solvent :** 3%HCL & 1%HNO3-1285629
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100315-04 **Opened:** 15-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-MAR-10 **Balance Id :** 4025216
Type: Working **Expires:** 16-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1285348
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100315-04A **Opened:** 15-MAR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 15-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 16-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100315-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100315-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100315-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100315-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100315-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100315-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100315-05 **Opened:** 15-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 15-MAR-10 **Pipet Id :** 3541598
Type: Working **Expres:** 16-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100315-06 **Opened:** 15-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 15-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 16-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100315-07 **Opened:** 15-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 15-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 16-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1285348
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: WMS100315-08 **Opened:** 15-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100317-04 **Opened:** 17-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 17-MAR-10 **Balance Id :** 4025216
Type: Working **Expires:** 18-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1285348
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100317-04A **Opened:** 17-MAR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 17-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100317-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100317-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100317-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100317-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100317-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100317-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100317-05 **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 17-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100317-06 **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 17-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100317-07 **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 17-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 18-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100317-08 **Opened:** 17-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 17-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 18-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID:	<u>WMS100318-04</u>	Opened:	<u>18-MAR-10</u>	Amount :	<u>50 mL</u>
Name:	<u>ICPMS Cal Standard 100</u>	Received:	<u>18-MAR-10</u>	Balance Id :	<u>4025216</u>
Type:	<u>Working</u>	Expires:	<u>19-MAR-10</u>	Pipet Id :	<u>3541598</u>
Employee:	<u>Paul Boyd</u>			Solvent :	<u>2%HNO3/1%HCl-1285348</u>

Supplier: GEL

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100318-04A **Opened:** 18-MAR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 18-MAR-10 **Pipet Id :** 3541598
Type: Working **Expres:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100318-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100318-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100318-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100318-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100318-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS100318-05 **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 18-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100318-06 **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 18-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100318-07 **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 18-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 19-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1285348
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: WMS100318-08 **Opened:** 18-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 18-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 19-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100319-04AB **Opened:** 19-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 19-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 20-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100319-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100319-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100319-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100319-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100319-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100319-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100319-04B **Opened:** 19-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 19-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 20-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1285348
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100319-05B **Opened:** 19-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 19-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 20-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100319-06B **Opened:** 19-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 19-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 20-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins **Verified:** 06-MAR-10
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100319-07B **Opened:** 19-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 19-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 20-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1285348
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100319-08B **Opened:** 19-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 19-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 20-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 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: 1176183 Opened: 24-AUG-09 Lot Number : H20001
Name: B-H2SO4-MER Received: 24-AUG-09
Type: Reagent/Solvent Expires: 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1215906 Opened: 06-NOV-09 Lot Number : H44465
Name: B-K2S2O8S-MER Received: 06-NOV-09
Type: Reagent/Solvent Expires: 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1228372-A Opened: 12-NOV-09 Lot Number : 49215936
Name: B-NH2OH.HCl-MER Received: 12-NOV-09
Type: Reagent/Solvent Expires: 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1261483-C **Opened:** 28-JAN-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-JAN-10
Type: Reagent/Solvent **Expires:** 28-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 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: 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

Standard Logbook

Comments: None

Serial ID: 1274397-C Opened: 24-FEB-10 Balance Id : BAL-002
 Name: B-KMnO4-MER Received: 24-FEB-10
 Type: Reagent/Solvent Expires: 20-JUL-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: 5% KMnO4 solution
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1277916 Opened: 02-MAR-10 Lot Number : J02039
 Name: I-HCL Received: 02-MAR-10 Preservative_Id : 5 none
 Type: Reagent/Solvent Expires: 02-MAR-11
 Employee: Francena Armstrong
 Supplier: J.T. BAKER
 Description: HYDROCHLORIC ACID
 Comments: None

Serial ID: 1277919 Opened: 02-MAR-10 Lot Number : J 04043 L
 Name: I-HNO3 Received: 02-MAR-10
 Type: Reagent/Solvent Expires: 02-MAR-11
 Employee: Francena Armstrong
 Supplier: BAKER
 Description: Nitric Acid CONC.
 Comments: None

Serial ID: 1285348 Opened: 15-MAR-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCl-ICPMS Received: 15-MAR-10
 Type: Reagent/Solvent Expires: 22-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

Standard Logbook

Serial ID: 1285629 **Opened:** 15-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 05-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 21-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1912**

Method/Analysis Information

Product: Cyanide, Total
Analytical Batch: 955987 **Method:** SW9012A Cyanide and Total
Prep Batch : 955986 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247347001	RE15-10-8246
247347002	RE15-10-8245
247347003	RE15-10-8243
247347004	RE15-10-8244
247347005	RE15-10-8242
247347006	RE15-10-8240
247347007	RE15-10-8241
247347008	RE15-10-8267
1202049739	Method Blank (MB)
1202049740	247338007(RE15-10-8209) Sample Duplicate (DUP)
1202049741	247338008(RE15-10-8205) Sample Duplicate (DUP)
1202049742	247338007(RE15-10-8209) Matrix Spike (MS)
1202049743	247338008(RE15-10-8205) Matrix Spike (MS)
1202049744	247338007(RE15-10-8209) Matrix Spike Duplicate (MSD)
1202049745	247338008(RE15-10-8205) Matrix Spike Duplicate (MSD)
1202049746	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

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

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 247338007 (RE15-10-8209) and 247338008 (RE15-10-8205).

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. 1202049741 (RE15-10-8205).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The following sample in this sample group was diluted due to high concentration: 1202049746 (LCS).

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

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: 16Mar10

Sample Data Summary

GEL LABORATORIES LLC

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Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1912 GEL Work Order: 247347

The Qualifiers in this report are defined as follows:

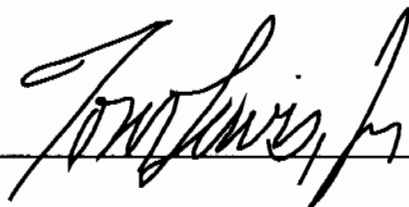
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

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 'Valerie Davis', is written over a horizontal line.

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 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8246
Sample ID: 247347001
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.57%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	67.7	249	ug/kg	1	AXC2	02/25/10	1608	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

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Certificate of Analysis

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8245
Sample ID: 247347002
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: .955%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.7	252	ug/kg	1	AXC2	02/25/10	1609	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8243
Sample ID: 247347003
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.54%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	65.2	240	ug/kg	1	AXC2	02/25/10	1610	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8244
Sample ID: 247347004
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 2.23%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.2	251	ug/kg	1	AXC2	02/25/10	1611	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8242
Sample ID: 247347005
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.35%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	63.8	235	ug/kg	1	AXC2	02/25/10	1612	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545

Contact: Ms. Joylene Valdez

Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8240

Sample ID: 247347006

Matrix: R

Collect Date: 13-FEB-10 12:00

Receive Date: 18-FEB-10

Collector: Client

Moisture: 1.66%

Project: LANL01004

Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.5	244	ug/kg	1	AXC2	02/25/10	1613	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

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Certificate of Analysis

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Los Alamos, New Mexico 87545

Contact: Ms. Joylene Valdez

Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8241
Sample ID: 247347007
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.17%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	60.4	222	ug/kg	1	AXC2	02/25/10	1613	955987	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 10, 2010

Client SDG: 10-1912

Client Sample ID: RE15-10-8267
Sample ID: 247347008
Matrix: R
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client
Moisture: 1.22%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	67.5	248	ug/kg	1	AXC2	02/25/10	1618	955987	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/25/10	1137	955986

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

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QC Summary

Report Date: March 10, 2010

Page 1 of 2

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

Contact: Ms. Joylene Valdez

Workorder: 247347

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	955987										
QC1202049740	247338007	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/25/10	15:56
QC1202049741	247338008	DUP									
Cyanide, Total		J	89.8	U	ND	ug/kg	200 ^			02/25/10	15:59
QC1202049746	LCS										
Cyanide, Total	67900				42300	ug/kg	62.2	(32%-157%)		02/25/10	15:48
QC1202049739	MB										
Cyanide, Total				U	250	ug/kg				02/25/10	15:47
QC1202049742	247338007	MS									
Cyanide, Total	5100	U	ND		5100	ug/kg	100	(26%-158%)		02/25/10	15:56
QC1202049743	247338008	MS									
Cyanide, Total	5090	J	89.8		4730	ug/kg	91.1	(26%-158%)		02/25/10	16:00
QC1202049744	247338007	MSD									
Cyanide, Total	4900	U	ND		4900	ug/kg	3.92	100	(0%-30%)	02/25/10	15:57
QC1202049745	247338008	MSD									
Cyanide, Total	4990	J	89.8		5090	ug/kg	7.36	100	(0%-30%)	02/25/10	16:01

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

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QC Summary

Workorder: 247347

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
		on nearest internal standard response factor									
N/A		RPD or %Recovery limits do not apply.									
ND		Analyte concentration is not detected above the detection limit									
NJ		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
P		Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%									
R		Sample results are rejected									
U		Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.									
UI		Gamma Spectroscopy--Uncertain identification									
X		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
Y		QC Samples were not spiked with this compound									
Z		Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.									
^		RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.									
d		5-day BOD--The 2:1 depletion requirement was not met for this sample									
h		Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 10-MAR-2010 18:06

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1912

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	25-FEB-2010 12:24:32	OM_2-25-2010_12-14-00	148	150	98.7	(90%-110%)	Yes
CCV	25-FEB-2010 15:37:07	OM_2-25-2010_15-11-15	98.8	100	98.8	(90%-110%)	Yes
CCV	25-FEB-2010 15:49:37	OM_2-25-2010_15-11-15	101	100	101	(90%-110%)	Yes
CCV	25-FEB-2010 16:02:14	OM_2-25-2010_15-11-15	100	100	100	(90%-110%)	Yes
CCV	25-FEB-2010 16:14:52	OM_2-25-2010_15-11-15	100	100	100	(90%-110%)	Yes
CCV	25-FEB-2010 16:23:53	OM_2-25-2010_15-11-15	100	100	100	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	25-FEB-2010 12:26:22	OM_2-25-2010_12-14-00	0.328	10	Yes
CCB	25-FEB-2010 15:38:58	OM_2-25-2010_15-11-15	-1.45	10	Yes
CCB	25-FEB-2010 15:51:27	OM_2-25-2010_15-11-15	-1.48	10	Yes
CCB	25-FEB-2010 16:04:05	OM_2-25-2010_15-11-15	-1.11	10	Yes
CCB	25-FEB-2010 16:16:42	OM_2-25-2010_15-11-15	-1.47	10	Yes
CCB	25-FEB-2010 16:25:44	OM_2-25-2010_15-11-15	-1.54	10	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: 955986.0 Analyst: Alan Stanley Method: SW846 9010B Prep Lab SOP: GL-GC-E-067 REV# 13 Instrument: Sartorius Balance B-001	Verified by:					
	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
	LCS	1202049746	Total Cyanide Solid LCS	URF1200957-01	.25	g
	MS	1202049742	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
	MS	1202049743	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
	MSD	1202049744	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
	MSD	1202049745	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202049739 MB	25-FEB-2010 11:36:00	Soil	0.5	25	50	>12
1202049746 LCS	25-FEB-2010 11:36:00	Soil	0.25	25	100	>12
247249001	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247249002	25-FEB-2010 11:37:00	Soil	0.58	25	43.10345	>12
247338007	25-FEB-2010 11:37:00	Soil	0.52	25	48.07692	>12
1202049740 DUP (247338007)	25-FEB-2010 11:37:00	Soil	0.57	25	43.85965	>12
1202049742 MS (247338007)	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12
1202049744 MSD (247338007)	25-FEB-2010 11:37:00	Soil	0.52	25	48.07692	>12
247338008	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
1202049741 DUP (247338008)	25-FEB-2010 11:37:00	Soil	0.57	25	43.85965	>12
1202049743 MS (247338008)	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12
1202049745 MSD (247338008)	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247338009	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12
247338010	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247338011	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247347001	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247347002	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12
247347003	25-FEB-2010 11:37:00	Soil	0.53	25	47.16981	>12
247347004	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247347005	25-FEB-2010 11:37:00	Soil	0.54	25	46.2963	>12
247347006	25-FEB-2010 11:37:00	Soil	0.52	25	48.07692	>12

GEL Laboratories LLC

Analytical Logbook version 1 11-04-2002

Prep Logbook

Batch ID: 955986.0
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202049746	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202049742	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202049743	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202049744	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202049745	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
247347007	25-FEB-2010 11:37:00	Soil	0.57	25	43.85965	>12
247347008	25-FEB-2010 11:37:00	Soil	0.51	25	49.01961	>12
247359001	25-FEB-2010 11:37:00	Soil	0.58	25	43.10345	>12
247359002	25-FEB-2010 11:37:00	Soil	0.56	25	44.64286	>12
247359003	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12
247359004	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12
247552002	25-FEB-2010 11:37:00	Soil	0.5	25	50	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
1260189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N HNO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100225-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/25/2010 12:17:22	OM_2-25-2010_12-14-00
150 ppb		1	axc2	2/25/2010 12:18:14	OM_2-25-2010_12-14-00
100 ppb		1	axc2	2/25/2010 12:19:07	OM_2-25-2010_12-14-00
50 ppb		1	axc2	2/25/2010 12:20:00	OM_2-25-2010_12-14-00
10 ppb		1	axc2	2/25/2010 12:20:53	OM_2-25-2010_12-14-00
CRDL 5.0 ppb		1	axc2	2/25/2010 12:21:47	OM_2-25-2010_12-14-00
ICAL-00		1	axc2	2/25/2010 12:22:41	OM_2-25-2010_12-14-00
ICV		1	axc2	2/25/2010 12:24:32	OM_2-25-2010_12-14-00
ICB		1	axc2	2/25/2010 12:26:22	OM_2-25-2010_12-14-00
CRDL		1	axc2	2/25/2010 12:28:12	OM_2-25-2010_12-14-00
1202046116	954509	1	axc2	2/25/2010 12:30:02	OM_2-25-2010_12-14-00
1202046123*	954509	25	axc2	2/25/2010 12:30:55	OM_2-25-2010_12-14-00
247103001	954509	1	axc2	2/25/2010 12:31:48	OM_2-25-2010_12-14-00
247103002	954509	1	axc2	2/25/2010 12:32:41	OM_2-25-2010_12-14-00
247103003	954509	1	axc2	2/25/2010 12:33:34	OM_2-25-2010_12-14-00
247103004	954509	1	axc2	2/25/2010 12:34:27	OM_2-25-2010_12-14-00
247103005	954509	1	axc2	2/25/2010 12:35:20	OM_2-25-2010_12-14-00
247103006	954509	1	axc2	2/25/2010 12:36:12	OM_2-25-2010_12-14-00
247103007	954509	1	axc2	2/25/2010 12:37:04	OM_2-25-2010_12-14-00
247103008	954509	1	axc2	2/25/2010 12:37:57	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010 12:38:49	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010 12:40:39	OM_2-25-2010_12-14-00
1202046123	954509	25	axc2	2/25/2010 12:42:29	OM_2-25-2010_12-14-00
247103009	954509	1	axc2	2/25/2010 12:43:21	OM_2-25-2010_12-14-00
247103010	954509	1	axc2	2/25/2010 12:44:13	OM_2-25-2010_12-14-00
247103011	954509	1	axc2	2/25/2010 12:45:05	OM_2-25-2010_12-14-00
247103012	954509	1	axc2	2/25/2010 12:45:56	OM_2-25-2010_12-14-00
247103013	954509	1	axc2	2/25/2010 12:46:48	OM_2-25-2010_12-14-00
247103014	954509	1	axc2	2/25/2010 12:47:42	OM_2-25-2010_12-14-00
247103015	954509	1	axc2	2/25/2010 12:48:35	OM_2-25-2010_12-14-00
247123001	954509	1	axc2	2/25/2010 12:49:29	OM_2-25-2010_12-14-00
1202046117	954509	1	axc2	2/25/2010 12:50:22	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010 12:51:15	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010 12:53:06	OM_2-25-2010_12-14-00
1202046119	954509	1	axc2	2/25/2010 12:54:54	OM_2-25-2010_12-14-00
1202046121	954509	1	axc2	2/25/2010 12:55:47	OM_2-25-2010_12-14-00
247123002	954509	1	axc2	2/25/2010 12:56:40	OM_2-25-2010_12-14-00
1202046118	954509	1	axc2	2/25/2010 12:57:33	OM_2-25-2010_12-14-00
1202046120	954509	1	axc2	2/25/2010 12:58:26	OM_2-25-2010_12-14-00
1202046122	954509	1	axc2	2/25/2010 12:59:18	OM_2-25-2010_12-14-00
247123003	954509	1	axc2	2/25/2010 13:00:11	OM_2-25-2010_12-14-00
247123004	954509	1	axc2	2/25/2010 13:01:03	OM_2-25-2010_12-14-00
247273002	954509	1	axc2	2/25/2010 13:01:56	OM_2-25-2010_12-14-00
1202049712	955983	1	axc2	2/25/2010 13:02:48	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010 13:03:40	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010 13:05:30	OM_2-25-2010_12-14-00
1202049725	955983	1	axc2	2/25/2010 13:07:17	OM_2-25-2010_12-14-00
247046002	955983	1	axc2	2/25/2010 13:08:11	OM_2-25-2010_12-14-00
1202049713	955983	1	axc2	2/25/2010 13:09:06	OM_2-25-2010_12-14-00
1202049717	955983	1	axc2	2/25/2010 13:09:59	OM_2-25-2010_12-14-00
1202049721	955983	1	axc2	2/25/2010 13:10:52	OM_2-25-2010_12-14-00
247261003	955983	1	axc2	2/25/2010 13:11:45	OM_2-25-2010_12-14-00
1202049714	955983	1	axc2	2/25/2010 13:12:39	OM_2-25-2010_12-14-00
1202049718	955983	1	axc2	2/25/2010 13:13:32	OM_2-25-2010_12-14-00
1202049722	955983	1	axc2	2/25/2010 13:14:25	OM_2-25-2010_12-14-00
247394001	955983	1	axc2	2/25/2010 13:15:18	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010 13:16:10	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010 13:18:01	OM_2-25-2010_12-14-00

247402001	955983	1	axc2	2/25/2010	13:19:49	OM_2-25-2010_12-14-00
247402002	955983	1	axc2	2/25/2010	13:20:42	OM_2-25-2010_12-14-00
247402004	955983	1	axc2	2/25/2010	13:21:34	OM_2-25-2010_12-14-00
247431001	955983	1	axc2	2/25/2010	13:22:27	OM_2-25-2010_12-14-00
247438001	955983	1	axc2	2/25/2010	13:23:19	OM_2-25-2010_12-14-00
1202049715	955983	1	axc2	2/25/2010	13:24:10	OM_2-25-2010_12-14-00
1202049719	955983	1	axc2	2/25/2010	13:25:05	OM_2-25-2010_12-14-00
1202049723	955983	1	axc2	2/25/2010	13:25:59	OM_2-25-2010_12-14-00
247441001	955983	1	axc2	2/25/2010	13:26:53	OM_2-25-2010_12-14-00
247449001	955983	1	axc2	2/25/2010	13:27:47	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010	13:28:39	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010	13:30:29	OM_2-25-2010_12-14-00
247505001	955983	1	axc2	2/25/2010	13:32:20	OM_2-25-2010_12-14-00
1202049716	955983	1	axc2	2/25/2010	13:33:12	OM_2-25-2010_12-14-00
1202049720	955983	1	axc2	2/25/2010	13:34:06	OM_2-25-2010_12-14-00
1202049724	955983	1	axc2	2/25/2010	13:34:59	OM_2-25-2010_12-14-00
247505002	955983	1	axc2	2/25/2010	13:35:52	OM_2-25-2010_12-14-00
247505003	955983	1	axc2	2/25/2010	13:36:45	OM_2-25-2010_12-14-00
247505004	955983	1	axc2	2/25/2010	13:37:38	OM_2-25-2010_12-14-00
247505005	955983	1	axc2	2/25/2010	13:38:30	OM_2-25-2010_12-14-00
247533001	955983	1	axc2	2/25/2010	13:39:22	OM_2-25-2010_12-14-00
247533002	955983	1	axc2	2/25/2010	13:40:14	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010	13:41:07	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010	13:42:58	OM_2-25-2010_12-14-00
247548001	955983	1	axc2	2/25/2010	13:44:45	OM_2-25-2010_12-14-00
247548002	955983	1	axc2	2/25/2010	13:45:40	OM_2-25-2010_12-14-00
247273002	954509	2	axc2	2/25/2010	13:46:32	OM_2-25-2010_12-14-00
247533001	955983	10	axc2	2/25/2010	13:47:24	OM_2-25-2010_12-14-00
247533002	955983	25	axc2	2/25/2010	13:48:16	OM_2-25-2010_12-14-00
CCV		1	axc2	2/25/2010	13:49:09	OM_2-25-2010_12-14-00
CCB		1	axc2	2/25/2010	13:50:59	OM_2-25-2010_12-14-00

Original Run Filename: OM_2-25-2010_12-14-00.OMN created 2/25/2010 12:14:00
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-25-2010_12-14-00.OMN last modified 2/25/2010 13:52:05
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100225-01	1	S1	200	9.64	2/25/2010@12:17:22			200 ppb
WCN100225-02	1	S2	150	7.20	2/25/2010@12:18:14			150 ppb
WCN100225-03	1	S3	100	4.68	2/25/2010@12:19:07			100 ppb
WCN100225-04	1	S4	50.0	2.51	2/25/2010@12:20:00			50 ppb
WCN100225-05	1	S5	10.0	0.629	2/25/2010@12:20:53			10 ppb
WCN100225-06	1	S6	5.00	0.384	2/25/2010@12:21:47			CRDL 5.0 ppb
WCN100225-08	1	S7	0.00	0.0380	2/25/2010@12:22:41			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99976 > 0.99500					
Message			Pass					
Action			Continue					
WCN100225-07	1	S8	148	7.12	2/25/2010@12:24:32			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-1.2 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-1.2 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100225-08	1	S7	0.328	0.111	2/25/2010@12:26:22			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.328 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.328 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100225-06	1	S6	6.32	0.395	2/25/2010@12:28:12			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.32 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.32 > 2.50					
Message			Pass					
Action			None					
1202046116|954509|MB	1	1	-1.07	0.0449	2/25/2010@12:30:02			
1202046123|LCS	1	2	492	23.4	2/25/2010@12:30:55		25.00	
247103001	1	3	2.33	0.206	2/25/2010@12:31:48			
247103002	1	4	-2.02	-4.98e-4	2/25/2010@12:32:41			
247103003	1	5	1.28	0.156	2/25/2010@12:33:34			
247103004	1	6	-0.839	0.0556	2/25/2010@12:34:27			
247103005	1	7	-0.982	0.0489	2/25/2010@12:35:20			
247103006	1	8	-0.483	0.0725	2/25/2010@12:36:12			
247103007	1	9	0.0851	0.0994	2/25/2010@12:37:04			
247103008	1	10	-2.02	-2.21e-4	2/25/2010@12:37:57			
WCN100225-03	1	S3	103	4.99	2/25/2010@12:38:49			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.2 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100225-08	1	S7	-2.01	2.30e-4	2/25/2010@12:40:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.01 > -5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.01 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202046123||LCS	1	2	27.6	1.41	2/25/2010@12:42:29		25.00	
247103009	1	11	0.343	0.112	2/25/2010@12:43:21			
247103010	1	12	-0.641	0.0650	2/25/2010@12:44:13			
247103011	1	13	1.10	0.148	2/25/2010@12:45:05			
247103012	1	14	0.143	0.102	2/25/2010@12:45:56			
247103013	1	15	-2.03	-7.26e-4	2/25/2010@12:46:48			
247103014	1	16	0.252	0.107	2/25/2010@12:47:42			
247103015	1	17	-0.684	0.0630	2/25/2010@12:48:35			
247123001	1	18	-1.43	0.0275	2/25/2010@12:49:29			
1202046117||DUP	1	19	-2.01	2.15e-4	2/25/2010@12:50:22			
WCN100225-03	1	S3	104	5.03	2/25/2010@12:51:15			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100225-08	1	S7	-0.919	0.0518	2/25/2010@12:53:06			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.919 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.919 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202046119||MS	1	20	105	5.07	2/25/2010@12:54:54			
1202046121||MSD	1	21	102	4.93	2/25/2010@12:55:47			
247123002	1	22	-1.18	0.0395	2/25/2010@12:56:40			
1202046118||DUP	1	23	-1.98	0.00160	2/25/2010@12:57:33			
1202046120||MS	1	24	97.4	4.71	2/25/2010@12:58:26			
1202046122||MSD	1	25	75.3	3.66	2/25/2010@12:59:18			
247123003	1	26	-1.24	0.0366	2/25/2010@13:00:11			
247123004	1	27	-1.41	0.0287	2/25/2010@13:01:03			
247273002	1	28	218	10.4	2/25/2010@13:01:56			
1202049712|955983|MB	1	29	0.307	0.110	2/25/2010@13:02:48			
WCN100225-03	1	S3	104	5.04	2/25/2010@13:03:40			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100225-08	1	S7	-1.35	0.0312	2/25/2010@13:05:30			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit									
Result:		-1.35 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.35 > -5.00							
Message		CCB Passed							
Action		Continue							
1202049725||LCS	1	30	53.2	2.62	2/25/2010@13:07:17				
247046002	1	31	-1.20	0.0386	2/25/2010@13:08:11				
1202049713||DUP	1	32	-1.16	0.0403	2/25/2010@13:09:06				
1202049717||MS	1	33	110	5.30	2/25/2010@13:09:59				
1202049721||MSD	1	34	112	5.43	2/25/2010@13:10:52				
247261003	1	35	-1.14	0.0416	2/25/2010@13:11:45				
1202049714||DUP	1	36	-1.44	0.0273	2/25/2010@13:12:39				
1202049718||MS	1	37	111	5.38	2/25/2010@13:13:32				
1202049722||MSD	1	38	105	5.05	2/25/2010@13:14:25				
247394001	1	39	-1.18	0.0397	2/25/2010@13:15:18				
WCN100225-03	1	S3	105	5.07	2/25/2010@13:16:10			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							
WCN100225-08	1	S7	-1.41	0.0283	2/25/2010@13:18:01			CCB	
Known Conc:		0.00							
DQM Test: > + Concentration Limit									
Result:		-1.41 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.41 > -5.00							
Message		CCB Passed							
Action		Continue							
247402001	1	40	-1.02	0.0469	2/25/2010@13:19:49				
247402002	1	41	-0.885	0.0535	2/25/2010@13:20:42				
247402004	1	42	-0.633	0.0654	2/25/2010@13:21:34				
247431001	1	43	-1.65	0.0173	2/25/2010@13:22:27				
247438001	1	44	-1.24	0.0365	2/25/2010@13:23:19				
1202049715||DUP	1	45	-1.40	0.0289	2/25/2010@13:24:10				
1202049719||MS	1	46	99.6	4.82	2/25/2010@13:25:05				
1202049723||MSD	1	47	111	5.37	2/25/2010@13:25:59				
247441001	1	48	-1.19	0.0390	2/25/2010@13:26:53				
247449001	1	49	0.0261	0.0966	2/25/2010@13:27:47				
WCN100225-03	1	S3	103	5.00	2/25/2010@13:28:39			CCV	
Known Conc:		100							
DQM Test: > + Percent Relative Difference									
Result:		3.4 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		3.4 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100225-08	1	S7	-1.29	0.0343	2/25/2010@13:30:29			CCB	
Known Conc:		0.00							
DQM Test: > + Concentration Limit									
Result:		-1.29 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.29 > -5.00							
Message		CCB Passed							
Action		Continue							

247505001	1	50	-0.496	0.0719	2/25/2010@13:32:20		
1202049716|DUP	1	51	-1.17	0.0398	2/25/2010@13:33:12		
1202049720|MS	1	52	96.2	4.65	2/25/2010@13:34:06		
1202049724|MSD	1	53	100	4.83	2/25/2010@13:34:59		
247505002	1	54	-1.29	0.0342	2/25/2010@13:35:52		
247505003	1	55	-1.28	0.0346	2/25/2010@13:36:45		
247505004	1	56	-1.98	0.00137	2/25/2010@13:37:38		
247505005	1	57	-1.07	0.0448	2/25/2010@13:38:30		
247533001	1	58	476	22.7	2/25/2010@13:39:22		
247533002	1	59	1.91e+3	90.9	2/25/2010@13:40:14		
WCN100225-03	1	S3	110	5.30	2/25/2010@13:41:07		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			9.9 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			9.9 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100225-08	1	S7	-0.877	0.0538	2/25/2010@13:42:58		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.877 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-0.877 > -5.00				
Message			CCB Passed				
Action			Continue				
247548001	1	60	-1.11	0.0426	2/25/2010@13:44:45		
247548002	1	61	1.17	0.151	2/25/2010@13:45:40		
247273002|954509	1	28	106	5.10	2/25/2010@13:46:32		2.00
247533001|955983	1	58	43.8	2.17	2/25/2010@13:47:24		10.00
247533002	1	59	183	8.78	2/25/2010@13:48:16		25.00
WCN100225-03	1	S3	104	5.01	2/25/2010@13:49:09		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			3.7 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			3.7 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100225-08	1	S7	-0.996	0.0482	2/25/2010@13:50:59		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.996 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-0.996 > -5.00				
Message			CCB Passed				
Action			Continue				

Analyte Properties Table for OM_2-25-2010_12-14-00.OMN

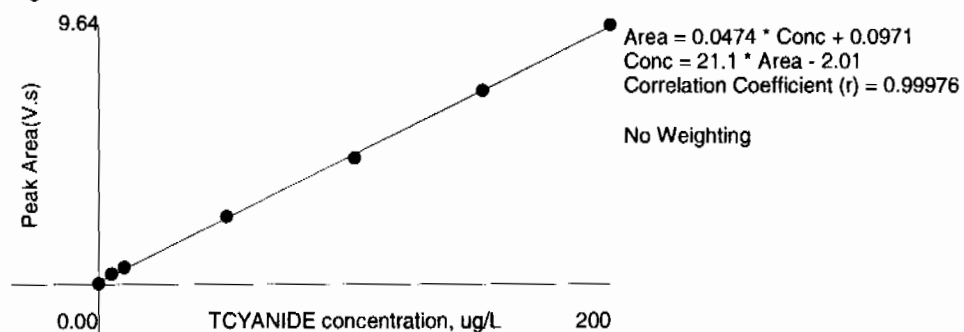
Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A

Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.64	0.609	-0.7	2/25/2010	12:18:25
2	150	1	7.20	0.459	0.0	2/25/2010	12:19:17
3	100	1	4.68	0.300	3.2	2/25/2010	12:20:10
4	50.0	1	2.51	0.160	-1.8	2/25/2010	12:21:03
5	10.0	1	0.629	0.0395	-10.1	2/25/2010	12:21:56
6	5.00	1	0.384	0.0226	-14.9	2/25/2010	12:22:50
7	0.00	1	0.0380	0.00110		2/25/2010	12:23:44

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/25/2010 15:12:01	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010 15:13:51	OM_2-25-2010_15-11-15
1202046664	954711	1	axc2	2/25/2010 15:15:41	OM_2-25-2010_15-11-15
1202046671	954711	25	axc2	2/25/2010 15:16:36	OM_2-25-2010_15-11-15
247040009	954711	1	axc2	2/25/2010 15:17:29	OM_2-25-2010_15-11-15
247040010	954711	1	axc2	2/25/2010 15:18:24	OM_2-25-2010_15-11-15
247040011	954711	1	axc2	2/25/2010 15:19:17	OM_2-25-2010_15-11-15
247040012	954711	1	axc2	2/25/2010 15:20:10	OM_2-25-2010_15-11-15
247040013	954711	1	axc2	2/25/2010 15:21:03	OM_2-25-2010_15-11-15
247040014	954711	1	axc2	2/25/2010 15:21:56	OM_2-25-2010_15-11-15
247040015	954711	1	axc2	2/25/2010 15:22:49	OM_2-25-2010_15-11-15
247040016	954711	1	axc2	2/25/2010 15:23:42	OM_2-25-2010_15-11-15
CCV		1	axc2	2/25/2010 15:24:35	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010 15:26:25	OM_2-25-2010_15-11-15
247097001	954711	1	axc2	2/25/2010 15:28:14	OM_2-25-2010_15-11-15
247097002	954711	1	axc2	2/25/2010 15:29:06	OM_2-25-2010_15-11-15
247097003	954711	1	axc2	2/25/2010 15:29:58	OM_2-25-2010_15-11-15
247097004	954711	1	axc2	2/25/2010 15:30:51	OM_2-25-2010_15-11-15
247097005	954711	1	axc2	2/25/2010 15:31:45	OM_2-25-2010_15-11-15
247201001	954711	1	axc2	2/25/2010 15:32:39	OM_2-25-2010_15-11-15
1202046665	954711	1	axc2	2/25/2010 15:33:33	OM_2-25-2010_15-11-15
1202046667	954711	1	axc2	2/25/2010 15:34:28	OM_2-25-2010_15-11-15
1202046669	954711	1	axc2	2/25/2010 15:35:21	OM_2-25-2010_15-11-15
247201002	954711	1	axc2	2/25/2010 15:36:15	OM_2-25-2010_15-11-15
CCV		1	axc2	2/25/2010 15:37:07	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010 15:38:58	OM_2-25-2010_15-11-15
1202046666	954711	1	axc2	2/25/2010 15:40:47	OM_2-25-2010_15-11-15
1202046668	954711	1	axc2	2/25/2010 15:41:41	OM_2-25-2010_15-11-15
1202046670	954711	1	axc2	2/25/2010 15:42:34	OM_2-25-2010_15-11-15
247201003	954711	1	axc2	2/25/2010 15:43:27	OM_2-25-2010_15-11-15
247201004	954711	1	axc2	2/25/2010 15:44:20	OM_2-25-2010_15-11-15
247201005	954711	1	axc2	2/25/2010 15:45:13	OM_2-25-2010_15-11-15
247201006	954711	1	axc2	2/25/2010 15:46:06	OM_2-25-2010_15-11-15
247201007	954711	1	axc2	2/25/2010 15:46:58	OM_2-25-2010_15-11-15
1202049739	955987	1	axc2	2/25/2010 15:47:50	OM_2-25-2010_15-11-15
1202049746	955987	25	axc2	2/25/2010 15:48:45	OM_2-25-2010_15-11-15
CCV		1	axc2	2/25/2010 15:49:37	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010 15:51:27	OM_2-25-2010_15-11-15
247249001	955987	1	axc2	2/25/2010 15:53:18	OM_2-25-2010_15-11-15
247249002	955987	1	axc2	2/25/2010 15:54:12	OM_2-25-2010_15-11-15
247338007	955987	1	axc2	2/25/2010 15:55:06	OM_2-25-2010_15-11-15
1202049740	955987	1	axc2	2/25/2010 15:56:01	OM_2-25-2010_15-11-15
1202049742	955987	1	axc2	2/25/2010 15:56:55	OM_2-25-2010_15-11-15
1202049744	955987	1	axc2	2/25/2010 15:57:49	OM_2-25-2010_15-11-15
247338008	955987	1	axc2	2/25/2010 15:58:42	OM_2-25-2010_15-11-15
1202049741	955987	1	axc2	2/25/2010 15:59:35	OM_2-25-2010_15-11-15
1202049743	955987	1	axc2	2/25/2010 16:00:29	OM_2-25-2010_15-11-15
1202049745	955987	1	axc2	2/25/2010 16:01:22	OM_2-25-2010_15-11-15
CCV		1	axc2	2/25/2010 16:02:14	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010 16:04:05	OM_2-25-2010_15-11-15
247338009	955987	1	axc2	2/25/2010 16:05:54	OM_2-25-2010_15-11-15
247338010	955987	1	axc2	2/25/2010 16:06:47	OM_2-25-2010_15-11-15
247338011	955987	1	axc2	2/25/2010 16:07:40	OM_2-25-2010_15-11-15
247347001	955987	1	axc2	2/25/2010 16:08:32	OM_2-25-2010_15-11-15
247347002	955987	1	axc2	2/25/2010 16:09:27	OM_2-25-2010_15-11-15
247347003	955987	1	axc2	2/25/2010 16:10:22	OM_2-25-2010_15-11-15
247347004	955987	1	axc2	2/25/2010 16:11:17	OM_2-25-2010_15-11-15
247347005	955987	1	axc2	2/25/2010 16:12:11	OM_2-25-2010_15-11-15

247347006	955987	1	axc2	2/25/2010	16:13:05	OM_2-25-2010_15-11-15
247347007	955987	1	axc2	2/25/2010	16:13:59	OM_2-25-2010_15-11-15
CCV		1	axc2	2/25/2010	16:14:52	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010	16:16:42	OM_2-25-2010_15-11-15
247347008	955987	1	axc2	2/25/2010	16:18:33	OM_2-25-2010_15-11-15
247359001	955987	1	axc2	2/25/2010	16:19:27	OM_2-25-2010_15-11-15
247359002	955987	1	axc2	2/25/2010	16:20:21	OM_2-25-2010_15-11-15
247359003	955987	1	axc2	2/25/2010	16:21:14	OM_2-25-2010_15-11-15
247359004	955987	1	axc2	2/25/2010	16:22:07	OM_2-25-2010_15-11-15
247552002	955987	1	axc2	2/25/2010	16:23:00	OM_2-25-2010_15-11-15
CCV		1	axc2	2/25/2010	16:23:53	OM_2-25-2010_15-11-15
CCB		1	axc2	2/25/2010	16:25:44	OM_2-25-2010_15-11-15

Original Run Filename: OM_2-25-2010_15-11-15.OMN created 2/25/2010 15:11:15
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-25-2010_15-11-15.OMN last modified 2/25/2010 16:26:48
 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)				
WCN100225-03	1	S3	93.8	4.54	2/25/2010@15:12:01			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-6.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-6.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100225-08	1	S7	-1.29	0.0342	2/25/2010@15:13:51			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.29 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.29 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
1202046664|954711|MB	1	62	-1.26	0.0354	2/25/2010@15:15:41			
1202046671||LCS	1	63	20.2	1.05	2/25/2010@15:16:36		25.00	
247040009	1	64	-0.381	0.0774	2/25/2010@15:17:29			
247040010	1	65	2.94	0.235	2/25/2010@15:18:24			
247040011	1	66	-0.810	0.0570	2/25/2010@15:19:17			
247040012	1	67	2.37	0.208	2/25/2010@15:20:10			
247040013	1	68	-0.421	0.0754	2/25/2010@15:21:03			
247040014	1	69	2.04	0.192	2/25/2010@15:21:56			
247040015	1	70	-0.752	0.0597	2/25/2010@15:22:49			
247040016	1	71	-2.22	-0.00975	2/25/2010@15:23:42			
WCN100225-03	1	S3	98.6	4.77	2/25/2010@15:24:35			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-1.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-1.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100225-08	1	S7	-1.53	0.0230	2/25/2010@15:26:25			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.53 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.53 > -5.00					
Message			CCB Passed					
Action			Continue					
247097001	1	72	-0.645	0.0648	2/25/2010@15:28:14			
247097002	1	73	-0.931	0.0513	2/25/2010@15:29:06			
247097003	1	74	-0.937	0.0510	2/25/2010@15:29:58			
247097004	1	75	-1.16	0.0405	2/25/2010@15:30:51			
247097005	1	76	-0.518	0.0709	2/25/2010@15:31:45			

247201001	1	77	1.57	0.170	2/25/2010@15:32:39		
1202046665|DUP	1	78	1.62	0.172	2/25/2010@15:33:33		
1202046667|MS	1	79	95.6	4.63	2/25/2010@15:34:28		
1202046669|MSD	1	80	88.3	4.28	2/25/2010@15:35:21		
247201002	1	81	1.52	0.167	2/25/2010@15:36:15		
WCN100225-03	1	S3	98.8	4.78	2/25/2010@15:37:07		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: -1.2 < 10.0							
Message CCB Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: -1.2 < 10.0							
Message CCB Passed							
Action Continue							
WCN100225-08	1	S7	-1.45	0.0265	2/25/2010@15:38:58		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.45 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.45 > -5.00							
Message CCB Passed							
Action Continue							
1202046666|DUP	1	82	1.24	0.154	2/25/2010@15:40:47		
1202046668|MS	1	83	90.0	4.36	2/25/2010@15:41:41		
1202046670|MSD	1	84	98.0	4.74	2/25/2010@15:42:34		
247201003	1	85	0.892	0.138	2/25/2010@15:43:27		
247201004	1	86	1.31	0.157	2/25/2010@15:44:20		
247201005	1	87	0.962	0.141	2/25/2010@15:45:13		
247201006	1	88	3.55	0.263	2/25/2010@15:46:06		
247201007	1	89	-0.233	0.0844	2/25/2010@15:46:58		
1202049739|955987|MB	1	90	-1.75	0.0126	2/25/2010@15:47:50		
1202049746|LCS	1	91	16.9	0.898	2/25/2010@15:48:45	25.00	
WCN100225-03	1	S3	101	4.86	2/25/2010@15:49:37		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 0.6 < 10.0							
Message CCB Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 0.6 < 10.0							
Message CCB Passed							
Action Continue							
WCN100225-08	1	S7	-1.48	0.0251	2/25/2010@15:51:27		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.48 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.48 > -5.00							
Message CCB Passed							
Action Continue							
247249001	1	92	-0.837	0.0557	2/25/2010@15:53:18		
247249002	1	93	-1.08	0.0441	2/25/2010@15:54:12		
247338007	1	94	-1.30	0.0336	2/25/2010@15:55:06		
1202049740|DUP	1	95	-1.29	0.0340	2/25/2010@15:56:01		
1202049742|MS	1	96	100	4.84	2/25/2010@15:56:55		
1202049744|MSD	1	97	100	4.83	2/25/2010@15:57:49		
247338008	1	98	1.80	0.181	2/25/2010@15:58:42		
1202049741|DUP	1	99	-1.61	0.0190	2/25/2010@15:59:35		
1202049743|MS	1	100	92.9	4.50	2/25/2010@16:00:29		
1202049745|MSD	1	101	102	4.92	2/25/2010@16:01:22		
WCN100225-03	1	S3	100	4.84	2/25/2010@16:02:14		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							

			Result:	0.1 < 10.0		
			Message	CCV Passed		
			Action	Continue		
DQM Test: < - Percent Relative Difference						
			Result:	0.1 < 10.0		
			Message	CCV Passed		
			Action	Continue		
WCN100225-08	1	S7	-1.11	0.0429	2/25/2010@16:04:05	CCB
			Known Conc:	0.00		
DQM Test: > + Concentration Limit						
			Result:	-1.11 < 5.00		
			Message	CCB Passed		
			Action	Continue		
DQM Test: < - Concentration Limit						
			Result:	-1.11 > -5.00		
			Message	CCB Passed		
			Action	Continue		
247338009	1	102	-2.00	3.73e-4	2/25/2010@16:05:54	
247338010	1	103	-2.02	-1.74e-4	2/25/2010@16:06:47	
247338011	1	104	-1.51	0.0238	2/25/2010@16:07:40	
247347001	1	105	-1.26	0.0355	2/25/2010@16:08:32	
247347002	1	106	-1.57	0.0209	2/25/2010@16:09:27	
247347003	1	107	-1.38	0.0302	2/25/2010@16:10:22	
247347004	1	108	-1.38	0.0301	2/25/2010@16:11:17	
247347005	1	109	-1.24	0.0366	2/25/2010@16:12:11	
247347006	1	110	-1.31	0.0333	2/25/2010@16:13:05	
247347007	1	111	-2.15	-0.00660	2/25/2010@16:13:59	
WCN100225-03	1	S3	100	4.84	2/25/2010@16:14:52	CCV
			Known Conc:	100		
DQM Test: > + Percent Relative Difference						
			Result:	-0.0 < 10.0		
			Message	CCV Passed		
			Action	Continue		
DQM Test: < - Percent Relative Difference						
			Result:	-0.0 < 10.0		
			Message	CCV Passed		
			Action	Continue		
WCN100225-08	1	S7	-1.47	0.0259	2/25/2010@16:16:42	CCB
			Known Conc:	0.00		
DQM Test: > + Concentration Limit						
			Result:	-1.47 < 5.00		
			Message	CCB Passed		
			Action	Continue		
DQM Test: < - Concentration Limit						
			Result:	-1.47 > -5.00		
			Message	CCB Passed		
			Action	Continue		
247347008	1	112	-1.35	0.0313	2/25/2010@16:18:33	
247359001	1	113	9.72	0.556	2/25/2010@16:19:27	
247359002	1	114	3.74	0.273	2/25/2010@16:20:21	
247359003	1	115	-0.434	0.0748	2/25/2010@16:21:14	
247359004	1	116	-1.40	0.0288	2/25/2010@16:22:07	
247552002	1	117	-0.339	0.0793	2/25/2010@16:23:00	
WCN100225-03	1	S3	100	4.84	2/25/2010@16:23:53	CCV
			Known Conc:	100		
DQM Test: > + Percent Relative Difference						
			Result:	0.2 < 10.0		
			Message	CCV Passed		
			Action	Continue		
DQM Test: < - Percent Relative Difference						
			Result:	0.2 < 10.0		
			Message	CCV Passed		
			Action	Continue		
WCN100225-08	1	S7	-1.54	0.0225	2/25/2010@16:25:44	CCB
			Known Conc:	0.00		
DQM Test: > + Concentration Limit						
			Result:	-1.54 < 5.00		
			Message	CCB Passed		

[illegible]

Analyte Properties Table for OM_2-25-2010_15-11-15.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

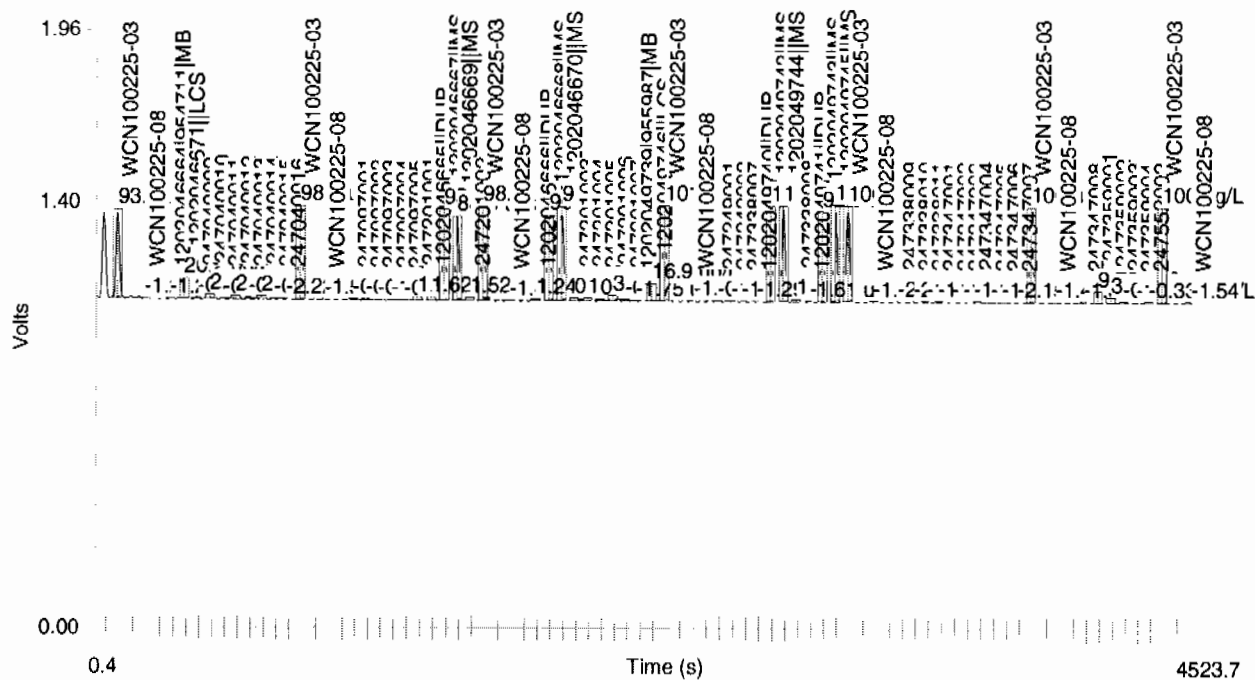
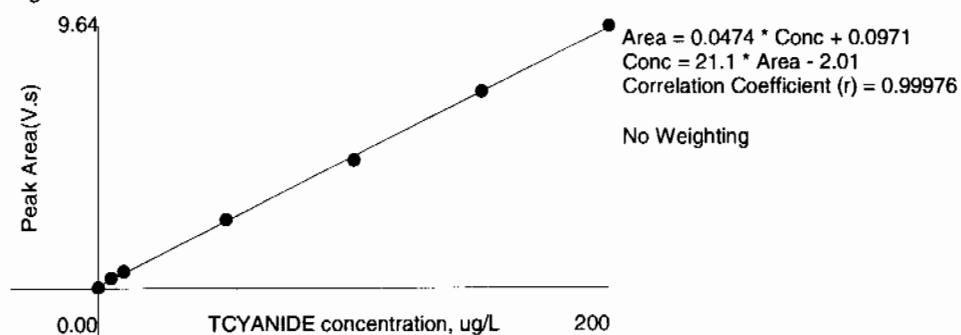


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.64	0.609	-0.7	2/25/2010	12:18:25
2	150	1	7.20	0.459	0.0	2/25/2010	12:19:17
3	100	1	4.68	0.300	3.2	2/25/2010	12:20:10
4	50.0	1	2.51	0.160	-1.8	2/25/2010	12:21:03
5	10.0	1	0.629	0.0395	-10.1	2/25/2010	12:21:56
6	5.00	1	0.384	0.0226	-14.9	2/25/2010	12:22:50
7	0.00	1	0.0380	0.00110		2/25/2010	12:23:44

Figure 1: TCYANIDE



General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1912-1**

Method/Analysis Information

Product: Cyanide, Total
Analytical Batch: 955981 **Method:** SW9012A Cyanide and Total
Prep Batch : 955979 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247350001	RE15-10-8270
1202049704	Method Blank (MB)
1202049706	247203001(RE16-10-11741) Sample Duplicate (DUP)
1202049708	247203001(RE16-10-11741) Matrix Spike (MS)
1202049710	247203001(RE16-10-11741) Matrix Spike Duplicate (MSD)
1202049711	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

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

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 247203001 (RE16-10-11741).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recovery for this sample set was within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovery for this sample set was within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD 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. 1202049706 (RE16-10-11741).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

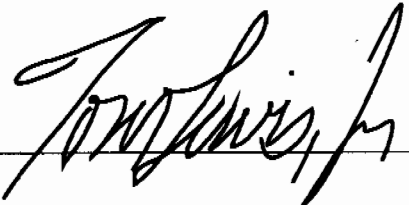
Certification Statement

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

Review Validation:

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

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

Reviewer:  Date: 16Mar10

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: 10-1912-1 GEL Work Order: 247350

The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 10, 2010

Client SDG: 10-1912-1

Client Sample ID: RE15-10-8270
Sample ID: 247350001
Matrix: W
Collect Date: 13-FEB-10 12:00
Receive Date: 18-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "As Received"

Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/23/10	1351	955981	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/23/10	1200	955979

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 10, 2010

Page 1 of 2

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

Contact: Ms. Joylene Valdez

Workorder: 247350

Parmname		NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis													
Batch	955981												
QC1202049706	247203001	DUP											
Cyanide, Total			U	ND	U	ND	ug/L	N/A			AXC2	02/23/10	13:30
QC1202049711	LCS												
Cyanide, Total		50.0				54.3	ug/L		109	(90%-110%)		02/23/10	13:25
QC1202049704	MB												
Cyanide, Total					U	5.00	ug/L					02/23/10	13:24
QC1202049708	247203001	MS											
Cyanide, Total		100	U	ND		109	ug/L		109	(60%-144%)		02/23/10	13:31
QC1202049710	247203001	MSD											
Cyanide, Total		100	U	ND		102	ug/L	6.64	102	(0%-20%)		02/23/10	13:32

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

GEL LABORATORIES LLC

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QC Summary

Workorder: 247350

Page 2 of 2

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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: 10-MAR-2010 18:05

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1912-1

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-FEB-2010 10:14:06	OM_2-23-2010_10-03-36	149	150	99.3	(90%-110%)	Yes
CCV	23-FEB-2010 13:20:35	OM_2-23-2010_11-19-05	104	100	104	(90%-110%)	Yes
CCV	23-FEB-2010 13:33:13	OM_2-23-2010_11-19-05	104	100	104	(90%-110%)	Yes
CCV	23-FEB-2010 13:45:56	OM_2-23-2010_11-19-05	105	100	105	(90%-110%)	Yes
CCV	23-FEB-2010 13:57:43	OM_2-23-2010_11-19-05	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-FEB-2010 10:15:57	OM_2-23-2010_10-03-36	-1.34	10	Yes
CCB	23-FEB-2010 13:22:26	OM_2-23-2010_11-19-05	-1.39	10	Yes
CCB	23-FEB-2010 13:35:03	OM_2-23-2010_11-19-05	-1.25	10	Yes
CCB	23-FEB-2010 13:47:47	OM_2-23-2010_11-19-05	-1.55	10	Yes
CCB	23-FEB-2010 13:59:33	OM_2-23-2010_11-19-05	-1.21	10	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID:	955979.0	Verified by:	
Analyst:	Alan Stanley		
Method:	SW846 9010C Distillation	SW846 9010B Prep	
		E	
		P	
		A	
		33	
		5.	
		3	
	EPA 335.4		
Lab SOP:	GL-GC-E-067 REV# 13		
Instrument:	Sartorius Balance B-001		

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check	Serial Number	Spike Amount	Spike Units
1202049704 MB	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.0125	mL
1202049711 LCS	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.0125	mL
246941002	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
1202049705 DUP (246941002)	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
1202049707 MS (246941002)	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
1202049709 MSD (246941002)	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247203001	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
1202049706 DUP (247203001)	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
1202049708 MS (247203001)	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
1202049710 MSD (247203001)	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247204001	23-FEB-2010 12:00:00	Waste Water	25	25	1	>12	URF1269274-02	.025	mL
247244001	23-FEB-2010 12:00:00	Waste Water	25	25	1	>12	URF1269274-02	.025	mL
247250001	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247250002	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247256001	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247256002	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247273001	23-FEB-2010 12:00:00	Waste Water	25	25	1	>12	URF1269274-02	.025	mL
247322001	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247322002	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL
247335001	23-FEB-2010 12:00:00	Water	25	25	1	>12	URF1269274-02	.025	mL

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 955979.0
Analyst: Alan Stanley
Method: SW846 9010C Distillation SW846 9010B Prep
 Verified by:
 EPA 335.4
 Lab SOP: GL-GC-E-067 REV# 13
 Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202049711	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.0125	mL
MS	1202049707	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MS	1202049708	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MSD	1202049709	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MSD	1202049710	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
247339001	23-FEB-2010 12:00:00	Water	25	25	1	>12
247339002	23-FEB-2010 12:00:00	Water	25	25	1	>12
247350001	23-FEB-2010 12:00:00	Water	25	25	1	>12
247434001	23-FEB-2010 12:00:00	Water	25	25	1	>12
247434002	23-FEB-2010 12:00:00	Water	25	25	1	>12
247559001	23-FEB-2010 12:00:00	Water	25	25	1	>12
247560001	23-FEB-2010 12:00:00	Water	25	25	1	>12
247567001	23-FEB-2010 12:00:00	Water	25	25	1	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
1260189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N H3NO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100223-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/23/2010 10:06:57	OM_2-23-2010_10-03-36
150 ppb		1	axc2	2/23/2010 10:07:49	OM_2-23-2010_10-03-36
100 ppb		1	axc2	2/23/2010 10:08:41	OM_2-23-2010_10-03-36
50 ppb		1	axc2	2/23/2010 10:09:34	OM_2-23-2010_10-03-36
10 ppb		1	axc2	2/23/2010 10:10:28	OM_2-23-2010_10-03-36
CRDL 5.0 ppb		1	axc2	2/23/2010 10:11:21	OM_2-23-2010_10-03-36
ICAL-00		1	axc2	2/23/2010 10:12:16	OM_2-23-2010_10-03-36
ICV		1	axc2	2/23/2010 10:14:06	OM_2-23-2010_10-03-36
ICB		1	axc2	2/23/2010 10:15:57	OM_2-23-2010_10-03-36
CRDL		1	axc2	2/23/2010 10:17:46	OM_2-23-2010_10-03-36
1202046146	954516	1	axc2	2/23/2010 10:19:36	OM_2-23-2010_10-03-36
1202046153	954516	25	axc2	2/23/2010 10:20:29	OM_2-23-2010_10-03-36
247172001	954516	1	axc2	2/23/2010 10:21:22	OM_2-23-2010_10-03-36
1202046147	954516	1	axc2	2/23/2010 10:22:15	OM_2-23-2010_10-03-36
1202046149	954516	1	axc2	2/23/2010 10:23:08	OM_2-23-2010_10-03-36
1202046151	954516	1	axc2	2/23/2010 10:24:01	OM_2-23-2010_10-03-36
247172002	954516	1	axc2	2/23/2010 10:24:54	OM_2-23-2010_10-03-36
1202046148	954516	1	axc2	2/23/2010 10:25:46	OM_2-23-2010_10-03-36
1202046150	954516	1	axc2	2/23/2010 10:26:38	OM_2-23-2010_10-03-36
1202046152*	954516	1	axc2	2/23/2010 10:27:31	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:28:23	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:30:13	OM_2-23-2010_10-03-36
247178001	954516	1	axc2	2/23/2010 10:32:01	OM_2-23-2010_10-03-36
247178002	954516	1	axc2	2/23/2010 10:32:53	OM_2-23-2010_10-03-36
247178003	954516	1	axc2	2/23/2010 10:33:45	OM_2-23-2010_10-03-36
247178004	954516	1	axc2	2/23/2010 10:34:37	OM_2-23-2010_10-03-36
247178005	954516	1	axc2	2/23/2010 10:35:28	OM_2-23-2010_10-03-36
247178006	954516	1	axc2	2/23/2010 10:36:22	OM_2-23-2010_10-03-36
247178007	954516	1	axc2	2/23/2010 10:37:16	OM_2-23-2010_10-03-36
247178008	954516	1	axc2	2/23/2010 10:38:10	OM_2-23-2010_10-03-36
247178009	954516	1	axc2	2/23/2010 10:39:03	OM_2-23-2010_10-03-36
247178010	954516	1	axc2	2/23/2010 10:39:56	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:40:48	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:42:39	OM_2-23-2010_10-03-36
247178011	954516	1	axc2	2/23/2010 10:44:28	OM_2-23-2010_10-03-36
247181001	954516	1	axc2	2/23/2010 10:45:20	OM_2-23-2010_10-03-36
247181002	954516	1	axc2	2/23/2010 10:46:14	OM_2-23-2010_10-03-36
247187001	954516	1	axc2	2/23/2010 10:47:06	OM_2-23-2010_10-03-36
247187002	954516	1	axc2	2/23/2010 10:47:58	OM_2-23-2010_10-03-36
247187003	954516	1	axc2	2/23/2010 10:48:51	OM_2-23-2010_10-03-36
247197001	954516	1	axc2	2/23/2010 10:49:43	OM_2-23-2010_10-03-36
247197002	954516	1	axc2	2/23/2010 10:50:35	OM_2-23-2010_10-03-36
1202046124	954512	1	axc2	2/23/2010 10:51:27	OM_2-23-2010_10-03-36
1202046131	954512	25	axc2	2/23/2010 10:52:19	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:53:12	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:55:01	OM_2-23-2010_10-03-36
247108001	954512	1	axc2	2/23/2010 10:56:52	OM_2-23-2010_10-03-36
1202046125	954512	1	axc2	2/23/2010 10:57:45	OM_2-23-2010_10-03-36
1202046127	954512	1	axc2	2/23/2010 10:58:39	OM_2-23-2010_10-03-36
1202046129	954512	1	axc2	2/23/2010 10:59:32	OM_2-23-2010_10-03-36
247108002	954512	1	axc2	2/23/2010 11:00:25	OM_2-23-2010_10-03-36
1202046126	954512	1	axc2	2/23/2010 11:01:19	OM_2-23-2010_10-03-36
1202046128	954512	1	axc2	2/23/2010 11:02:11	OM_2-23-2010_10-03-36
1202046130	954512	1	axc2	2/23/2010 11:03:05	OM_2-23-2010_10-03-36
247108003	954512	1	axc2	2/23/2010 11:03:58	OM_2-23-2010_10-03-36
247108004	954512	1	axc2	2/23/2010 11:04:50	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 11:05:42	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 11:07:33	OM_2-23-2010_10-03-36

247108005*	954512	1	axc2	2/23/2010	11:09:22	OM_2-23-2010_10-03-36
247195001*	954512	1	axc2	2/23/2010	11:10:14	OM_2-23-2010_10-03-36
247195002*	954512	1	axc2	2/23/2010	11:11:05	OM_2-23-2010_10-03-36

Author: axc2

Date : 2/23/2010

Original Run Filename: OM_2-23-2010_10-03-36.OMN created 2/23/2010 10:03:36
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-23-2010_10-03-36.OMN last modified 2/23/2010 11:12:14
 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)				
WCN100223-01	1	S1	200	9.53	2/23/2010@10:06:57			200 ppb
WCN100223-02	1	S2	150	7.13	2/23/2010@10:07:49			150 ppb
WCN100223-03	1	S3	100	4.60	2/23/2010@10:08:41			100 ppb
WCN100223-04	1	S4	50.0	2.53	2/23/2010@10:09:34			50 ppb
WCN100223-05	1	S5	10.0	0.617	2/23/2010@10:10:28			10 ppb
WCN100223-06	1	S6	5.00	0.385	2/23/2010@10:11:21			CRDL 5.0 ppb
WCN100223-08	1	S7	0.00	0.0245	2/23/2010@10:12:16			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99966 > 0.99500					
Message			Pass					
Action			Continue					
WCN100223-07	1	S8	149	7.09	2/23/2010@10:14:06			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-0.5 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.5 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100223-08	1	S7	-1.34	0.0341	2/23/2010@10:15:57			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.34 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.34 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100223-06	1	S6	6.77	0.414	2/23/2010@10:17:46			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.77 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.77 > 2.50					
Message			Pass					
Action			None					
1202046146|954516|MB	1	1	-1.30	0.0360	2/23/2010@10:19:36			
1202046153|LCS	1	2	20.1	1.04	2/23/2010@10:20:29		25.00	
247172001	1	3	-1.33	0.0345	2/23/2010@10:21:22			
1202046147|DUP	1	4	-1.25	0.0384	2/23/2010@10:22:15			
1202046149|MS	1	5	98.6	4.72	2/23/2010@10:23:08			
1202046151|MSD	1	6	101	4.82	2/23/2010@10:24:01			
247172002	1	7	-0.836	0.0578	2/23/2010@10:24:54			
1202046148|DUP	1	8	-1.14	0.0437	2/23/2010@10:25:46			
1202046150|MS	1	9	107	5.10	2/23/2010@10:26:38			
1202046152|MSD	1	10	69.8	3.37	2/23/2010@10:27:31			
WCN100223-03	1	S3	103	4.93	2/23/2010@10:28:23			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					
WCN100223-08	1	S7		-1.28	0.0369	2/23/2010@10:30:13			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.28 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.28 > -5.00					
			Message	CCB Passed					
			Action	Continue					
247178001	1	11		-1.02	0.0494	2/23/2010@10:32:01			
247178002	1	12		-1.24	0.0391	2/23/2010@10:32:53			
247178003	1	13		-0.195	0.0879	2/23/2010@10:33:45			
247178004	1	14		-1.18	0.0420	2/23/2010@10:34:37			
247178005	1	15		-1.20	0.0409	2/23/2010@10:35:28			
247178006	1	16		-0.310	0.0825	2/23/2010@10:36:22			
247178007	1	17		-0.592	0.0693	2/23/2010@10:37:16			
247178008	1	18		1.40	0.162	2/23/2010@10:38:10			
247178009	1	19		0.677	0.129	2/23/2010@10:39:03			
247178010	1	20		-0.578	0.0699	2/23/2010@10:39:56			
WCN100223-03	1	S3		104	4.96	2/23/2010@10:40:48			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	3.7 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	3.7 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100223-08	1	S7		-1.27	0.0375	2/23/2010@10:42:39			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.27 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.27 > -5.00					
			Message	CCB Passed					
			Action	Continue					
247178011	1	21		-1.34	0.0342	2/23/2010@10:44:28			
247181001	1	22		-1.33	0.0348	2/23/2010@10:45:20			
247181002	1	23		-0.741	0.0623	2/23/2010@10:46:14			
247187001	1	24		-1.57	0.0236	2/23/2010@10:47:06			
247187002	1	25		-1.22	0.0399	2/23/2010@10:47:58			
247187003	1	26		-1.40	0.0315	2/23/2010@10:48:51			
247197001	1	27		-1.38	0.0323	2/23/2010@10:49:43			
247197002	1	28		-1.11	0.0450	2/23/2010@10:50:35			
1202046124|954512|MB	1	29		-1.30	0.0361	2/23/2010@10:51:27			
1202046131|LCS	1	30		16.8	0.885	2/23/2010@10:52:19		25.00	
WCN100223-03	1	S3		104	4.98	2/23/2010@10:53:12			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	4.3 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	4.3 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100223-08	1	S7		-1.30	0.0362	2/23/2010@10:55:01			CCB
			Known Conc:	0.00					

DQM Test: > + Concentration Limit						
Result:		-1.30 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.30 > -5.00				
Message		CCB Passed				
Action		Continue				
247108001	1	31	-1.09	0.0462	2/23/2010@10:56:52	
1202046125||DUP	1	32	-1.54	0.0247	2/23/2010@10:57:45	
1202046127||MS	1	33	81.1	3.90	2/23/2010@10:58:39	
1202046129||MSD	1	34	98.3	4.70	2/23/2010@10:59:32	
247108002	1	35	-1.05	0.0481	2/23/2010@11:00:25	
1202046126||DUP	1	36	-0.928	0.0536	2/23/2010@11:01:19	
1202046128||MS	1	37	95.0	4.55	2/23/2010@11:02:11	
1202046130||MSD	1	38	88.6	4.25	2/23/2010@11:03:05	
247108003	1	39	-1.15	0.0430	2/23/2010@11:03:58	
247108004	1	40	-1.94	0.00601	2/23/2010@11:04:50	
WCN100223-03	1	S3	104	4.96	2/23/2010@11:05:42	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		3.8 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		3.8 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100223-08	1	S7	-1.19	0.0415	2/23/2010@11:07:33	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.19 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.19 > -5.00				
Message		CCB Passed				
Action		Continue				
247108005	1	41	-2.02	0.00232	2/23/2010@11:09:22	
247195001	1	42	-1.60	0.0222	2/23/2010@11:10:14	
247195002	1	43	-1.50	0.0270	2/23/2010@11:11:05	

Analyte Properties Table for OM_2-23-2010_10-03-36.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

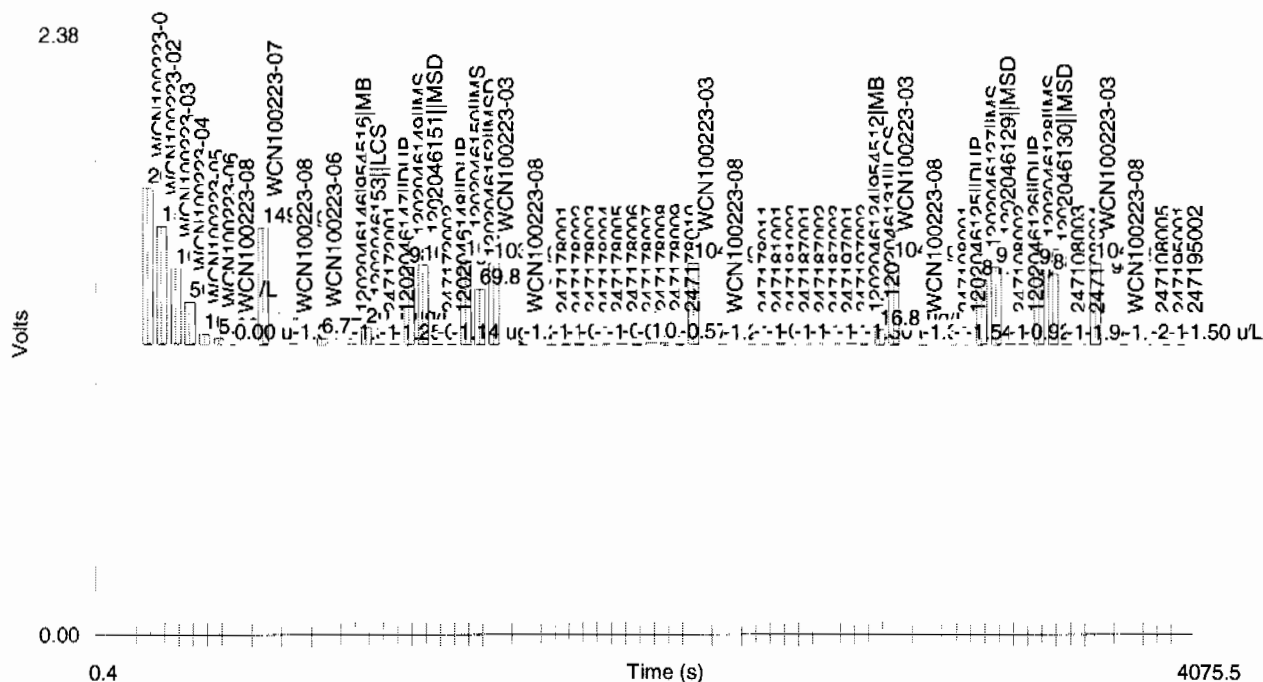
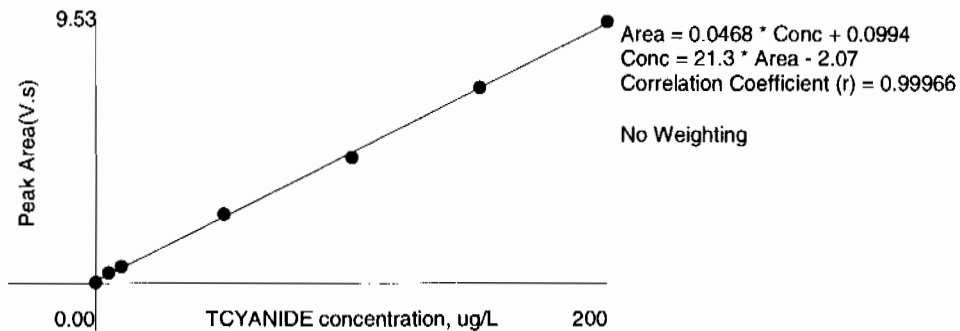


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.53	0.622	-0.6	2/23/2010	10:08:00
2	150	1	7.13	0.468	-0.1	2/23/2010	10:08:52
3	100	1	4.60	0.301	3.8	2/23/2010	10:09:44
4	50.0	1	2.53	0.167	-3.7	2/23/2010	10:10:37
5	10.0	1	0.617	0.0399	-8.7	2/23/2010	10:11:31
6	5.00	1	0.385	0.0238	-15.5	2/23/2010	10:12:24
7	0.00	1	0.0245	0.00128		2/23/2010	10:13:19

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/23/2010 11:22:28	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:24:18	OM_2-23-2010_11-19-05
247108005	954512	1	axc2	2/23/2010 11:26:07	OM_2-23-2010_11-19-05
247195001	954512	1	axc2	2/23/2010 11:26:59	OM_2-23-2010_11-19-05
247195002	954512	1	axc2	2/23/2010 11:27:51	OM_2-23-2010_11-19-05
247195003	954512	1	axc2	2/23/2010 11:28:44	OM_2-23-2010_11-19-05
247195004	954512	1	axc2	2/23/2010 11:29:35	OM_2-23-2010_11-19-05
247195005	954512	1	axc2	2/23/2010 11:30:30	OM_2-23-2010_11-19-05
247195006	954512	1	axc2	2/23/2010 11:31:24	OM_2-23-2010_11-19-05
247195007	954512	1	axc2	2/23/2010 11:32:17	OM_2-23-2010_11-19-05
247195008	954512	1	axc2	2/23/2010 11:33:11	OM_2-23-2010_11-19-05
247195009	954512	1	axc2	2/23/2010 11:34:05	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:34:57	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:36:48	OM_2-23-2010_11-19-05
247195010	954512	1	axc2	2/23/2010 11:38:37	OM_2-23-2010_11-19-05
247195011	954512	1	axc2	2/23/2010 11:39:30	OM_2-23-2010_11-19-05
247195012	954512	1	axc2	2/23/2010 11:40:23	OM_2-23-2010_11-19-05
247195013	954512	1	axc2	2/23/2010 11:41:16	OM_2-23-2010_11-19-05
247195014	954512	1	axc2	2/23/2010 11:42:09	OM_2-23-2010_11-19-05
247195015	954512	1	axc2	2/23/2010 11:43:02	OM_2-23-2010_11-19-05
1202042913	953106	1	axc2	2/23/2010 11:43:55	OM_2-23-2010_11-19-05
1202042920	953106	25	axc2	2/23/2010 11:44:47	OM_2-23-2010_11-19-05
246870010	953106	1	axc2	2/23/2010 11:45:39	OM_2-23-2010_11-19-05
1202042914	953106	1	axc2	2/23/2010 11:46:31	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:47:23	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:49:13	OM_2-23-2010_11-19-05
1202042916	953106	1	axc2	2/23/2010 11:51:03	OM_2-23-2010_11-19-05
1202042918	953106	1	axc2	2/23/2010 11:51:57	OM_2-23-2010_11-19-05
246872001	953106	1	axc2	2/23/2010 11:52:52	OM_2-23-2010_11-19-05
1202042915	953106	1	axc2	2/23/2010 11:53:45	OM_2-23-2010_11-19-05
1202042917	953106	1	axc2	2/23/2010 11:54:39	OM_2-23-2010_11-19-05
1202042919	953106	1	axc2	2/23/2010 11:55:33	OM_2-23-2010_11-19-05
246872002	953106	1	axc2	2/23/2010 11:56:26	OM_2-23-2010_11-19-05
246872003	953106	1	axc2	2/23/2010 11:57:19	OM_2-23-2010_11-19-05
246872004	953106	1	axc2	2/23/2010 11:58:12	OM_2-23-2010_11-19-05
246872005	953106	1	axc2	2/23/2010 11:59:05	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:59:57	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 12:01:48	OM_2-23-2010_11-19-05
246872006	953106	1	axc2	2/23/2010 12:03:37	OM_2-23-2010_11-19-05
246872007	953106	1	axc2	2/23/2010 12:04:30	OM_2-23-2010_11-19-05
246872008	953106	1	axc2	2/23/2010 12:05:22	OM_2-23-2010_11-19-05
246881001	953106	1	axc2	2/23/2010 12:06:14	OM_2-23-2010_11-19-05
246881002	953106	1	axc2	2/23/2010 12:07:07	OM_2-23-2010_11-19-05
246881003	953106	1	axc2	2/23/2010 12:08:01	OM_2-23-2010_11-19-05
246881004	953106	1	axc2	2/23/2010 12:08:55	OM_2-23-2010_11-19-05
246881005	953106	1	axc2	2/23/2010 12:09:49	OM_2-23-2010_11-19-05
246881006	953106	1	axc2	2/23/2010 12:10:43	OM_2-23-2010_11-19-05
246881007	953106	1	axc2	2/23/2010 12:11:37	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 12:12:29	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 12:14:20	OM_2-23-2010_11-19-05
246881008	953106	1	axc2	2/23/2010 12:16:10	OM_2-23-2010_11-19-05
246881009	953106	1	axc2	2/23/2010 12:17:03	OM_2-23-2010_11-19-05
246881010	953106	1	axc2	2/23/2010 12:17:56	OM_2-23-2010_11-19-05
246881011	953106	1	axc2	2/23/2010 12:18:49	OM_2-23-2010_11-19-05
1202046152	954516	1	axc2	2/23/2010 12:19:42	OM_2-23-2010_11-19-05
1202046158	954519	1	axc2	2/23/2010 12:20:35	OM_2-23-2010_11-19-05
1202046165	954519	25	axc2	2/23/2010 12:21:28	OM_2-23-2010_11-19-05
247084001	954519	1	axc2	2/23/2010 12:22:20	OM_2-23-2010_11-19-05

247084002	954519	1	axc2	2/23/2010	12:23:13	OM_2-23-2010_11-19-05
247126001	954519	1	axc2	2/23/2010	12:24:06	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:24:58	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:26:48	OM_2-23-2010_11-19-05
247126002	954519	1	axc2	2/23/2010	12:28:37	OM_2-23-2010_11-19-05
247126003	954519	1	axc2	2/23/2010	12:29:32	OM_2-23-2010_11-19-05
247136001	954519	1	axc2	2/23/2010	12:30:26	OM_2-23-2010_11-19-05
247136002	954519	1	axc2	2/23/2010	12:31:21	OM_2-23-2010_11-19-05
247141001	954519	1	axc2	2/23/2010	12:32:16	OM_2-23-2010_11-19-05
247141002	954519	1	axc2	2/23/2010	12:33:09	OM_2-23-2010_11-19-05
247141003	954519	1	axc2	2/23/2010	12:34:03	OM_2-23-2010_11-19-05
247186001	954519	1	axc2	2/23/2010	12:34:58	OM_2-23-2010_11-19-05
1202046159	954519	1	axc2	2/23/2010	12:35:51	OM_2-23-2010_11-19-05
1202046161	954519	1	axc2	2/23/2010	12:36:44	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:37:37	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:38:31	OM_2-23-2010_11-19-05
1202046163	954519	1	axc2	2/23/2010	12:39:24	OM_2-23-2010_11-19-05
247186002	954519	1	axc2	2/23/2010	12:40:17	OM_2-23-2010_11-19-05
1202046160	954519	1	axc2	2/23/2010	12:41:10	OM_2-23-2010_11-19-05
1202046162	954519	1	axc2	2/23/2010	12:42:03	OM_2-23-2010_11-19-05
1202046164	954519	1	axc2	2/23/2010	12:42:55	OM_2-23-2010_11-19-05
247186003	954519	1	axc2	2/23/2010	12:43:49	OM_2-23-2010_11-19-05
247186004	954519	1	axc2	2/23/2010	12:44:43	OM_2-23-2010_11-19-05
247186005	954519	1	axc2	2/23/2010	12:45:38	OM_2-23-2010_11-19-05
247186006	954519	1	axc2	2/23/2010	12:46:32	OM_2-23-2010_11-19-05
247186007	954519	1	axc2	2/23/2010	12:47:26	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:48:19	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:49:13	OM_2-23-2010_11-19-05
247186008	954519	1	axc2	2/23/2010	12:50:07	OM_2-23-2010_11-19-05
247186009	954519	1	axc2	2/23/2010	12:51:01	OM_2-23-2010_11-19-05
247186010	954519	1	axc2	2/23/2010	12:51:56	OM_2-23-2010_11-19-05
1202046185	954529	1	axc2	2/23/2010	12:52:50	OM_2-23-2010_11-19-05
1202046192	954529	1	axc2	2/23/2010	12:53:43	OM_2-23-2010_11-19-05
246983002	954529	1	axc2	2/23/2010	12:54:37	OM_2-23-2010_11-19-05
247036005	954529	1	axc2	2/23/2010	12:55:30	OM_2-23-2010_11-19-05
1202046186	954529	1	axc2	2/23/2010	12:56:23	OM_2-23-2010_11-19-05
1202046188	954529	1	axc2	2/23/2010	12:57:17	OM_2-23-2010_11-19-05
1202046190	954529	1	axc2	2/23/2010	12:58:09	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:59:01	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:59:56	OM_2-23-2010_11-19-05
247039001	954529	1	axc2	2/23/2010	13:00:48	OM_2-23-2010_11-19-05
247039002	954529	1	axc2	2/23/2010	13:01:43	OM_2-23-2010_11-19-05
247039003	954529	1	axc2	2/23/2010	13:02:39	OM_2-23-2010_11-19-05
247039004	954529	1	axc2	2/23/2010	13:03:33	OM_2-23-2010_11-19-05
247092001	954529	1	axc2	2/23/2010	13:04:27	OM_2-23-2010_11-19-05
247098001	954529	1	axc2	2/23/2010	13:05:21	OM_2-23-2010_11-19-05
247098002	954529	1	axc2	2/23/2010	13:06:15	OM_2-23-2010_11-19-05
247098003	954529	1	axc2	2/23/2010	13:07:10	OM_2-23-2010_11-19-05
247098004	954529	1	axc2	2/23/2010	13:08:04	OM_2-23-2010_11-19-05
247109001	954529	1	axc2	2/23/2010	13:08:58	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:09:50	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:10:44	OM_2-23-2010_11-19-05
247109002	954529	1	axc2	2/23/2010	13:11:38	OM_2-23-2010_11-19-05
1202046187	954529	1	axc2	2/23/2010	13:12:31	OM_2-23-2010_11-19-05
1202046189	954529	1	axc2	2/23/2010	13:13:25	OM_2-23-2010_11-19-05
1202046191	954529	1	axc2	2/23/2010	13:14:18	OM_2-23-2010_11-19-05
247127001	954529	1	axc2	2/23/2010	13:15:11	OM_2-23-2010_11-19-05
247139001	954529	1	axc2	2/23/2010	13:16:04	OM_2-23-2010_11-19-05
247179001	954529	1	axc2	2/23/2010	13:16:59	OM_2-23-2010_11-19-05
247182001	954529	1	axc2	2/23/2010	13:17:54	OM_2-23-2010_11-19-05

247183001	954529	1	axc2	2/23/2010	13:18:48	OM_2-23-2010_11-19-05
247192001	954529	1	axc2	2/23/2010	13:19:43	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:20:35	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:22:26	OM_2-23-2010_11-19-05
1202049704	955981	1	axc2	2/23/2010	13:24:16	OM_2-23-2010_11-19-05
1202049711	955981	1	axc2	2/23/2010	13:25:10	OM_2-23-2010_11-19-05
246941002	955981	1	axc2	2/23/2010	13:26:05	OM_2-23-2010_11-19-05
1202049705	955981	1	axc2	2/23/2010	13:26:59	OM_2-23-2010_11-19-05
1202049707	955981	1	axc2	2/23/2010	13:27:53	OM_2-23-2010_11-19-05
1202049709	955981	1	axc2	2/23/2010	13:28:47	OM_2-23-2010_11-19-05
247203001	955981	1	axc2	2/23/2010	13:29:41	OM_2-23-2010_11-19-05
1202049706	955981	1	axc2	2/23/2010	13:30:34	OM_2-23-2010_11-19-05
1202049708	955981	1	axc2	2/23/2010	13:31:28	OM_2-23-2010_11-19-05
1202049710	955981	1	axc2	2/23/2010	13:32:21	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:33:13	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:35:03	OM_2-23-2010_11-19-05
247204001	955981	1	axc2	2/23/2010	13:36:52	OM_2-23-2010_11-19-05
247244001	955981	1	axc2	2/23/2010	13:37:47	OM_2-23-2010_11-19-05
247250001	955981	1	axc2	2/23/2010	13:38:42	OM_2-23-2010_11-19-05
247250002	955981	1	axc2	2/23/2010	13:39:37	OM_2-23-2010_11-19-05
247256001	955981	1	axc2	2/23/2010	13:40:32	OM_2-23-2010_11-19-05
247256002	955981	1	axc2	2/23/2010	13:41:27	OM_2-23-2010_11-19-05
247273001	955981	1	axc2	2/23/2010	13:42:22	OM_2-23-2010_11-19-05
247322001	955981	1	axc2	2/23/2010	13:43:15	OM_2-23-2010_11-19-05
247322002	955981	1	axc2	2/23/2010	13:44:09	OM_2-23-2010_11-19-05
247335001	955981	1	axc2	2/23/2010	13:45:04	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:45:56	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:47:47	OM_2-23-2010_11-19-05
247339001	955981	1	axc2	2/23/2010	13:49:37	OM_2-23-2010_11-19-05
247339002	955981	1	axc2	2/23/2010	13:50:31	OM_2-23-2010_11-19-05
247350001	955981	1	axc2	2/23/2010	13:51:25	OM_2-23-2010_11-19-05
247434001	955981	1	axc2	2/23/2010	13:52:18	OM_2-23-2010_11-19-05
247434002	955981	1	axc2	2/23/2010	13:53:12	OM_2-23-2010_11-19-05
247559001	955981	1	axc2	2/23/2010	13:54:05	OM_2-23-2010_11-19-05
247560001	955981	1	axc2	2/23/2010	13:55:00	OM_2-23-2010_11-19-05
247567001	955981	1	axc2	2/23/2010	13:55:56	OM_2-23-2010_11-19-05
247273001	955981	2	axc2	2/23/2010	13:56:50	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:57:43	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:59:33	OM_2-23-2010_11-19-05

Author: axc2

Date : 2/23/2010

Original Run Filename: OM_2-23-2010_11-19-05.OMN created 2/23/2010 11:19:05
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-23-2010_11-19-05.OMN last modified 2/23/2010 14:00:39
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100223-03	1	S3	103	4.91	2/23/2010@11:22:28			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100223-08	1	S7	-1.61	0.0215	2/23/2010@11:24:18			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247108005[954512]	1	41	-2.38	-0.0147	2/23/2010@11:26:07			
247195001	1	42	-1.98	0.00432	2/23/2010@11:26:59			
247195002	1	43	-1.72	0.0166	2/23/2010@11:27:51			
247195003	1	44	-1.17	0.0424	2/23/2010@11:28:44			
247195004	1	45	-0.745	0.0621	2/23/2010@11:29:35			
247195005	1	46	-1.28	0.0369	2/23/2010@11:30:30			
247195006	1	47	-1.56	0.0240	2/23/2010@11:31:24			
247195007	1	48	-1.45	0.0293	2/23/2010@11:32:17			
247195008	1	49	-3.33	-0.0592	2/23/2010@11:33:11			
247195009	1	50	-1.19	0.0412	2/23/2010@11:34:05			
WCN100223-03	1	S3	102	4.89	2/23/2010@11:34:57			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.39	0.0321	2/23/2010@11:36:48			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.39 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.39 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247195010	1	51	-0.780	0.0605	2/23/2010@11:38:37			
247195011	1	52	-1.91	0.00734	2/23/2010@11:39:30			
247195012	1	53	-1.44	0.0298	2/23/2010@11:40:23			
247195013	1	54	-1.29	0.0368	2/23/2010@11:41:16			
247195014	1	55	-1.40	0.0315	2/23/2010@11:42:09			

247195015	1	56	-1.32	0.0351	2/23/2010@11:43:02		
1202042913|953106|MB	1	57	-1.34	0.0343	2/23/2010@11:43:55		
1202042920|LCS	1	58	20.7	1.07	2/23/2010@11:44:47	25.00	
246870010	1	59	-1.12	0.0447	2/23/2010@11:45:39		
1202042914|DUP	1	60	-1.41	0.0309	2/23/2010@11:46:31		
WCN100223-03	1	S3	103	4.94	2/23/2010@11:47:23		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 3.4 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 3.4 < 10.0							
Message CCV Passed							
Action Continue							
WCN100223-08	1	S7	-1.29	0.0368	2/23/2010@11:49:13		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.29 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.29 > -5.00							
Message CCB Passed							
Action Continue							
1202042916|MS	1	61	100	4.81	2/23/2010@11:51:03		
1202042918|MSD	1	62	99.6	4.76	2/23/2010@11:51:57		
246872001	1	63	-0.922	0.0539	2/23/2010@11:52:52		
1202042915|DUP	1	64	-0.752	0.0618	2/23/2010@11:53:45		
1202042917|MS	1	65	87.7	4.21	2/23/2010@11:54:39		
1202042919|MSD	1	66	97.7	4.67	2/23/2010@11:55:33		
246872002	1	67	-0.703	0.0641	2/23/2010@11:56:26		
246872003	1	68	-0.152	0.0899	2/23/2010@11:57:19		
246872004	1	69	-2.08	-2.27e-4	2/23/2010@11:58:12		
246872005	1	70	-0.139	0.0905	2/23/2010@11:59:05		
WCN100223-03	1	S3	104	4.98	2/23/2010@11:59:57		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 4.3 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 4.3 < 10.0							
Message CCV Passed							
Action Continue							
WCN100223-08	1	S7	-1.19	0.0412	2/23/2010@12:01:48		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.19 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.19 > -5.00							
Message CCB Passed							
Action Continue							
246872006	1	71	-1.15	0.0433	2/23/2010@12:03:37		
246872007	1	72	-1.05	0.0479	2/23/2010@12:04:30		
246872008	1	73	0.643	0.127	2/23/2010@12:05:22		
246881001	1	74	-2.08	-1.94e-4	2/23/2010@12:06:14		
246881002	1	75	-0.602	0.0689	2/23/2010@12:07:07		
246881003	1	76	-0.887	0.0555	2/23/2010@12:08:01		
246881004	1	77	-0.0611	0.0942	2/23/2010@12:08:55		
246881005	1	78	0.768	0.133	2/23/2010@12:09:49		
246881006	1	79	-0.774	0.0608	2/23/2010@12:10:43		
246881007	1	80	-0.623	0.0678	2/23/2010@12:11:37		
WCN100223-03	1	S3	105	5.00	2/23/2010@12:12:29		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				
WCN100223-08	1	S7		-1.05	0.0478	2/23/2010@12:14:20		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.05 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.05 > -5.00				
			Message	CCB Passed				
			Action	Continue				
246881008	1	81		-0.812	0.0590	2/23/2010@12:16:10		
246881009	1	82		-0.213	0.0871	2/23/2010@12:17:03		
246881010	1	83		1.65	0.174	2/23/2010@12:17:56		
246881011	1	84		-1.44	0.0294	2/23/2010@12:18:49		
1202046152|954516|MSD	1	10		82.2	3.95	2/23/2010@12:19:42		
1202046158|954519|MB	1	85		-1.23	0.0392	2/23/2010@12:20:35		
1202046165|LCS	1	86		27.6	1.39	2/23/2010@12:21:28	25.00	
247084001	1	87		-0.732	0.0627	2/23/2010@12:22:20		
247084002	1	88		-1.03	0.0489	2/23/2010@12:23:13		
247126001	1	89		-1.40	0.0313	2/23/2010@12:24:06		
WCN100223-03	1	S3		105	5.02	2/23/2010@12:24:58		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	5.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	5.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100223-08	1	S7		-1.23	0.0392	2/23/2010@12:26:48		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.23 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.23 > -5.00				
			Message	CCB Passed				
			Action	Continue				
247126002	1	90		-1.37	0.0329	2/23/2010@12:28:37		
247126003	1	91		-0.806	0.0593	2/23/2010@12:29:32		
247136001	1	92		-0.846	0.0574	2/23/2010@12:30:26		
247136002	1	93		-1.49	0.0274	2/23/2010@12:31:21		
247141001	1	94		-1.44	0.0296	2/23/2010@12:32:16		
247141002	1	95		-1.10	0.0454	2/23/2010@12:33:09		
247141003	1	96		1.05	0.146	2/23/2010@12:34:03		
247186001	1	97		-1.11	0.0450	2/23/2010@12:34:58		
1202046159|DUP	1	98		-0.879	0.0558	2/23/2010@12:35:51		
1202046161|MS	1	99		99.4	4.76	2/23/2010@12:36:44		
WCN100223-03	1	S3		104	4.98	2/23/2010@12:37:37		CCV
			Known Conc:	0.00				
WCN100223-08	1	S7		-1.26	0.0382	2/23/2010@12:38:31		CCB
			Known Conc:	0.00				
1202046163|MSD	1	100		82.4	3.96	2/23/2010@12:39:24		
247186002	1	101		-0.608	0.0685	2/23/2010@12:40:17		
1202046160|DUP	1	102		-1.18	0.0415	2/23/2010@12:41:10		
1202046162|MS	1	103		99.3	4.75	2/23/2010@12:42:03		
1202046164|MSD	1	104		99.5	4.76	2/23/2010@12:42:55		
247186003	1	105		-0.780	0.0605	2/23/2010@12:43:49		
247186004	1	106		0.0465	0.0992	2/23/2010@12:44:43		

247186005	1	107	-0.959	0.0521	2/23/2010@12:45:38		
247186006	1	108	-0.485	0.0743	2/23/2010@12:46:32		
247186007	1	109	-1.06	0.0473	2/23/2010@12:47:26		
WCN100223-03	1	S3	103	4.95	2/23/2010@12:48:19		CCV
Known Conc:			0.00				
WCN100223-08	1	S7	-1.16	0.0425	2/23/2010@12:49:13		CCB
Known Conc:			0.00				
247186008	1	110	-1.30	0.0360	2/23/2010@12:50:07		
247186009	1	111	-0.542	0.0716	2/23/2010@12:51:01		
247186010	1	112	-0.994	0.0504	2/23/2010@12:51:56		
1202046185|954529|MB	1	113	-1.55	0.0242	2/23/2010@12:52:50		
1202046192|LCS	1	114	52.8	2.57	2/23/2010@12:53:43		
246983002	1	115	-1.39	0.0319	2/23/2010@12:54:37		
247036005	1	116	0.513	0.121	2/23/2010@12:55:30		
1202046186|DUP	1	117	-1.91	0.00766	2/23/2010@12:56:23		
1202046188|MS	1	118	93.0	4.45	2/23/2010@12:57:17		
1202046190|MSD	1	119	105	5.03	2/23/2010@12:58:09		
WCN100223-03	1	S3	104	4.96	2/23/2010@12:59:01		CCV
Known Conc:			0.00				
WCN100223-08	1	S7	-1.46	0.0288	2/23/2010@12:59:56		CCB
Known Conc:			0.00				
247039001	1	120	-1.15	0.0433	2/23/2010@13:00:48		
247039002	1	121	-1.35	0.0338	2/23/2010@13:01:43		
247039003	1	122	-1.24	0.0391	2/23/2010@13:02:39		
247039004	1	123	-1.49	0.0273	2/23/2010@13:03:33		
247092001	1	124	-2.07	2.59e-4	2/23/2010@13:04:27		
247098001	1	125	-2.08	-2.07e-4	2/23/2010@13:05:21		
247098002	1	126	-1.26	0.0378	2/23/2010@13:06:15		
247098003	1	127	-1.54	0.0247	2/23/2010@13:07:10		
247098004	1	128	-1.58	0.0230	2/23/2010@13:08:04		
247109001	1	129	-1.47	0.0281	2/23/2010@13:08:58		
WCN100223-03	1	S3	103	4.94	2/23/2010@13:09:50		CCV
Known Conc:			0.00				
WCN100223-08	1	S7	-0.806	0.0593	2/23/2010@13:10:44		CCB
Known Conc:			0.00				
247109002	1	130	-1.40	0.0315	2/23/2010@13:11:38		
1202046187|DUP	1	131	-1.64	0.0200	2/23/2010@13:12:31		
1202046189|MS	1	132	108	5.17	2/23/2010@13:13:25		
1202046191|MSD	1	133	86.4	4.14	2/23/2010@13:14:18		
247127001	1	134	-1.37	0.0327	2/23/2010@13:15:11		
247139001	1	135	-1.34	0.0342	2/23/2010@13:16:04		
247179001	1	136	-2.08	-2.07e-4	2/23/2010@13:16:59		
247182001	1	137	-1.43	0.0303	2/23/2010@13:17:54		
247183001	1	138	-1.38	0.0326	2/23/2010@13:18:48		
247192001	1	139	-1.93	0.00645	2/23/2010@13:19:43		
WCN100223-03	1	S3	104	4.98	2/23/2010@13:20:35		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.2 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.2 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100223-08	1	S7	-1.39	0.0321	2/23/2010@13:22:26		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.39 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.39 > -5.00				
Message			CCB Passed				
Action			Continue				
1202049704|955981|MB	1	140	-2.06	4.71e-4	2/23/2010@13:24:16		
1202049711|LCS	1	141	54.3	2.64	2/23/2010@13:25:10		
246941002	1	142	-1.47	0.0283	2/23/2010@13:26:05		

1202049705	DUP	1	143	-2.02	0.00224	2/23/2010@13:26:59		
1202049707	MS	1	144	108	5.14	2/23/2010@13:27:53		
1202049709	MSD	1	145	115	5.47	2/23/2010@13:28:47		
247203001		1	146	-1.26	0.0380	2/23/2010@13:29:41		
1202049706	DUP	1	147	-2.03	0.00182	2/23/2010@13:30:34		
1202049708	MS	1	148	109	5.22	2/23/2010@13:31:28		
1202049710	MSD	1	149	102	4.89	2/23/2010@13:32:21		
WCN100223-03		1	S3	104	4.99	2/23/2010@13:33:13		CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100223-08		1	S7	-1.25	0.0385	2/23/2010@13:35:03		CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.25 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.25 > -5.00					
Message			CCB Passed					
Action			Continue					
247204001		1	150	3.39	0.256	2/23/2010@13:36:52		
247244001		1	151	2.20	0.200	2/23/2010@13:37:47		
247250001		1	152	-1.65	0.0198	2/23/2010@13:38:42		
247250002		1	153	-1.43	0.0302	2/23/2010@13:39:37		
247256001		1	154	-1.39	0.0317	2/23/2010@13:40:32		
247256002		1	155	-1.28	0.0369	2/23/2010@13:41:27		
247273001		1	156	247	11.7	2/23/2010@13:42:22		
247322001		1	157	-1.24	0.0389	2/23/2010@13:43:15		
247322002		1	158	-1.40	0.0314	2/23/2010@13:44:09		
247335001		1	159	-1.39	0.0318	2/23/2010@13:45:04		
WCN100223-03		1	S3	105	5.01	2/23/2010@13:45:56		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					
WCN100223-08		1	S7	-1.55	0.0242	2/23/2010@13:47:47		CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.55 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.55 > -5.00					
Message			CCB Passed					
Action			Continue					
247339001		1	160	-1.25	0.0386	2/23/2010@13:49:37		
247339002		1	161	-2.07	1.64e-4	2/23/2010@13:50:31		
247350001		1	162	1.51	0.168	2/23/2010@13:51:25		
247434001		1	163	-1.33	0.0346	2/23/2010@13:52:18		
247434002		1	164	-0.955	0.0523	2/23/2010@13:53:12		
247559001		1	165	-1.30	0.0363	2/23/2010@13:54:05		
247560001		1	166	-1.67	0.0188	2/23/2010@13:55:00		
247567001		1	167	-1.26	0.0379	2/23/2010@13:55:56		
247273001		1	156	131	6.22	2/23/2010@13:56:50	2.00	
WCN100223-03		1	S3	105	5.02	2/23/2010@13:57:43		CCV
Known Conc:			100					

DQM Test: > + Percent Relative Difference						
Result:		5.1 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		5.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100223-08	1	S7	-1.21	0.0401	2/23/2010@13:59:33	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.21 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.21 > -5.00				
Message		CCB Passed				
Action		Continue				

Analyte Properties Table for OM_2-23-2010_11-19-05.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

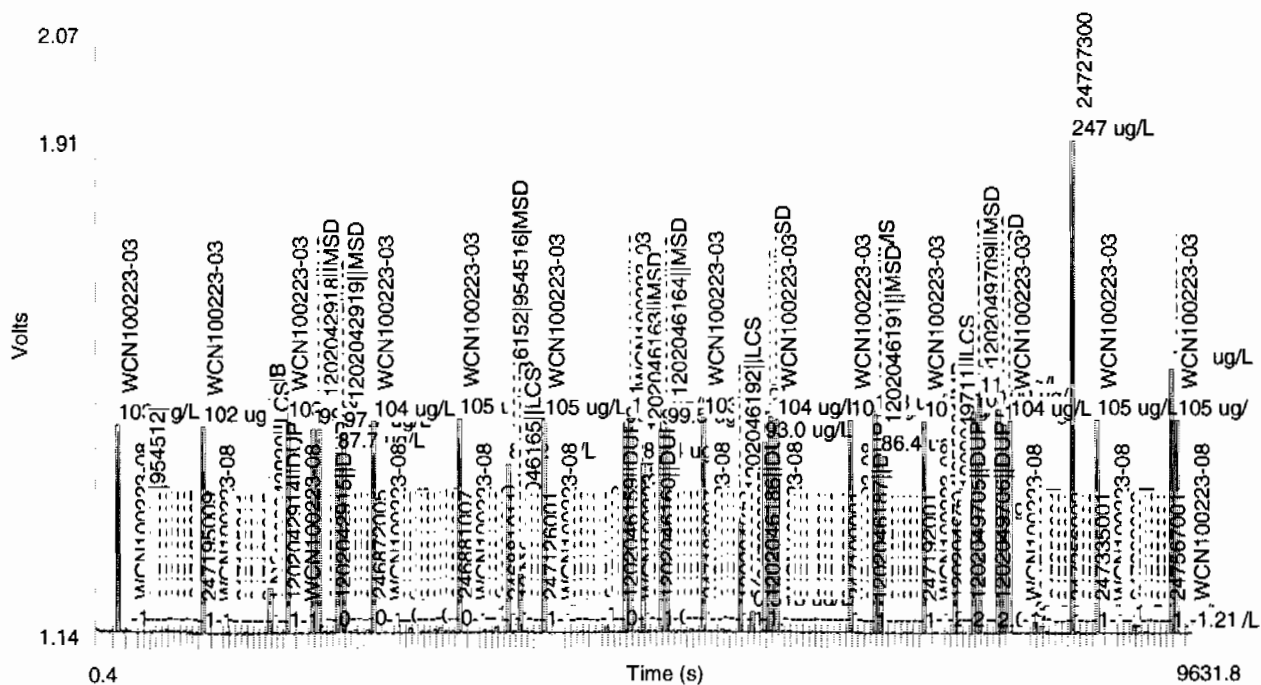


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.53	0.622	-0.6	2/23/2010	10:08:00
2	150	1	7.13	0.468	-0.1	2/23/2010	10:08:52
3	100	1	4.60	0.301	3.8	2/23/2010	10:09:44
4	50.0	1	2.53	0.167	-3.7	2/23/2010	10:10:37
5	10.0	1	0.617	0.0399	-8.7	2/23/2010	10:11:31
6	5.00	1	0.385	0.0238	-15.5	2/23/2010	10:12:24
7	0.00	1	0.0245	0.00128		2/23/2010	10:13:19

Figure 1: TCYANIDE

