

Monday, February 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

These Samples are on:
LANL Request Number: 10-1517
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010

TURNAROUND/REPORT DUE: 3/3/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLEID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020		1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	

Monday, February 01, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020	1	1	RE15-10-8124	W	1/28/2010	
			RE15-10-8112	R	1/28/2010	
			RE15-10-8113	R	1/28/2010	
			RE15-10-8114	R	1/28/2010	
			RE15-10-8115	R	1/28/2010	
			RE15-10-8116	R	1/28/2010	
			RE15-10-8117	R	1/28/2010	
			RE15-10-8118	R	1/28/2010	
			RE15-10-8119	R	1/28/2010	
			RE15-10-8122	R	1/28/2010	
SW-846:7470A	1	1	RE15-10-8124	W	1/28/2010	
			RE15-10-8124	W	1/28/2010	
			RE15-10-8112	R	1/28/2010	
			RE15-10-8113	R	1/28/2010	
			RE15-10-8114	R	1/28/2010	
			RE15-10-8115	R	1/28/2010	
			RE15-10-8116	R	1/28/2010	
			RE15-10-8117	R	1/28/2010	
			RE15-10-8118	R	1/28/2010	
			RE15-10-8119	R	1/28/2010	
SW-846:9012A	1	1	RE15-10-8122	R	1/28/2010	
			RE15-10-8112	R	1/28/2010	
			RE15-10-8113	R	1/28/2010	
			RE15-10-8114	R	1/28/2010	
			RE15-10-8115	R	1/28/2010	
			RE15-10-8116	R	1/28/2010	
			RE15-10-8117	R	1/28/2010	
			RE15-10-8118	R	1/28/2010	
			RE15-10-8119	R	1/28/2010	
			RE15-10-8118	R	1/28/2010	

Monday, February 01, 2010

Page 3 of 3
REQUEST NUMBER: 10-1517

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9012A						
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
		1	RE15-10-8124	W	1/28/2010	

Final Page of REQUEST NUMBER 10-1517

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1517C

LOS ALAMOS

REQUEST NUMBER: 10-1517

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

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
RE15-10-8122	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8112	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8113	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8124	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8124	1	POLY	SW-846:6850	Ice	W
RE15-10-8124	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8116	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8119	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8114	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8115	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8117	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8118	1	POLY	Met+U+CLO4+CN	Ice	R

Relinquished By:**Date****Time****Received By:****Date****Time**

2/1/10

3:00

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: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8119

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01-28-2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1220		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-004(d)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610791	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	2.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	5		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
					NA		NA

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

SAMPLE DESC: Light brown sandy silt' some white tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

4d-3

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 33$ dpm
 $\text{Bx} \leq 2140$ dpm

PID $\frac{\text{ambient}}{\text{reading}} \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) <i>R Saunders</i>	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) <i>[Signature]</i>	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8124

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/28/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1201	SUB-MEDIA:	OTHER	
PRS ID:	15-004(d)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610790	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

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

SAMPLE DESC: QC Sample of RE15-10-8117

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8114

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>	<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		<u>01/28/2010</u>	MEDIA:	<u>QBT3</u>
TIME COLLECTED (HH:MM)		<u>1045</u>	SUB-MEDIA:	<u>TUFF 1</u>
PRS ID: <u>15-004(d)</u>		<u>OK</u>	SAMPLE TECH CODE:	<u>HA</u>
LOCATION ID: <u>15-610789</u>		<u>↓</u>	FIELD QC TYPE:	<u>NA</u>
LOCATION TYPE: <u>GENERIC</u>		<u>↓</u>	FIELD PREP:	<u>NA</u>
TOP DEPTH: <u>0</u>		<u>0.0</u>	SAMPLE USAGE:	<u>INV</u>
BOTTOM DEPTH: <u>0</u>		<u>0.5</u>	SCREEN/PORT DESC:	<u>NA</u>
FIELD MATRIX: <u>R</u>		<u>S</u>	EXCAVATED: YES/ <input checked="" type="radio"/> NO/ <input type="radio"/> NA	
COMPOSITE TYPE: <u>NA</u>		COMPOSITE TIME INTERVAL: <u>NA</u>	WATER FLOWING: YES/ <input checked="" type="radio"/> NO/ <input type="radio"/> NA	
BOREHOLE: YES/ <input checked="" type="radio"/> NO/ <input type="radio"/> NA		BOREHOLE DECLINATION: <u>NA</u>	BOREHOLE DIRECTION: <u>NA</u>	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	<u>normal</u>	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	<u>Y</u>	
1	<u>↓</u>	Met+U+CLO4+C N	1 GAL POLY <u>1 liter 1/11/10 LC</u>	Ice	<u>Y</u>	
1	<u>↓</u>	NMED Explosives list	250 ML AMBER GLASS	Ice	<u>Y</u>	
1	<u>↓</u>	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	<u>Y</u>	

SAMPLE DESC:

Frozen brown sandy silt, some clay, roots, leavesSAMPLE COMMENTS: NALOCATION DESC: ^{RS 01-23-10} 4b 4d-4 in bushes

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 33$ dpm

PID

HE NEG

 $BY \leq 1624$ dpmambient 0.0
reading 0.0 ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) TL McFarlaneR Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) <u>R Saunders</u>	<u>1/28/10</u>	(Printed Name)	<u>1/28/10</u>
(Signature) <u>[Signature]</u>	<u>1350</u>	(Signature) <u>[Signature]</u>	<u>1350</u>
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8115

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1113		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-004(d)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610789			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0		2.0	SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0		3.0	SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R		S	EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAT POLY 1 liter 1/11/10 LC	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: light brown silty sand some rock

FD: RE15-10-8122

SAMPLE COMMENTS:

NA

LOCATION DESC: 4d-4 in bushes

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 16$ dpm

PID

HE-72m 1/28/10
ambient 0.6 ppm
reading 0.7BY ≤ 1658 dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8113

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1120		SUB-MEDIA:		TUFF 1	
PRS ID: 15-004(d)		ok		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610788		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		2.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		3.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 xc	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty sand, white tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

4d-2

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \pm 60$ dpm
 $\beta \pm 1962$ dpm

 PID ambient $\frac{0.0}{0.0}$ ppm
 reading

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R Saunders	1/28/10	(Printed Name) [Signature]	1/28/10
(Signature) R Saunders	1350	(Signature) [Signature]	1350
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8116

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA: OBT3		ALH	
TIME COLLECTED (HH:MM)		1137		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-004(d)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	15-610790	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC: NA			
FIELD MATRIX:	R	S		EXCAVATED: YES/NO NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO NA			
BOREHOLE: YES/NO NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: Brown silty sand some roots + rocks

SAMPLE COMMENTS:
NA

LOCATION DESC: 4d-1

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 33$ dpm

PID

HE NEG

ambient reading 0.0 ppm
0.0BY ≤ 1872 dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) <i>R Saunders</i>	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) <i>TLMcFarland</i> (Signature) <i>TLMcFarland</i>	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8112

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	OBT3		A115
TIME COLLECTED (HH:MM)		1115		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-004(d)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610788	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA	NO		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAE POLY 1 Liter 1/11/10 LC	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown frozen sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC: 4d-2

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 44$ dpm
 $\beta \leq 1990$ dpm

 PID ambient reading $\frac{0.0}{0.0}$ ppm
 HE neg

COLLECTED BY (PRINT)

JLMcFarland

REVIEWED BY (PRINT) Nicholas Gallegos

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) Jayung	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8117

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1147		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-004(d)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610790		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		2.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		3.0	SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R		S	EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE:	NA		NA	COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA
BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:
							NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAE POLY 1/11/10 RC 1 liter + 1/11/10 RC	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Light brown sandy silt, roots and rocks

FR: RE15-10-8124

SAMPLE COMMENTS:

NA

LOCATION DESC: 4d-1

FIELD SCREENING/MEASUREMENT RESULTS:

L ≤ 71 dpm

PID ambient 0.0 ppm
reading 0.0

BY ≤ 1976 dpm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R Saunders	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8118

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA: QBT3		A11h	
TIME COLLECTED (HH:MM)		1212		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-004(d)	ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID:	15-610791	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAE POLY liter 1/11/10 LC	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown frozen silty sand, some rocks + roots

SAMPLE COMMENTS:

NA

LOCATION DESC: 4d+3

FIELD SCREENING/MEASUREMENT RESULTS:

α = 38 dpm
 BX = 2140 dpm

PID ambient 0.0
 reading 0.0 ppm
 HE negative

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R Saunders (Signature) R. Saunders	Date/Time 1/29/10 1350	RECEIVED BY (Printed Name) (Signature)	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2501

EVENT NAME: 4th Qtr. FY09 - SWMU 15-004(d) - Threemile Canyon

SAMPLE ID: RE15-10-8122

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/28/2010		MEDIA:	QBT3		AIH
TIME COLLECTED (HH:MM)		1113		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-004(d)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK	15-610789		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		
TOP DEPTH:	0	2.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY liter 20 12/14/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-8115
Light brown silty sand some rock

SAMPLE COMMENTS:
NA

LOCATION DESC: 4d-4 in bushes

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 16$ dpm
BX ≤ 1658 dpm


PID $\frac{\text{ambient}}{\text{reading}} = \frac{0.6}{0.7}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarlane

RELINQUISHED BY (Printed Name) R Saunders (Signature) <i>R Saunders</i>	Date/Time 1/28/10 1350	RECEIVED BY (Printed Name) (Signature) <i>TLMcFarlane</i>	Date/Time 1/28/10 1350
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

DATA VALIDATION COVER SHEET	
5121-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	<div style="border: 1px solid black; padding: 5px;"> Records Use only  </div>

Section I.

REQUEST NUMBER: 10-1517 VALIDATION DATE: 03/10/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Jeanne Peterson 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. It should be noted that the parent samples for the matrix QCs were LANL samples from other RNs. In addition, the parent sample raw data were not included in the data package. No sample results were qualified.


Reviewed by: Mary Donovan

Level: I


Date: 03/11/10

VALIDATOR'S SIGNATURE: _____


DATE: 03/10/2010

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"/>	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 checked="" type="checkbox"/>	<input type="checkbox"/>	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8122

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.588	2.35	0.588	ug/kg	U	1	23-FEB-10 17:56	per0223041a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:56	per0223041a
14797-73-0	Perchlorate-101	.588	2.35	0.588	ug/kg	U	1	23-FEB-10 17:56	per0223041a
	Perchlorate-O(18)			5.22	ug/kg		1	23-FEB-10 17:56	per0223041a

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

JMP 03/10/2010

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: 950068
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8112
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1517
 GEL Sample ID: 245998002
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 67

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	.746	2.98	0.746	ug/kg	U	1	23-FEB-10 18:04	per0223042a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:04	per0223042a
14797-73-0	Perchlorate-101	.746	2.98	0.746	ug/kg	U	1	23-FEB-10 18:04	per0223042a
	Perchlorate-O(18)			6.51	ug/kg		1	23-FEB-10 18:04	per0223042a

[^] 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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8113

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998003

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

% Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.24	0.597	ug/kg	J	1	23-FEB-10 18:12	per0223043a
	Perchlorate Isotope Ratio			3.24			1	23-FEB-10 18:12	per0223043a
14797-73-0	Perchlorate-101	.561	2.24	0.590	ug/kg	J	1	23-FEB-10 18:12	per0223043a
	Perchlorate-O(18)			5.11	ug/kg		1	23-FEB-10 18:12	per0223043a

[^] 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

JMP 03/10/2010

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8116

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998004

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 71

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.7	2.8	0.700	ug/kg	U	1	23-FEB-10 18:20	per0223044a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:20	per0223044a
14797-73-0	Perchlorate-101	.7	2.8	0.700	ug/kg	U	1	23-FEB-10 18:20	per0223044a
	Perchlorate-Q(18)			6.11	ug/kg		1	23-FEB-10 18:20	per0223044a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8119

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.25	0.564	ug/kg	U	1	23-FEB-10 18:28	per0223045a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:28	per0223045a
14797-73-0	Perchlorate-101	.564	2.25	0.564	ug/kg	U	1	23-FEB-10 18:28	per0223045a
	Perchlorate-Q(18)			5.15	ug/kg		1	23-FEB-10 18:28	per0223045a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 950068
Extraction Type: Solid Prep
Client Sample No.: RE15-10-8114
Date Received: 02-FEB-10
GEL Job No (SDG): 10-1517
GEL Sample ID: 245998006
Date Filtered: 18-FEB-10
Injection Volume (uL): 20
%Solids: 56

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	.891	3.57	0.891	ug/kg	U	1	23-FEB-10 18:36	per0223046a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:36	per0223046a
14797-73-0	Perchlorate-101	.891	3.57	0.891	ug/kg	U	1	23-FEB-10 18:36	per0223046a
	Perchlorate-O(18)			8.26	ug/kg		1	23-FEB-10 18:36	per0223046a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8115

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998007

Date Filtered: 18-FEB-10

Injection Volume (mL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 18:44	per0223047a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:44	per0223047a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 18:44	per0223047a
	Perchlorate-O(18)			5.32	ug/kg		1	23-FEB-10 18:44	per0223047a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8117

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 92.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.16	0.695	ug/kg	J	1	23-FEB-10 19:17	per0223051a
	Perchlorate Isotope Ratio			3.1			1	23-FEB-10 19:17	per0223051a
14797-73-0	Perchlorate-101	.539	2.16	0.718	ug/kg	J	1	23-FEB-10 19:17	per0223051a
	Perchlorate-O(18)			5.00	ug/kg		1	23-FEB-10 19:17	per0223051a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8118

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 72

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.69	2.76	0.690	ug/kg	U	1	23-FEB-10 19:25	per0223052a
	Perchlorate Isotope Ratio						1	23-FEB-10 19:25	per0223052a
14797-73-0	Perchlorate-101	.69	2.76	0.690	ug/kg	U	1	23-FEB-10 19:25	per0223052a
	Perchlorate-O(18)			6.46	ug/kg		1	23-FEB-10 19:25	per0223052a

[^] 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: WATER

Extraction Batch ID: 250027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8124

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517-1

GEL Sample ID: 246000001

Date Filtered: 07-FEB-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	08-FEB-10 21:13	per0208068a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:13	per0208068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:13	per0208068a
	Perchlorate-O(18)			0.478	ug/L		1	08-FEB-10 21:13	per0208068a

[^] 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

JMP 03/10/2010

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

**Section I.**

REQUEST NUMBER: 10-1517 VALIDATION DATE: 03/10/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Jeanne Peterson ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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


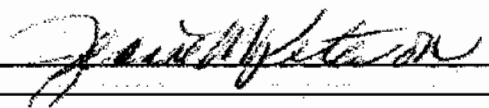
Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):


- The soil MS %R for Se was <10%. Thus, the associated sample results were qualified R₁₆. The soil MS %Rs for Al, Ba, Ca, Fe, Mg, Mn, K, and Ni were > the laboratory UAL. The parent sample results for Al, Ba, Ca, Fe, Mg, and Mn were >4X the spike amount and, thus, no sample data were qualified, based on professional judgment. The associated sample results for K and Ni were detects and, thus, were qualified J₊,16b. The soil MS %R for Sb was < the laboratory LAL but ≥10%. The Sb result for sample RE15-10-8114 was an ND and, thus, was qualified UJ_{16a}. The remaining associated sample results were detects and, thus, were qualified J₋,16a.
- Fe was detected in the MB associated with all soil samples. The associated sample results were detects >50X the MB concentration and, thus, were not qualified based on professional judgment.
- Tl was detected in one or more of the CCBs associated with aqueous sample -8124. The associated sample result was an ND and, thus, was not qualified.
- Ca, Cr, Fe, K, and Na were detected in the FR blank, sample -8124, which was associated with all soil samples. The Na results for all samples *except* samples -8113 and -8119 were detects ≤5X the FR blank concentration and, thus, were qualified U_{14d}. The remaining associated sample results were detects >5X the FR blank concentration and, thus, were not qualified.
- The duplicate RPDs for Co and Mn were >35%, and the parent sample and duplicate results were ≥5X the RL. The associated sample results were detects and, thus, were qualified J_{110a}.
- It should be noted that the parent samples for the mercury matrix QC were LANL samples from other RNs. No sample results were qualified.

Reviewed by: Mary Donovan


Level: 1

Date: 03/11/10


DATA VALIDATION COVER SHEET	
5118-1 Data Validation Cover Sheet	Records Use only  Los Alamos NATIONAL LABORATORY EST. 1945
VALIDATOR'S SIGNATURE: 	DATE: 03/10/2010
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$.	N/A	J, I4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input 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 Metals Analytical Data Validation Checklist	Records Use only 

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
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: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998001

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8122

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13600000	ug/Kg	*	7780	22900	22900	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-36-0	Antimony J-,16a	1360	ug/Kg	N	377	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-38-2	Arsenic	3.05	mg/kg		0.229	1.14	1.14	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-39-3	Barium	252000	ug/Kg		114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-41-7	Beryllium	1.42	mg/kg		0.0229	0.114	0.114	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-70-2	Calcium	5870000	ug/Kg		9150	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-47-3	Chromium	20500	ug/Kg		172	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-48-4	Cobalt J,110a	4480	ug/Kg	*	172	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-50-8	Copper	7570	ug/Kg		343	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-89-6	Iron	13700000	ug/Kg	*	9150	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-92-1	Lead	12200	ug/Kg	*	286	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-95-4	Magnesium	2660000	ug/Kg		9720	34300	34300	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-96-5	Mangancsc J,110a	246000	ug/Kg	*	229	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-97-6	Mercury	20.7	ug/kg		4.47	13.2	13.2	1	AV	JXL1	02/18/10 14:56	021810S1-7	951523
7440-02-0	Nickel J+,16b	11.8	mg/kg	N	0.114	0.457	0.457	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-09-7	Potassium J+,16b	1360000	ug/Kg	N	7320	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7782-49-2	Selenium R,16	1.14	mg/kg	UN	0.572	1.14	1.14	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-22-4	Silver	572	ug/Kg	U	114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-23-5	Sodium U,14d	112000	ug/Kg		8000	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-28-0	Thallium	0.303	mg/kg		0.0686	0.229	0.229	2	MS	RMJ	02/26/10 12:08	100225-2	948782
7440-61-1	Uranium	1.11	mg/kg		0.0151	0.0457	0.0457	2	MS	RMJ	02/27/10 07:55	100226-3	948782
7440-62-2	Vanadium	24700	ug/Kg	*	114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-66-6	Zinc	25300	ug/Kg	*	377	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.514	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.514	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.536	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998002

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8112

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 67

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9620000	ug/Kg	*	10100	29800	29800	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-36-0	Antimony J,16a	678	ug/Kg	JN	492	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-38-2	Arsenic	2.28	mg/kg		0.298	1.49	1.49	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-39-3	Barium	175000	ug/Kg		149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-41-7	Beryllium	1.26	mg/kg		0.0298	0.149	0.149	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-43-9	Cadmium	746	ug/Kg	U	149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-70-2	Calcium	2370000	ug/Kg		11900	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-47-3	Chromium	9600	ug/Kg		224	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-48-4	Cobalt J,110a	5070	ug/Kg	*	224	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-50-8	Copper	8460	ug/Kg		447	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-89-6	Iron	11900000	ug/Kg	*	11900	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-92-1	Lead	13600	ug/Kg	*	373	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-95-4	Magnesium	1840000	ug/Kg		12700	44700	44700	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-96-5	Manganese J,110a	337000	ug/Kg	*	298	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-97-6	Mercury	16	ug/kg	U	5.44	16	16	1	AV	JXL	02/18/10 14:58	021810S1-7	951523
7440-02-0	Nickel J+,16b	10.7	mg/kg	N	0.149	0.597	0.597	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-09-7	Potassium J+,16b	1800000	ug/Kg	N	9550	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7782-49-2	Selenium R,16	1.49	mg/kg	UN	0.746	1.49	1.49	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-22-4	Silver	746	ug/Kg	U	149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-23-5	Sodium U,14d	44700	ug/Kg		10400	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-28-0	Thallium	0.259	mg/kg	J	0.0895	0.298	0.298	2	MS	RMJ	02/26/10 12:38	100225-2	948782
7440-61-1	Uranium	10.4	mg/kg		0.0197	0.0597	0.0597	2	MS	RMJ	02/27/10 08:10	100226-3	948782
7440-62-2	Vanadium	24500	ug/Kg	*	149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-66-6	Zinc	25300	ug/Kg	*	492	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.5	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.5	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.559	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998003

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8113

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17200000	ug/Kg	*	7470	22000	22000	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-36-0	Antimony J-,16a	560	ug/Kg	JN	363	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-38-2	Arsenic	1.84	mg/kg		0.223	1.12	1.12	2	MS	RMJ	02/27/10 10:52	100226-4	948782
7440-39-3	Barium	237000	ug/Kg		110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-41-7	Beryllium	1.23	mg/kg		0.0223	0.112	0.112	2	MS	RMJ	02/27/10 10:52	100226-4	948782
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-70-2	Calcium	3910000	ug/Kg		8790	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-47-3	Chromium	12800	ug/Kg		165	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-48-4	Cobalt J,110a	5090	ug/Kg	*	165	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-50-8	Copper	6630	ug/Kg		330	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-89-6	Iron	14900000	ug/Kg	*	8790	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-92-1	Lead	13000	ug/Kg	*	275	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-95-4	Magnesium	2330000	ug/Kg		9340	33000	33000	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-96-5	Manganese J,110a	324000	ug/Kg	*	220	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-97-6	Mercury	13.4	ug/kg		4.43	13	13	1	AV	JXL	02/18/10 15:00	021810S1-7	951523
7440-02-0	Nickel J+,16b	8.87	mg/kg	N	0.112	0.447	0.447	2	MS	RMJ	02/27/10 10:52	100226-4	948782
7440-09-7	Potassium J+,16b	1760000	ug/Kg	N	7030	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7782-49-2	Selenium R,16	1.12	mg/kg	UN	0.558	1.12	1.12	2	MS	RMJ	02/28/10 02:33	100227-6	948782
7440-22-4	Silver	550	ug/Kg	U	110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-23-5	Sodium	121000	ug/Kg		7690	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-28-0	Thallium	0.217	mg/kg	J	0.067	0.223	0.223	2	MS	RMJ	02/26/10 12:44	100225-2	948782
7440-61-1	Uranium	1.03	mg/kg		0.0147	0.0447	0.0447	2	MS	RMJ	02/27/10 08:13	100226-3	948782
7440-62-2	Vanadium	29100	ug/Kg	*	110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-66-6	Zinc	27300	ug/Kg	*	363	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.51	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.502	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.516	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998004

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8116

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 71

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8570000	ug/Kg	*	8880	26100	26100	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-36-0	Antimony J-,16a	674	ug/Kg	JN	431	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-38-2	Arsenic	1.66	mg/kg		0.264	1.32	1.32	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-39-3	Barium	142000	ug/Kg		131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-41-7	Beryllium	1.04	mg/kg		0.0264	0.132	0.132	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-43-9	Cadmium	653	ug/Kg	U	131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-70-2	Calcium	1660000	ug/Kg		10400	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-47-3	Chromium	9650	ug/Kg		196	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-48-4	Cobalt J,110a	4160	ug/Kg	*	196	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-50-8	Copper	7660	ug/Kg		392	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-89-6	Iron	11600000	ug/Kg	*	10400	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-92-1	Lead	12900	ug/Kg	*	326	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-95-4	Magnesium	1580000	ug/Kg		11100	39200	39200	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-96-5	Manganese J,110a	325000	ug/Kg	*	261	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-97-6	Mercury	11	ug/kg	J	5.64	16.6	16.6	1	AV	JXL1	02/18/10 15:02	021810S1-7	951523
7440-02-0	Nickel J+,16b	8.14	mg/kg	N	0.132	0.528	0.528	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-09-7	Potassium J+,16b	1490000	ug/Kg	N	8360	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7782-49-2	Selenium R,16	1.32	mg/kg	UN	0.66	1.32	1.32	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-22-4	Silver	653	ug/Kg	U	131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-23-5	Sodium U,14d	55400	ug/Kg		9140	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-28-0	Thallium	0.230	mg/kg	J	0.0792	0.264	0.264	2	MS	RMJ	02/26/10 12:49	100225-2	948782
7440-61-1	Uranium	11.8	mg/kg		0.0174	0.0528	0.0528	2	MS	RMJ	02/27/10 08:23	100226-3	948782
7440-62-2	Vanadium	22000	ug/Kg	*	131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-66-6	Zinc	28500	ug/Kg	*	431	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.536	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.53	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.506	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998005

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8119

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16900000	ug/Kg	*	7630	22500	22500	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-36-0	Antimony J-.16a	1020	ug/Kg	JN	371	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-38-2	Arsenic	2.48	mg/kg		0.224	1.12	1.12	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-39-3	Barium	405000	ug/Kg		112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-41-7	Beryllium	1.53	mg/kg		0.0224	0.112	0.112	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-43-9	Cadmium	561	ug/Kg	U	112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-70-2	Calcium	12100000	ug/Kg		8980	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-47-3	Chromium	16200	ug/Kg		168	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-48-4	Cobalt J.110a	4620	ug/Kg	*	168	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-50-8	Copper	7380	ug/Kg		337	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-89-6	Iron	15100000	ug/Kg	*	8980	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-92-1	Lead	13800	ug/Kg	*	281	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-95-4	Magnesium	2910000	ug/Kg		9540	33700	33700	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-96-5	Manganese J.110a	269000	ug/Kg	*	225	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-97-6	Mercury	10.3	ug/kg	J	4.33	12.7	12.7	1	AV	JXL1	02/18/10 15:03	021810S1-7	951523
7440-02-0	Nickel J+.16b	11.2	mg/kg	N	0.112	0.448	0.448	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-09-7	Potassium J+.16b	1890000	ug/Kg	N	7190	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7782-49-2	Selenium R.16	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-22-4	Silver	561	ug/Kg	U	112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-23-5	Sodium	307000	ug/Kg		7860	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-28-0	Thallium	0.246	mg/kg		0.0672	0.224	0.224	2	MS	RMJ	02/26/10 13:07	100225-2	948782
7440-61-1	Uranium	0.898	mg/kg		0.0148	0.0448	0.0448	2	MS	RMJ	02/27/10 08:26	100226-3	948782
7440-62-2	Vanadium	31200	ug/Kg	*	112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-66-6	Zinc	27200	ug/Kg	*	371	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol	Units	Final wt/vol	Units	Date	Analyst
948776	948773	SW846 3050B	0.502	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.503	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.531	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998006

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8114

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 56

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8940000	ug/Kg	*	12000	35300	35300	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-36-0	Antimony UJ,16a	1770	ug/Kg	UN	582	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-38-2	Arsenic	3.36	mg/kg		0.356	1.78	1.78	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-39-3	Barium	229000	ug/Kg		177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-41-7	Beryllium	1.26	mg/kg		0.0356	0.178	0.178	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-43-9	Cadmium	883	ug/Kg	U	177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-70-2	Calcium	5520000	ug/Kg		14100	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-47-3	Chromium	10900	ug/Kg		265	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-48-4	Cobalt J,110a	5570	ug/Kg	*	265	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-50-8	Copper	29900	ug/Kg		530	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-89-6	Iron	11800000	ug/Kg	*	14100	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-92-1	Lead	35800	ug/Kg	*	441	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-95-4	Magnesium	2050000	ug/Kg		15000	53000	53000	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-96-5	Manganesec J,110a	797000	ug/Kg	*	353	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-97-6	Mercury	42.8	ug/kg		7.12	20.9	20.9	1	AV	JXL1	02/18/10 15:05	021810S1-7	951523
7440-02-0	Nickel J+,16b	10.6	mg/kg	N	0.178	0.712	0.712	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-09-7	Potassium J+,16b	2040000	ug/Kg	N	11300	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7782-49-2	Selenium R,16	1.78	mg/kg	UN	0.89	1.78	1.78	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-22-4	Silver	883	ug/Kg	U	177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-23-5	Sodium U,14d	50300	ug/Kg		12400	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-28-0	Thallium	0.226	mg/kg	J	0.107	0.356	0.356	2	MS	RMJ	02/26/10 13:13	100225-2	948782
7440-61-1	Uranium	23.8	mg/kg		0.0235	0.0712	0.0712	2	MS	RMJ	02/27/10 08:29	100226-3	948782
7440-62-2	Vanadium	23800	ug/Kg	*	177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-66-6	Zinc	43400	ug/Kg	*	582	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.505	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.501	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.511	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998007

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8115

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13700000	ug/Kg	*	7950	23400	23400	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-36-0	Antimony J-,16a	1510	ug/Kg	N	386	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-38-2	Arsenic	2.05	mg/kg		0.227	1.14	1.14	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-39-3	Barium	236000	ug/Kg		117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-41-7	Beryllium	1.25	mg/kg		0.0227	0.114	0.114	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-43-9	Cadmium	584	ug/Kg	U	117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-70-2	Calcium	5250000	ug/Kg		9350	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-47-3	Chromium	21300	ug/Kg		175	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-48-4	Cobalt J,110a	5830	ug/Kg	*	175	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-50-8	Copper	8040	ug/Kg		351	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-89-6	Iron	14700000	ug/Kg	*	9350	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-92-1	Lead	14600	ug/Kg	*	292	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-95-4	Magnesium	2790000	ug/Kg		9940	35100	35100	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-96-5	Manganese J,110a	359000	ug/Kg	*	234	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-97-6	Mercury	22.3	ug/kg		4.12	12.1	12.1	1	AV	JXL1	02/18/10 15:07	021810S1-7	951523
7440-02-0	Nickel J+,16b	10.9	mg/kg	N	0.114	0.454	0.454	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-09-7	Potassium J+,16b	1410000	ug/Kg	N	7480	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7782-49-2	Selenium R,16	1.14	mg/kg	UN	0.568	1.14	1.14	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-22-4	Silver	584	ug/Kg	U	117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-23-5	Sodium U,14d	114000	ug/Kg		8180	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-28-0	Thallium	0.249	mg/kg		0.0681	0.227	0.227	2	MS	RMJ	02/26/10 13:19	100225-2	948782
7440-61-1	Uranium	1.17	mg/kg		0.015	0.0454	0.0454	2	MS	RMJ	02/27/10 08:32	100226-3	948782
7440-62-2	Vanadium	28100	ug/Kg	*	117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-66-6	Zinc	26000	ug/Kg	*	386	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.502	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.517	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.581	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998008

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8117

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 92.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12500000	ug/Kg	*	7230	21300	21300	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-36-0	Antimony J-,16a	437	ug/Kg	JN	351	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-38-2	Arsenic	2.16	mg/kg		0.206	1.03	1.03	2	MS	RMJ	02/27/10 11:12	100226-4	948782
7440-39-3	Barium	208000	ug/Kg		106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-41-7	Beryllium	1.23	mg/kg		0.0206	0.103	0.103	2	MS	RMJ	02/27/10 11:12	100226-4	948782
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-70-2	Calcium	2490000	ug/Kg		8500	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-47-3	Chromium	12900	ug/Kg		159	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-48-4	Cobalt J,110a	6310	ug/Kg	*	159	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-50-8	Copper	9500	ug/Kg		319	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-89-6	Iron	14800000	ug/Kg	*	8500	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-92-1	Lead	18000	ug/Kg	*	266	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-95-4	Magnesium	2110000	ug/Kg		9030	31900	31900	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-96-5	Manganese J,110a	441000	ug/Kg	*	213	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-97-6	Mercury	14	ug/kg		4.05	11.9	11.9	1	AV	JXL	02/18/10 15:09	021810S1-7	951523
7440-02-0	Nickel J+,16b	9.87	mg/kg	N	0.103	0.413	0.413	2	MS	RMJ	02/27/10 11:12	100226-4	948782
7440-09-7	Potassium J+,16b	1940000	ug/Kg	N	6800	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7782-49-2	Selenium R,16	1.03	mg/kg	UN	0.516	1.03	1.03	2	MS	RMJ	02/28/10 02:47	100227-6	948782
7440-22-4	Silver	531	ug/Kg	U	106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-23-5	Sodium U,14d	67600	ug/Kg		7440	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-28-0	Thallium	0.242	mg/kg		0.0619	0.206	0.206	2	MS	RMJ	02/26/10 13:25	100225-2	948782
7440-61-1	Uranium	29.5	mg/kg		0.0273	0.0826	0.0826	4	MS	RMJ	02/28/10 01:53	100227-5	948782
7440-62-2	Vanadium	30800	ug/Kg	*	106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-66-6	Zinc	34500	ug/Kg	*	351	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.507	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.522	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.543	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998009

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8118

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 72

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11200000	ug/Kg	*	9160	26900	26900	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-36-0	Antimony J-,16a	556	ug/Kg	JN	445	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-38-2	Arsenic	1.62	mg/kg		0.263	1.31	1.31	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-39-3	Barium	189000	ug/Kg		135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-41-7	Beryllium	0.927	mg/kg		0.0263	0.131	0.131	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-43-9	Cadmium	674	ug/Kg	U	135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-70-2	Calcium	2380000	ug/Kg		10800	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-47-3	Chromium	17600	ug/Kg		202	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-48-4	Cobalt J,110a	6850	ug/Kg	*	202	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-50-8	Copper	14200	ug/Kg		404	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-89-6	Iron	14700000	ug/Kg	*	10800	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-92-1	Lead	16800	ug/Kg	*	337	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-95-4	Magnesium	2010000	ug/Kg		11500	40400	40400	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-96-5	Manganese J,110a	458000	ug/Kg	*	269	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-97-6	Mercury	11.4	ug/kg	J	5.32	15.6	15.6	1	AV	JXL1	02/18/10 15:15	021810S1-7	951523
7440-02-0	Nickel J+,16b	8.21	mg/kg	N	0.131	0.526	0.526	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-09-7	Potassium J+,16b	1990000	ug/Kg	N	8620	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7782-49-2	Selenium R,16	1.31	mg/kg	UN	0.657	1.31	1.31	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-22-4	Silver	674	ug/Kg	U	135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-23-5	Sodium U,14d	68200	ug/Kg		9430	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-28-0	Thallium	0.183	mg/kg	J	0.0788	0.263	0.263	2	MS	RMJ	02/26/10 13:31	100225-2	948782
7440-61-1	Uranium	18.9	mg/kg		0.0173	0.0526	0.0526	2	MS	RMJ	02/27/10 08:38	100226-3	948782
7440-62-2	Vanadium	30500	ug/Kg	*	135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-66-6	Zinc	30200	ug/Kg	*	445	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.512	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.525	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.529	g	30	mL	02/17/10	TXB3

JMP 03/10/2010

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246000001 **BASIS:** As Received **DATE COLLECTED** 28-JAN-10
CLIENT ID: RE15-10-8124 **LEVEL:** Low **DATE RECEIVED** 02-FEB-10
MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/25/10 05:09	100224-2	948740
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/25/10 15:37	100225-3	948740
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/25/10 05:09	100224-2	948740
7440-70-2	Calcium	59.5	ug/L	J	50	200	200	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-47-3	Chromium	1.31	ug/L	J	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 19:27	021110B-1	948737
7439-89-6	Iron	34.7	ug/L	J	30	100	100	1	P	HSC	02/11/10 19:27	021110B-1	948737
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	02/25/10 15:37	100225-3	948740
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 19:27	021110B-1	948737
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	02/25/10 15:37	100225-3	948740
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:07	020510W1-6	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-09-7	Potassium	181	ug/L		50	150	150	1	P	HSC	02/11/10 19:27	021110B-1	948737
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-23-5	Sodium	200	ug/L	J	100	300	300	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-28-0	Thallium	1	ug/L	UN	0.3	1	1	1	MS	BAJ	02/28/10 14:46	100228-5	948740
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	02/25/10 16:29	100225-4	948740
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 19:27	021110B-1	948737

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948737	948730	SW846 3005A	50	mL	50	mL	02/10/10	FGA
948740	948739	SW846 3005A	50	mL	50	mL	02/10/10	FGA
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3

JMP 03/10/2010

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1517 VALIDATION DATE: 03/10/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Jeanne Peterson ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

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):

- Total cyanide was detected in one or more of the CCBs associated with all soil samples. The total cyanide result for sample RE15-10-8114 was a detect $\leq 5X$ the greatest CCB concentration and, thus, was qualified U,I4b. The remaining associated sample results were NDs and, thus, were not qualified.
- It should be noted that the parent samples for the matrix QC were LANL samples from other RNs. No sample results were qualified.

Reviewed by: Mary Donovan Level: I Date: 03/11/10


VALIDATOR'S SIGNATURE:

A handwritten signature in black ink, appearing to read "Jeanne Peterson".


DATE: 03/10/2010

Form 5120-1, Revision 0.0


LOS ALAMOS
Environmental Restoration Project

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

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

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

Yes No N/A				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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8122
Sample ID: 245998001
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.9%

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	79.9	294	ug/kg	1	AXC2	02/11/10	1406	948618	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8112
Sample ID: 245998002
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 33%

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	86.0	316	ug/kg	1	AXC2	02/11/10	1407	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8113
Sample ID: 245998003
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 10.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>										
Cyanide, Total	U	ND	70.6	260	ug/kg	1	AXC2 02/11/10 1408	948618	1	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8116
Sample ID: 245998004
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 28.6%

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	89.8	330	ug/kg	1	AXC2	02/11/10	1409	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8119
Sample ID: 245998005
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 11.3%

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	73.7	271	ug/kg	1	AXC2	02/11/10	1410	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8114
Sample ID: 245998006
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 43.9%

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		407	U,lab	108	398	ug/kg	1	AXC2	02/11/10	1411	948618	1
----------------	--	-----	-------	-----	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8115
Sample ID: 245998007
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.8%

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	68.8	253	ug/kg	1	AXC2	02/11/10	1412	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8117
Sample ID: 245998008
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 7.2%

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	67.9	249	ug/kg	1	AXC2	02/11/10	1412	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8118
Sample ID: 245998009
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 27.5%

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	90.2	332	ug/kg	1	AXC2	02/11/10	1413	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 12, 2010

Client SDG: 10-1517-1

Client Sample ID: RE15-10-8124
Sample ID: 246000001
Matrix: W
Collect Date: 28-JAN-10 12:00
Receive Date: 02-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	02/08/10	1459	948940	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1517C

LOS ALAMOS

REQUEST NUMBER: 10-1517

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245998, 246000

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8122	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8112	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8113	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8124	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8124	1	POLY	SW-846:6850	Ice	W
RE15-10-8124	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8116	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8119	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8114	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8115	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8117	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8118	1	POLY	Met+U+CLO4+CN	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

2/1/10

3:00

Printed Name

Signature

Dionne Francis

Signature

2/2/10

0910

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, February 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1517

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010

TURNAROUND/REPORT DUE: 3/3/2010

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
	SW-846:6020	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8020	1	RE15-10-8124	W	1/28/2010	
	SW-846:8850	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
		1	RE15-10-8124	W	1/28/2010	
	SW-846:7470A	1	RE15-10-8124	W	1/28/2010	
	SW-846:7471A	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
	SW-846:9012A	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
		1	RE15-10-8124	W	1/28/2010	

Final Page of REQUEST NUMBER 10-1517



February 09, 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: 245998 246000
SDG: 10-1517

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 02, 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: 10-1517
Enclosures

Los Alamos National Laboratory (72733-001-09)

LANL ER Project

Work Order #: 245998 and 246000

SDG: 10-1517

Table of Contents

Case Narrative.....	1
Chain of Custody and Supporting Documentation	4
Data Review Qualifier Flag Definition Sheet	17
LC/MS/MS Perchlorate Analysis.....	19
Sample Data Summary	24
Quality Control Summary.....	34
Sample Data	59
Standards Data.....	78
Quality Control	97
Miscellaneous Data	102
LC/MS/MS Perchlorate Analysis.....	111
Sample Data Summary	116
Quaoity Control Summary	118
Sample Data	145
Standards Data.....	148
Quality Control	170
Miscellaneous Data	175
Metals Analysis	183
Case Narrative.....	184
Sample Data Summary	190
Quality Control Summary.....	200
Standards	271
Raw Data	283
Miscellaneous	696
Metals Analysis	746
Case Narrative.....	747
Sample Data Summary	752
Quality Control Summary.....	754
Standards	805
Raw Data	817
Miscellaneous	1128
General Chemistry Analysis	1175
Case Narrative.....	1176
Sample Data Summary	1181

Quality Control Summary.....	1192
Instrument QC Data Summary	1195
Cyanide, Total	1197
Miscellaneous	1213
General Chemistry Analysis	1215
Case Narrative	1216
Sample Data Summary	1221
Quality Control Summary.....	1224
Instrument QC Data Summary	1227
Cyanide, Total	1229

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245998 and 246000
SDG # : 10-1517**

February 09, 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 02, 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:

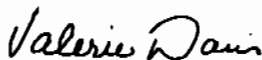
<u>Laboratory ID</u>	<u>Client ID</u>
245998001	RE15-10-8122
245998002	RE15-10-8112
245998003	RE15-10-8113
245998004	RE15-10-8116
245998005	RE15-10-8119
245998006	RE15-10-8114
245998007	RE15-10-8115
245998008	RE15-10-8117
245998009	RE15-10-8118
246000001	RE15-10-8124

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 09 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

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1517C

LOS ALAMOS

REQUEST NUMBER: 10-1517

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245998, 246000

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8122	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8112	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8113	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8124	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8124	1	POLY	SW-846:6850	Ice	W
RE15-10-8124	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8116	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8119	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8114	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8115	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8117	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8118	1	POLY	Met+U+CLO4+CN	Ice	R

Relinquished By:


Date

Time

Received By:

Date

Time



2/1/10

3:00

Dionne Francis



2/2/10

0910

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

Monday, February 01, 2010

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1517

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010

TURNAROUND/REPORT DUE: 3/3/2010

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
	SW-846:6020	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	

Monday, February 01, 2010

Page 2 of 3

REQUEST NUMBER: 10-1517

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8124	W	1/28/2010	
	SW-846:6850	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
		1	RE15-10-8124	W	1/28/2010	
	SW-846:7470A	1	RE15-10-8124	W	1/28/2010	
	SW-846:7471A	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	
		1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
	SW-846:9012A	1	RE15-10-8112	R	1/28/2010	
		1	RE15-10-8113	R	1/28/2010	
		1	RE15-10-8114	R	1/28/2010	
		1	RE15-10-8115	R	1/28/2010	
		1	RE15-10-8116	R	1/28/2010	
		1	RE15-10-8117	R	1/28/2010	
		1	RE15-10-8118	R	1/28/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE15-10-8119	R	1/28/2010	
		1	RE15-10-8122	R	1/28/2010	
		1	RE15-10-8124	W	1/28/2010	

Final Page of REQUEST NUMBER 10-1517



SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-1517		
Received By: Dionne Francis			Date Received: February 2, 2010		
Suspected Hazard Information		Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.	
COC/Samples marked as radioactive?			X	Maximum Counts Observed*: 80 CPM	
Classified Radioactive II by RSO?			X		
COC/Samples marked containing PCBs?			X		
Shipped as a DOT Hazardous?			X	Hazard Class Shipped: UN#:	
Samples identified as Foreign Soil?			X		

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within $0 \leq 6$ deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 0-5C 13-15,19C
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S

7209 7849 7978 0C 7209 7849 7886 2C 7209 7849 7967 3C 7209 7849 7739 19C

7209 7849 7772 1C 7209 7849 7901 2C 7209 7849 7945 4C

7209 7849 7934 1C 7209 7849 7853 2C 7209 7849 7810 5C

7209 7849 7831 1C 7209 7849 7875 2C 7209 7849 7897 5C

7209 7849 7783 1C 7209 7849 7956 2C 7209 7849 7728 13C

7209 7849 7864 1C 7209 7849 7794 2C 7209 7849 7706 13C

7209 7849 7923 1C 7209 7849 7820 2C 7209 7849 7717 14C

7209 7849 7761 1C 7209 7849 7809 2C 7209 7849 7750 15C

7209 7849 7842 1C 7209 7849 7912 3C 7209 7849 7740 15C

PM (or PMA) review: Initials

GRT

Date

2-3-10

TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

CMU: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGML0

NOTE: THIS DOCUMENT IS A COPY OF THE ORIGINAL AND NOT A REPRODUCTION



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 51.8 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

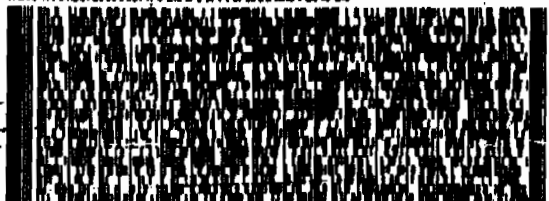
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00

NOTE: THIS DOCUMENT IS A COPY OF THE ORIGINAL AND NOT A REPRODUCTION



TRKH 7209 7849 7978
0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



Part # 150146-434 NAIT V3 09-05

2 of 2
MPSN 7209 7849 7772
0263

TUE - 02FEB A1
PRIORITY OVERNIGHT

Matr# 7209 7849 7761 0201

XX CHSA

29407
SC-US
CHS



Part # 150146-434 NAIT V3 04-05

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 50.8 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGML0

NOTE: THIS DOCUMENT IS A COPY OF THE ORIGINAL AND NOT A REPRODUCTION



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWT: 50.8 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

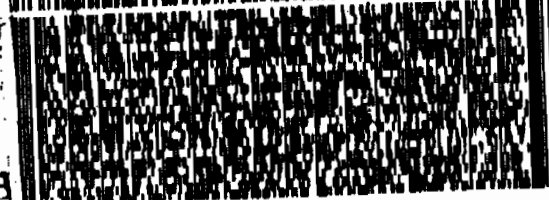
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00

NOTE: THIS DOCUMENT IS A COPY OF THE ORIGINAL AND NOT A REPRODUCTION



1 of 2
TRKH 7209 7849 7934
0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

1 of 2
TRKH 7209 7849 7831
0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 48.0 LB MAN
CRD: 0014176/CAFE2449

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 52.0 LB MAN
CRD: 0014176/CAFE2449

BILL SENDER

10 VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VRA00

10 VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGWKO



FedEx
Express



FedEx
Express

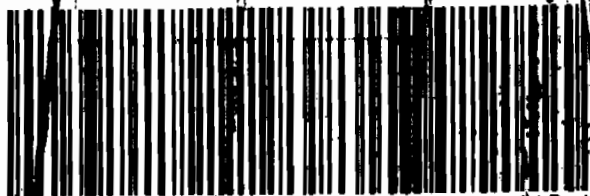


1 of 2
TRKH 7209 7849 7783
0201
NM MASTER NM

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



2 of 2
MPSH 7209 7849 7884
0263
MatrM 7209 7849 7853 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 61.0 LB MAN
CRD: 0014176/CAFE2449

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 53.0 LB MAN
CRD: 0014176/CAFE2449

BILL SENDER

10 VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGWLO

10 VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

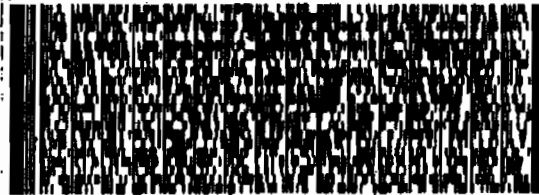
CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VRA00



FedEx
Express



FedEx
Express



2 of 2
MPSH 7209 7849 7923
0263
MatrM 7209 7849 7912 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

1 of 2
TRKH 7209 7849 7761
0201
NM MASTER NM

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 555-8171
REF: 6B010AMR1A015AGWKO

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 555-8171
REF: 6B010AMR1A015AGWKO



2 of 2 TUE - 02FEB A1
NPSH 0263 7209 7849 7842
MatrN 7209 7849 7831 0201

XX CHSA

29407
SC-US
CHS

2 of 2 TUE - 02FEB A1
NPSH 0263 7209 7849 7886
MatrN 7209 7849 7875 0201

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 555-8171
REF: 6B010AMR1A015AGWKO



2 of 2 TUE - 02FEB A1
NPSH 0263 7209 7849 7901
MatrN 7209 7849 7897 0201

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

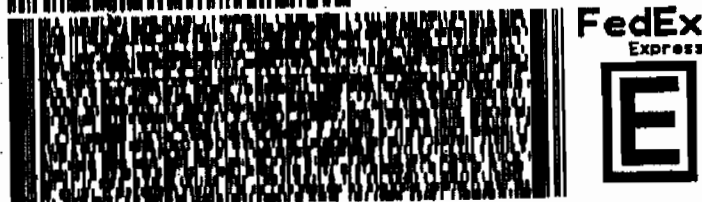
SHIP DATE: 01FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 555-8171
REF: 6B010AMR1A015AGWKO



1 of 2 TUE - 02FEB A1
TRKH 0201 7209 7849 7853
NN MASTER NN

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 865-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83

SHIP DATE: 01FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

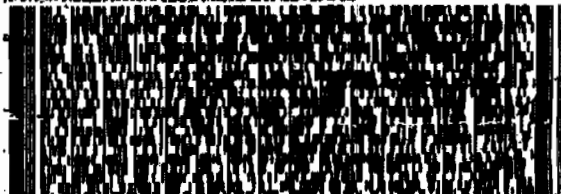
LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGMKO

2c



1 of 2
TRKH 7209 7849 7875
0201
MM MASTER MM

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 865-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83

SHIP DATE: 01FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A052VA00

2c



2 of 2
MPSH 7209 7849 7794
0263

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505) 865-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83

SHIP DATE: 01FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2449

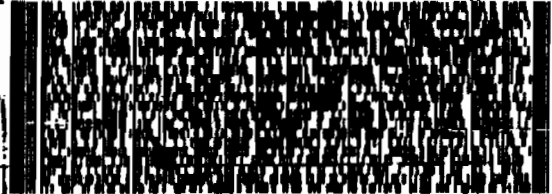
LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGML0

2c

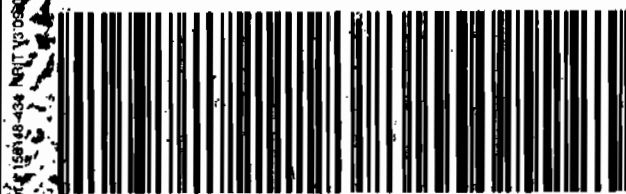


1 of 2
TRKH 7209 7849 7956
0201
MM MASTER MM

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 865-8968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83

SHIP DATE: 01FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A052VA00

2c



3 of 3
MPSH 7209 7849 7820
0263

TUE - 02FEB A1
PRIORITY OVERNIGHT

MatrM 7209 7849 7809 0201

29407
SC-US
CHS

XX CHSA

1400 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US
BILL SENDER
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A052VA00

2C



ORIGIN: ID: USAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
1400 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGML0

3C



1 of 3
TRKH 7209 7849 7809
TUE - 02FEB A1
TUE - 02 FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
XX CHSA
Emp# 133998 01FEB10 SAFA

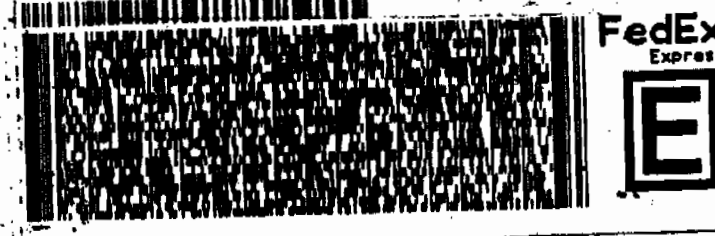
1 of 2
TRKH 7209 7849 7912
TUE - 02FEB A1
TUE - 02 FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
XX CHSA
Part # 156146-434 NRIT V3 09-09

ORIGIN ID: USAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
1400 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

ORIGIN ID: USAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
1400 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGML0

3C



VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGML0

40



2 of 2
MPS# 7209 7849 7967
TUE - 02FEB A1
TUE - 02 FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
XX CHSA
Matrn 7209 7849 7936 0201

2 of 2
MPS# 7209 7849 7945
TUE - 02FEB A1
TUE - 02 FEB A1
PRIORITY OVERNIGHT
29407
SC-US
CHS
X CHSA
Matrn 7209 7849 7934 0201

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VA00

5c

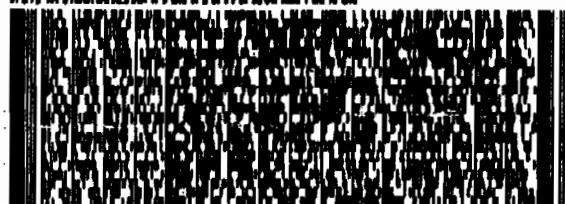
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGMKO

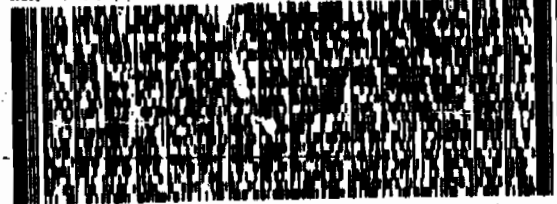
5°



FedEx
Express



JAN200911130223



FedEx
Express



JAN200911130223

2 of 3
MPS# 7209 7849 7810
0201

Matr-M 7209 7849 7809 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



1 of 2
TRKH 7209 7849 7897
0201

MM MASTER MM

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYDO

13c

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAG00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

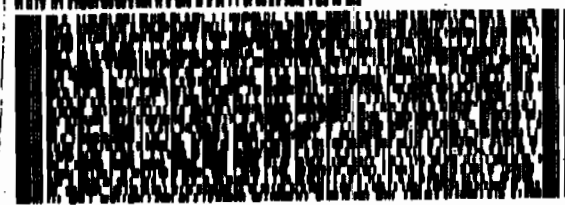
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A0515BYDO

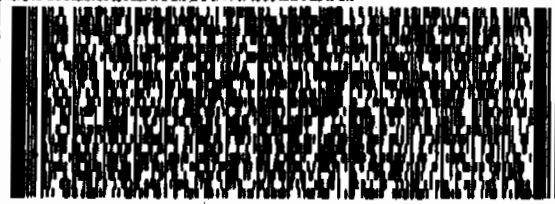
13c



FedEx
Express



JAN200911130223



FedEx
Express



JAN200911130223

1 of 2
TRKH 7209 7849 7728
0201

MM MASTER MM

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

2 of 3
MPS# 7209 7849 7706
0201

Matr-M 7209 7849 7891 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

14c

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

15c

FedEx
Express



FedEx
Express



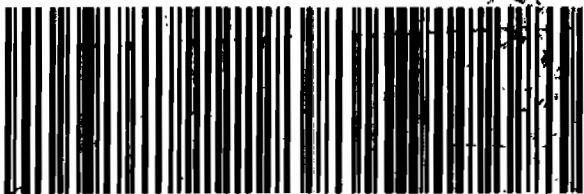
3 of 3
MPS# 7209 7849 7717
0263

Matr# 7209 7849 7891 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



2 of 2
MPS# 7209 7849 7750
0263

Matr# 7209 7849 7740 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



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

SHIP DATE: 01FEB10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

15c

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

SHIP DATE: 01FEB10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYDO

19c

FedEx
Express



FedEx
Express



1 of 2
TRKH 7209 7849 7740
0201
NM MASTER NM

TUE - 02FEB A1
PRIORITY OVERNIGHT

XX CHSA

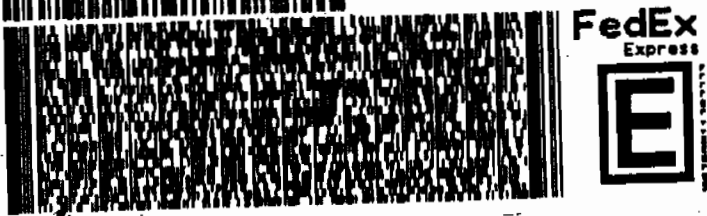
29407
SC-US
CHS

2 of 2
MPS# 7209 7849 7739
0263
Matr# 7209 7849 7728 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

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 10-1517**

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: 950071

Prep Batch Number: 950068

Sample Analysis

Sample ID	Client ID
245998001	RE15-10-8122
245998002	RE15-10-8112
245998003	RE15-10-8113
245998004	RE15-10-8116
245998005	RE15-10-8119
245998006	RE15-10-8114
245998007	RE15-10-8115
245998008	RE15-10-8117
245998009	RE15-10-8118
1202035664	Interference Check Sample (ICS)
1202035660	Method Blank (MB)
1202035661	Laboratory Control Sample (LCS)
1202035662	246055001(RE15-10-8170) Matrix Spike (MS)
1202035663	246055001(RE15-10-8170) Matrix Spike Duplicate (MSD)

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

10-1517-PERLCMS

Page 1 of 4

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 246055001 (RE15-10-8170) from SDG 10-1545 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

10-1517-PERLCMS

Page 2 of 4

Retention Time

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert R. Maier Date: 02/27/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8122

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.588	2.35	0.588	ug/kg	U	1	23-FEB-10 17:56	per0223041a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:56	per0223041a
14797-73-0	Perchlorate-101	.588	2.35	0.588	ug/kg	U	1	23-FEB-10 17:56	per0223041a
	Perchlorate-O(18)			5.22	ug/kg		1	23-FEB-10 17:56	per0223041a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8112

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998002

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 67

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.746	2.98	0.746	ug/kg	U	1	23-FEB-10 18:04	per0223042a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:04	per0223042a
14797-73-0	Perchlorate-101	.746	2.98	0.746	ug/kg	U	1	23-FEB-10 18:04	per0223042a
	Perchlorate-O(18)			6.51	ug/kg		1	23-FEB-10 18:04	per0223042a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-8113

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250068

Extraction Type: Solid Prep

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 24598003

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

% Solids: 89

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	.561	2.24	0.597	ug/kg	J	1	23-FEB-10 18:12	per0223043a
	Perchlorate Isotope Ratio			3.24			1	23-FEB-10 18:12	per0223043a
14797-73-0	Perchlorate-101	.561	2.24	0.590	ug/kg	J	1	23-FEB-10 18:12	per0223043a
	Perchlorate-O(18)			5.11	ug/kg		1	23-FEB-10 18:12	per0223043a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8116

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998004

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 71

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.7	2.8	0.700	ug/kg	U	1	23-FEB-10 18:20	per0223044a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:20	per0223044a
14797-73-0	Perchlorate-101	.7	2.8	0.700	ug/kg	U	1	23-FEB-10 18:20	per0223044a
	Perchlorate-O(18)			6.11	ug/kg		1	23-FEB-10 18:20	per0223044a

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

*Concentration =

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

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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8119

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.25	0.564	ug/kg	U	1	23-FEB-10 18:28	per0223045a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:28	per0223045a
14797-73-0	Perchlorate-101	.564	2.25	0.564	ug/kg	U	1	23-FEB-10 18:28	per0223045a
	Perchlorate-O(18)			5.15	ug/kg		1	23-FEB-10 18:28	per0223045a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8114

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998006

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 56

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.891	3.57	0.891	ug/kg	U	1	23-FEB-10 18:36	per0223046a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:36	per0223046a
14797-73-0	Perchlorate-101	.891	3.57	0.891	ug/kg	U	1	23-FEB-10 18:36	per0223046a
	Perchlorate-O(18)			8.26	ug/kg		1	23-FEB-10 18:36	per0223046a

[^] 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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 950068Extraction Type: Solid Prep

Client Sample No.

RE15-10-8115Date Received: 02-FEB-10GEL Job No (SDG): 10-1517GEL Sample ID: 245998007Date Filtered: 18-FEB-10Injection Volume (uL): 20%Solids: 85Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 18:44	per0223047a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:44	per0223047a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 18:44	per0223047a
	Perchlorate-O(18)			5.32	ug/kg		1	23-FEB-10 18:44	per0223047a

[^] 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 =

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

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8117

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 92.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.16	0.695	ug/kg	J	1	23-FEB-10 19:17	per0223051a
	Perchlorate Isotope Ratio			3.1			1	23-FEB-10 19:17	per0223051a
14797-73-0	Perchlorate-101	.539	2.16	0.718	ug/kg	J	1	23-FEB-10 19:17	per0223051a
	Perchlorate-O(18)			5.00	ug/kg		1	23-FEB-10 19:17	per0223051a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8118

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 72

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.69	2.76	0.690	ug/kg	U	1	23-FEB-10 19:25	per0223052a
	Perchlorate Isotope Ratio						1	23-FEB-10 19:25	per0223052a
14797-73-0	Perchlorate-101	.69	2.76	0.690	ug/kg	U	1	23-FEB-10 19:25	per0223052a
	Perchlorate-O(18)			6.46	ug/kg		1	23-FEB-10 19:25	per0223052a

[^] 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

P perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1517

Extract Batch Code: 950068

Date Filtered: 18-FEB-10

Matrix: SOIL

Sample ID: 1202035661

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.98	ug/kg	98.8		70 - 130
Perchlorate Isotope Ratio		3.1				-
Perchlorate-101	2.00	2.04	ug/kg	102		70 - 130
Perchlorate-O(18)		4.69	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): 10-1517

Extract Batch Code: 950068

Date Filtered: 18-FEB-10

Matrix: SOIL

Sample ID: 1202035664

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.15	ug/kg	108		70 - 130
Perchlorate Isotope Ratio		3.35				
Perchlorate-101	2.00	2.06	ug/kg	103		70 - 130
Perchlorate-O(18)		4.72	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

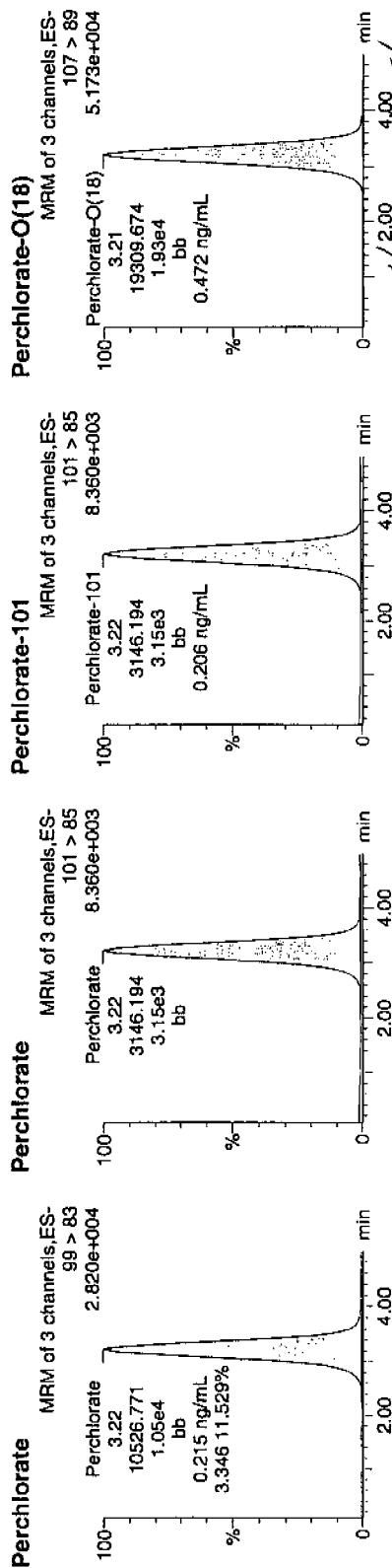
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223040a
Date: 23-Feb-2010
Time: 17:48:41
ID: 1202035664
Vial: 2:1,C

02-24-10

LANC | 950071 | 5020 Feb 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035664	Perchlorate	99 > 83	3.22	10526.771	10526.771	bb			0.2153	107.63	7.63	1420.2...	3.35
1202035664	Perchlorate-101	101 > 85	3.22	3146.194	3146.194	bb			0.2063	103.14	3.14	910.460	
1202035664	Perchlorate-O(18)	107 > 89	3.21	19309.674	19309.674	bb			0.4719	94.38	-5.62	1264.2...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 950068

GEL Job No (SDG): 10-1517

Date Extracted: 18-FEB-10

GEL MS/PS ID: 1202035662

Client ID: RE15-10-8170

GEL MSD/PSD ID: 1202035663

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.43	0.831	ug/kg	3.10	93.4		3.22	98.5		3.96		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.29			3.15			0			-
Perchlorate-101	2.43	0.836	ug/kg	3.02	89.9		3.28	101		8.42		30	75 - 125
Perchlorate-O(18)	0	5.52	ug/kg	5.61			5.61			.0629			-

^ 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): 10-1517

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	23-FEB-10	per0223001a	IPB001
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223001a	IPB001
Perchlorate	0.00	0	NA	23-FEB-10	per0223002a	IPB001
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223002a	IPB001

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

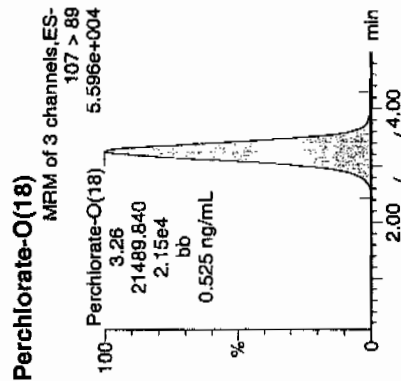
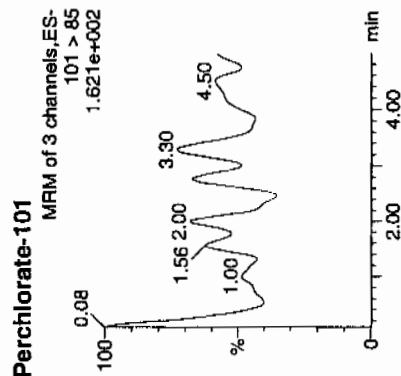
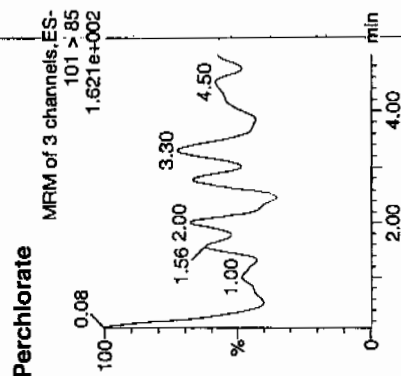
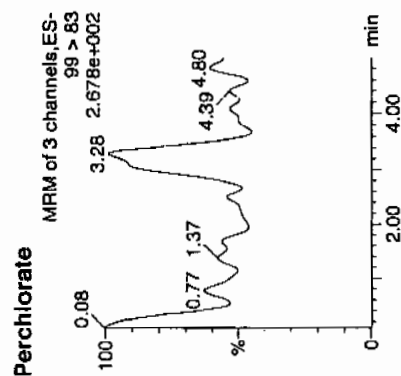
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022310a.mdb 24 Feb 2010 09:36:48
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022310a.cdb 24 Feb 2010 09:37:11

Name: per0223001a
Date: 23-Feb-2010
Time: 12:33:48
ID: IPB001
Vial: 1:1,A

024-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.26	21489.840	21489.840	bb			0.5252	105.04	5.04	7285.2...	

Quantify Sample Report MassLynx 4.0 SP4

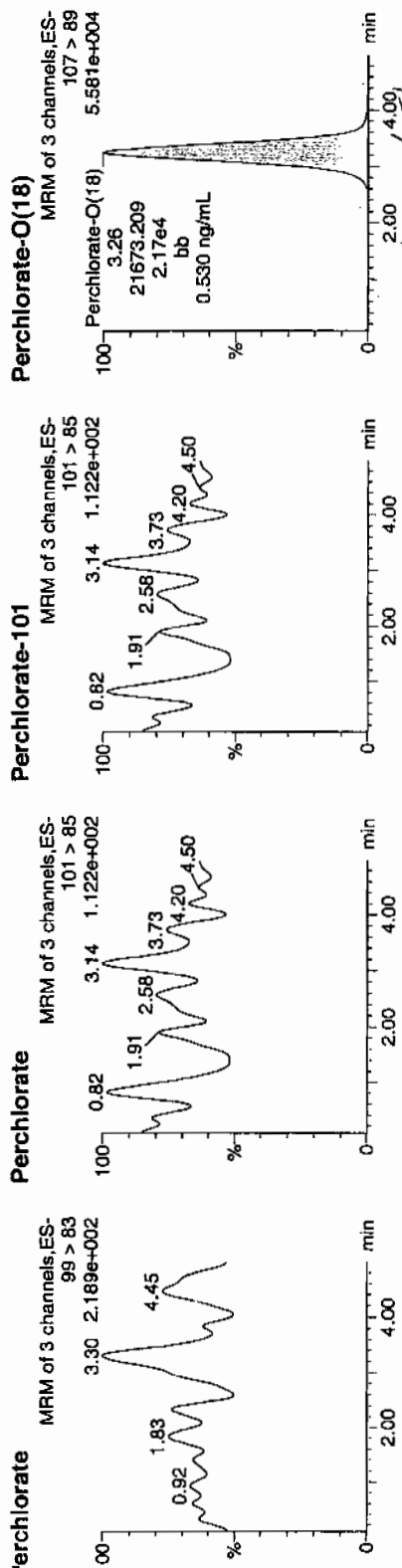
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Sample Name: Perchlorate
 Date Acquired: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Date Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223002a
 Date: 23-Feb-2010
 Time: 12:42:00
 Operator: JPB001
 File: 1:1,A

0224-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.26	21673.209	21673.209	bb			0.5297	105.93		5.93	1580.2...

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1517

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	23-FEB-10	per0223008a	IPB002
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223008a	IPB002
Perchlorate	0.00	0	NA	23-FEB-10	per0223010a	IPB003
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223010a	IPB003
Perchlorate	0.00	0	NA	23-FEB-10	per0223023a	IPB004
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223023a	IPB004
Perchlorate	0.00	0	NA	23-FEB-10	per0223036a	IPB005
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223036a	IPB005
Perchlorate	0.00	0	NA	23-FEB-10	per0223049a	IPB006
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223049a	IPB006
Perchlorate	0.00	0	NA	23-FEB-10	per0223062a	IPB007
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223062a	IPB007

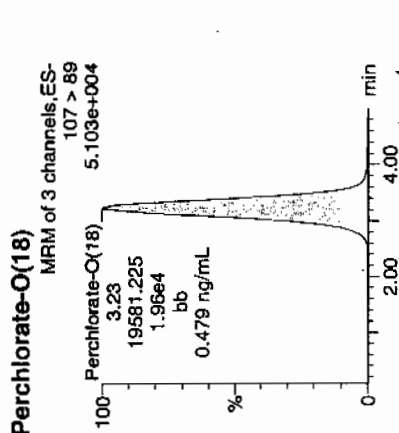
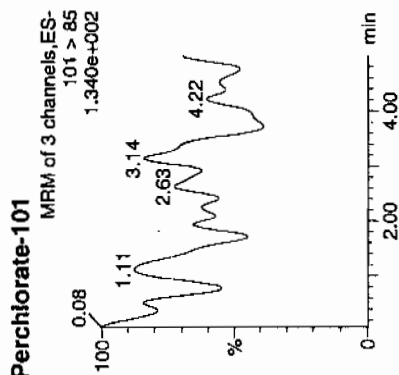
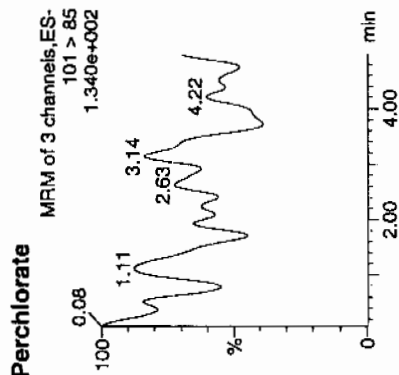
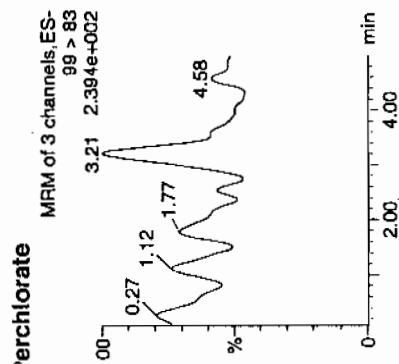
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223008a
Date: 23-Feb-2010
Time: 13:30:32
ID: IPB002
Label: 1:1,A

02-24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.23	19581.225	19581.225	bb			0.4785	95.71	-4.29	7325.9...	

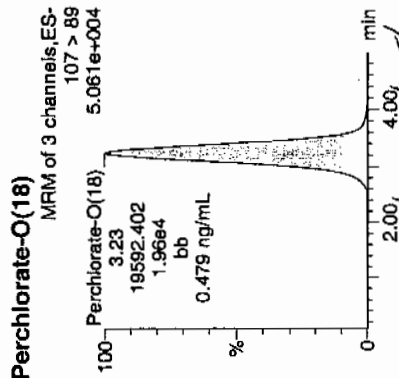
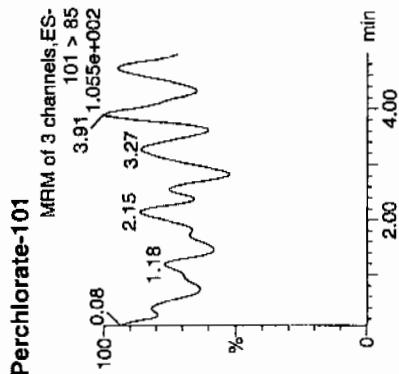
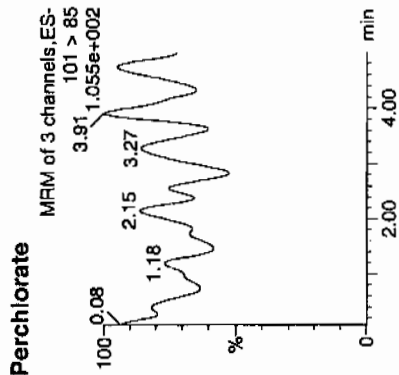
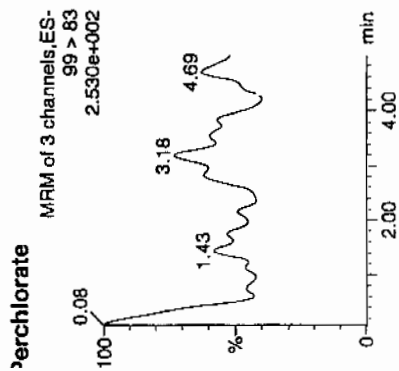
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223010a
Date: 23-Feb-2010
Time: 13:46:52
D: IPB003
/lat: 1:1,A

02-24-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83											0.00
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-O(18)	107 > 89	3.23	19592.402	19592.402	bb			0.4788	95.76	-4.24	4079.9...	

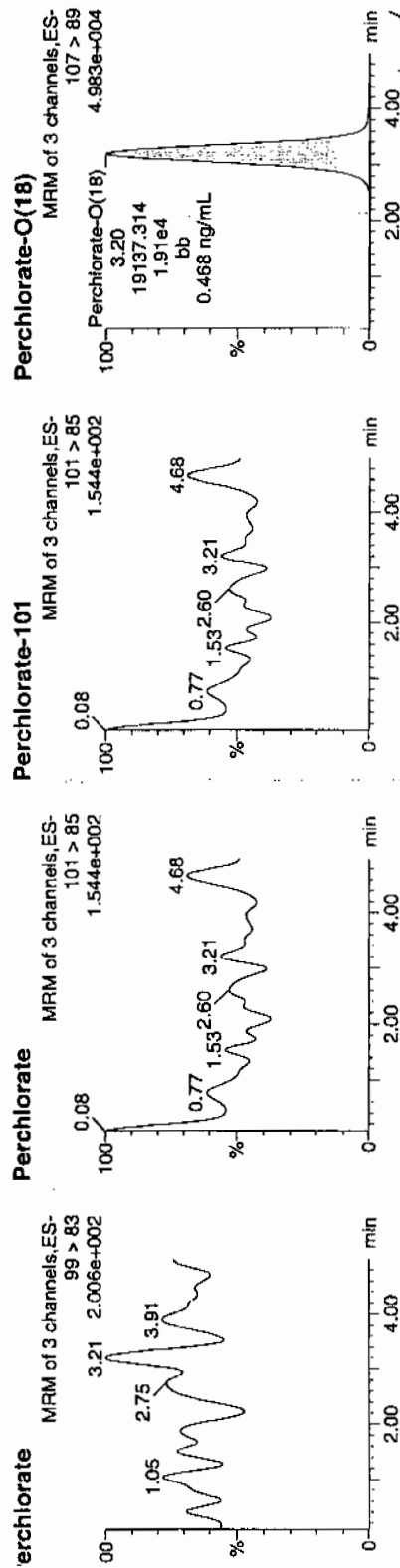
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223023a
Date: 23-Feb-2010
Time: 15:31:45
Job: IPB004
Label: 1:1,A

02-24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85	3.20	19137.314	19137.314	bb			0.4677	93.54	-6.46	8424.9...	
Perchlorate-O(18)	107 > 89											

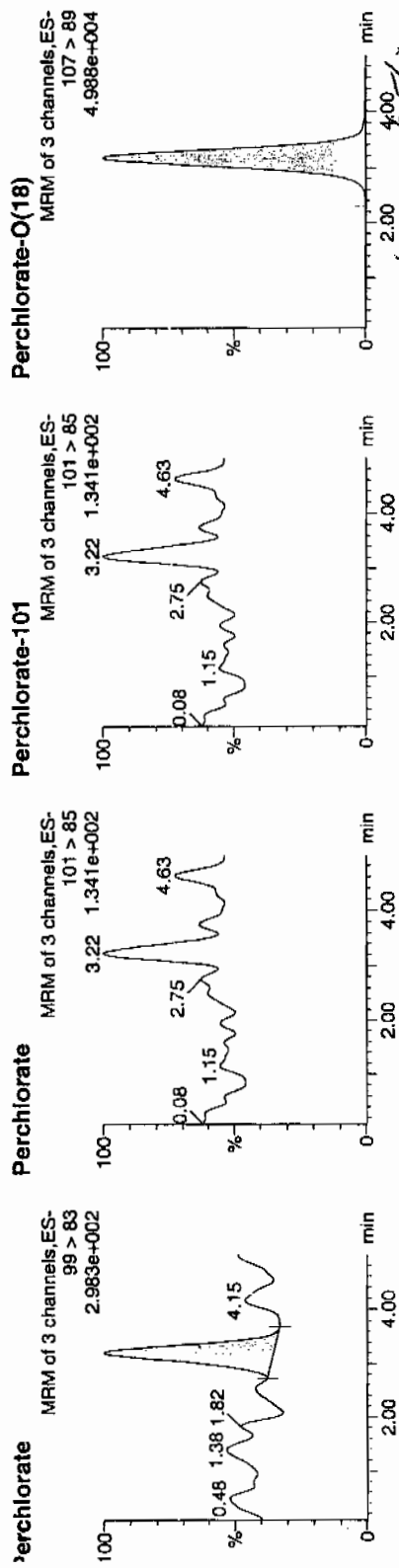
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223036a
Date: 23-Feb-2010
Time: 17:16:21
D: IPB005
/lat: 1:1,A

0.2410



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.20	71.064	71.064	bb			0.0015			8.434	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.17	18894.705	18894.705	bb			0.4618	92.35	-7.65	2125.4...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qid

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223049a

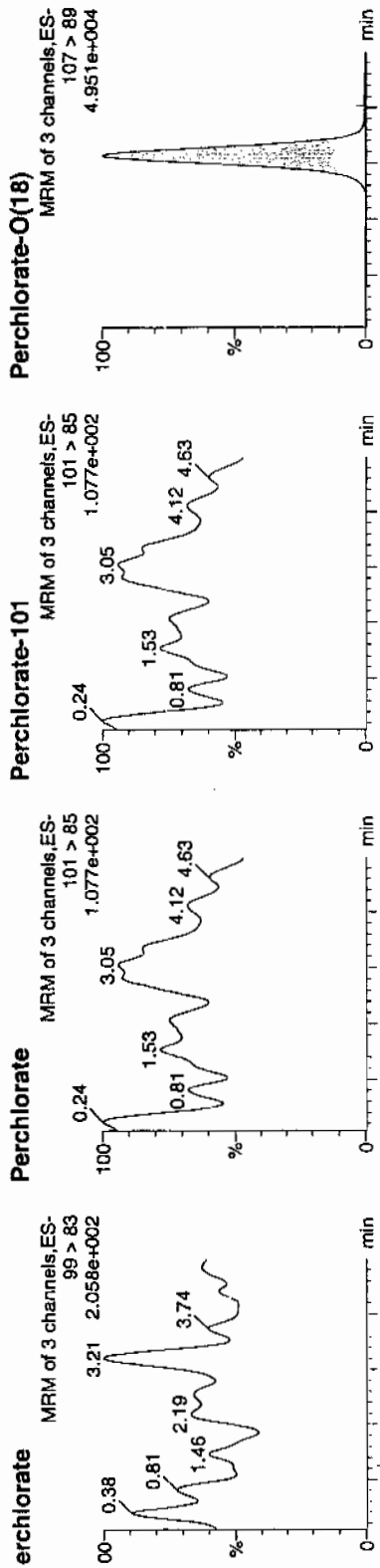
Sample Date: 23-Feb-2010

Sample Time: 19:01:09

Sample ID: IPB006

Sample Label: 1:1,A

08.24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85	3.15	18604.625	18604.625	bb			0.4547	90.93	-9.07	6408.7	
Perchlorate-O(18)	107 > 89											

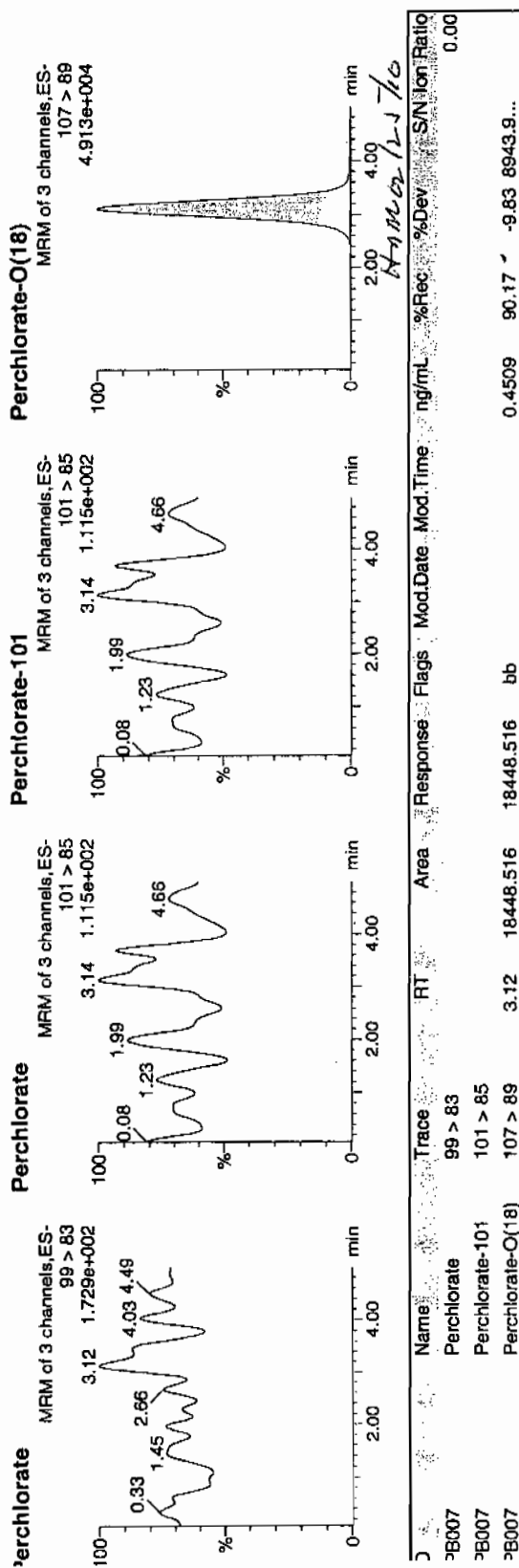
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223062a
Date: 23-Feb-2010
Time: 20:46:00
D: IPB007
File: 1:1,A

02-24-10



Nairb.ref

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

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

QUATRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

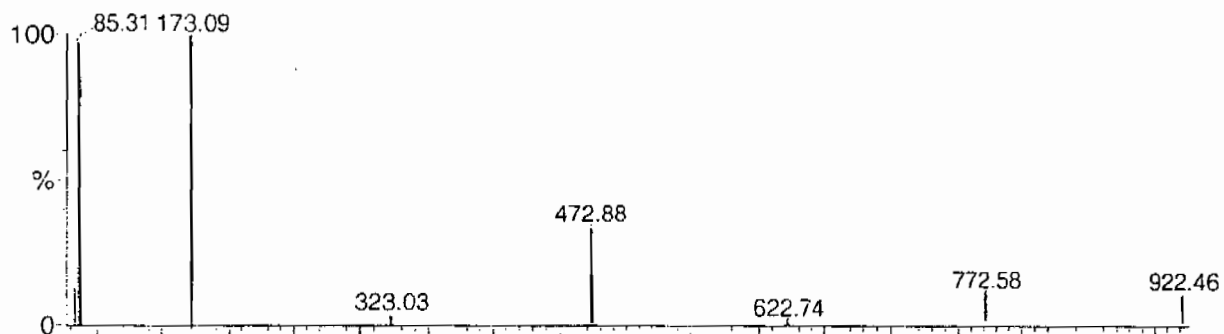
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

POINTS HIGHLIGHTED BY CURVED 01-01-03

Data file: STATMS1 - Uncalibrated

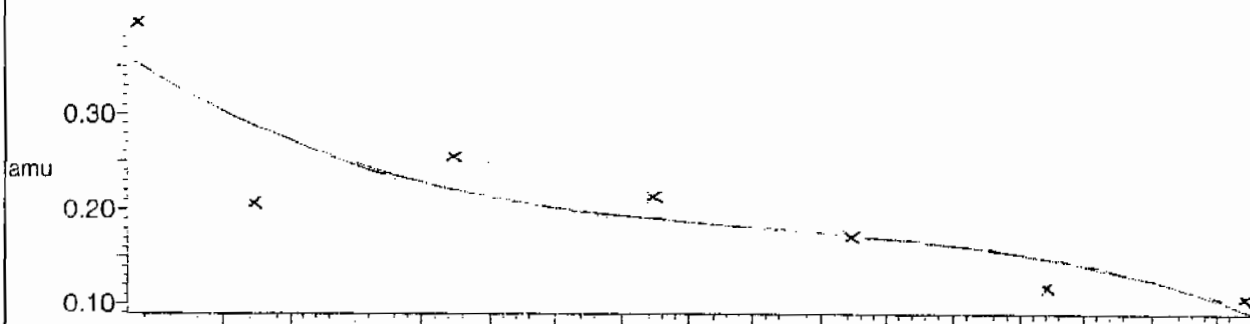
7 matches of 7 tested references



Reference file: Nairb

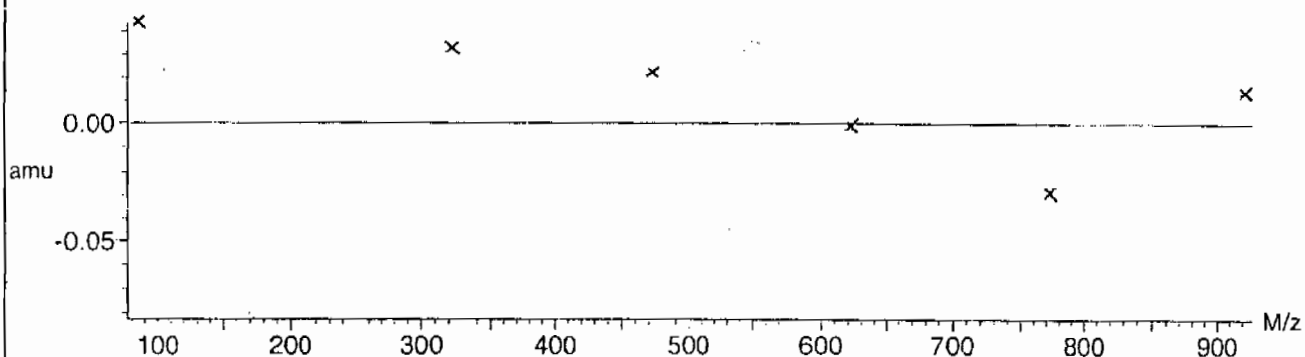


Mass difference (Raw - Ref mass)



Residuals

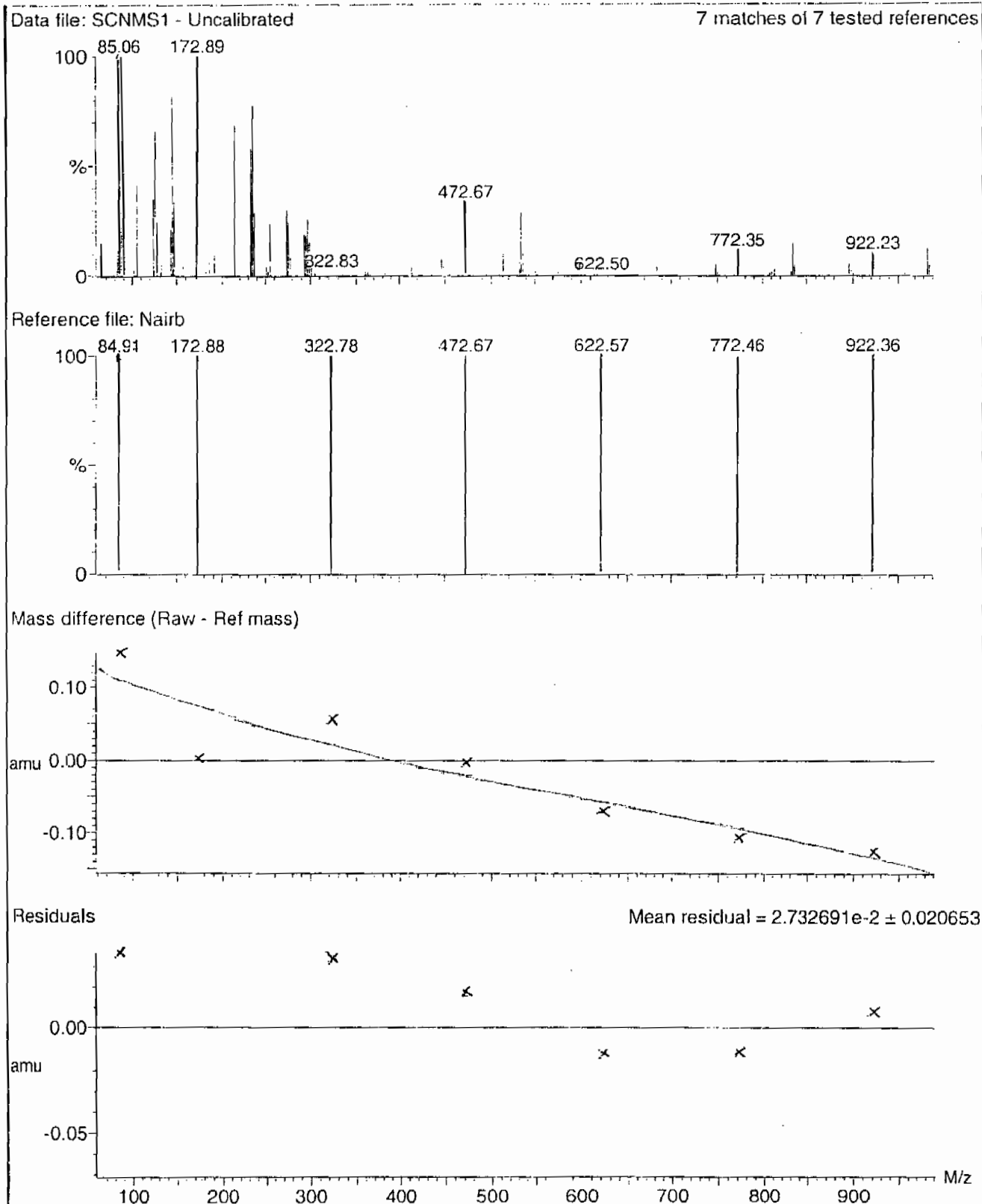
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

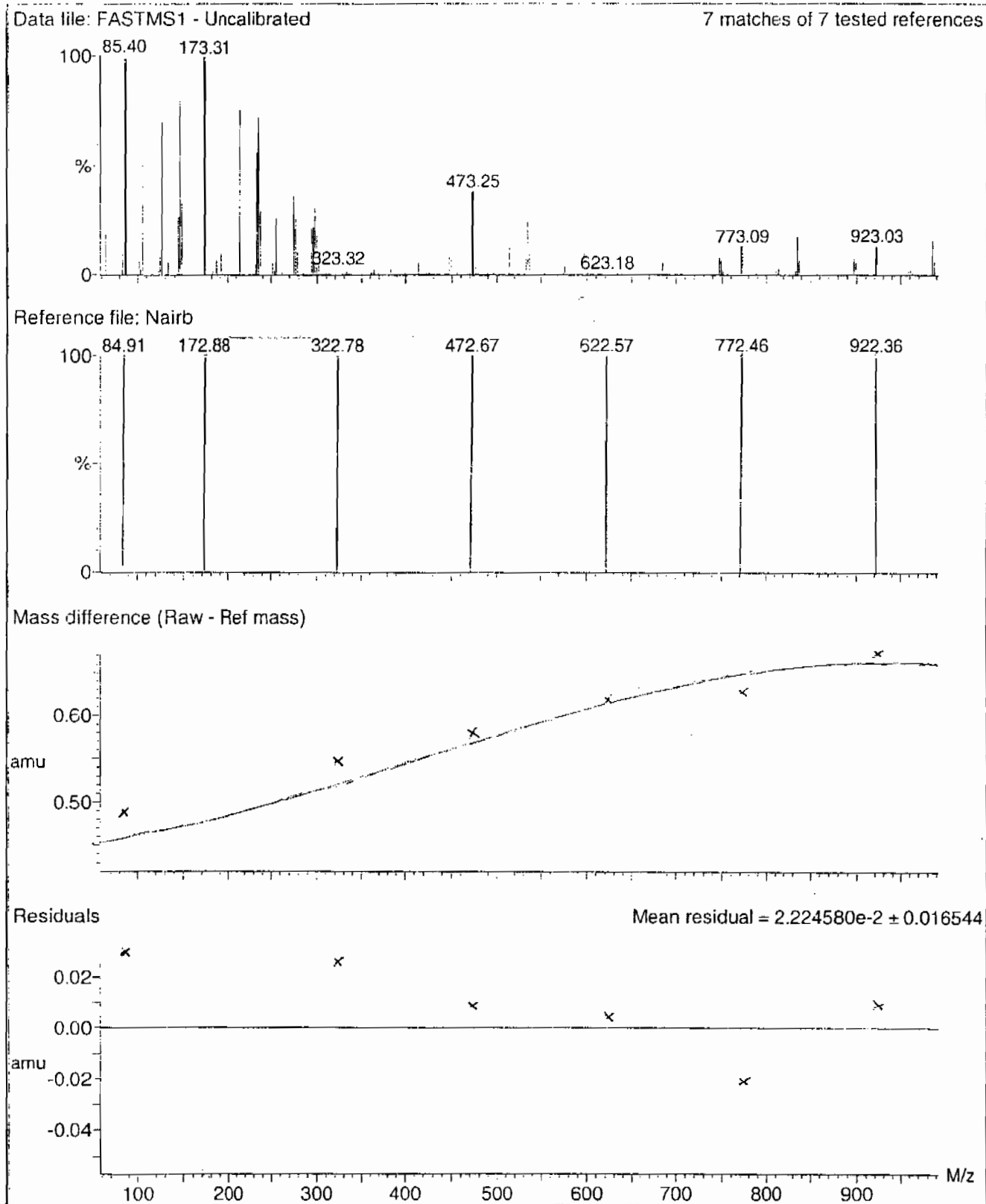
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

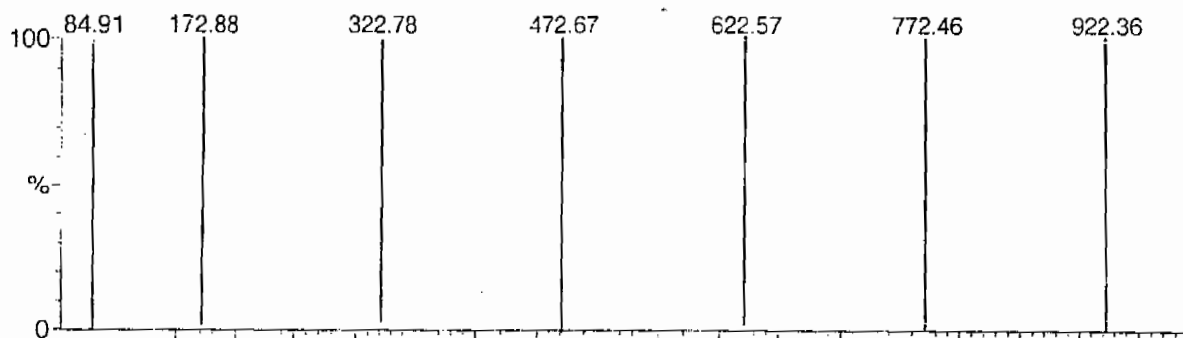
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

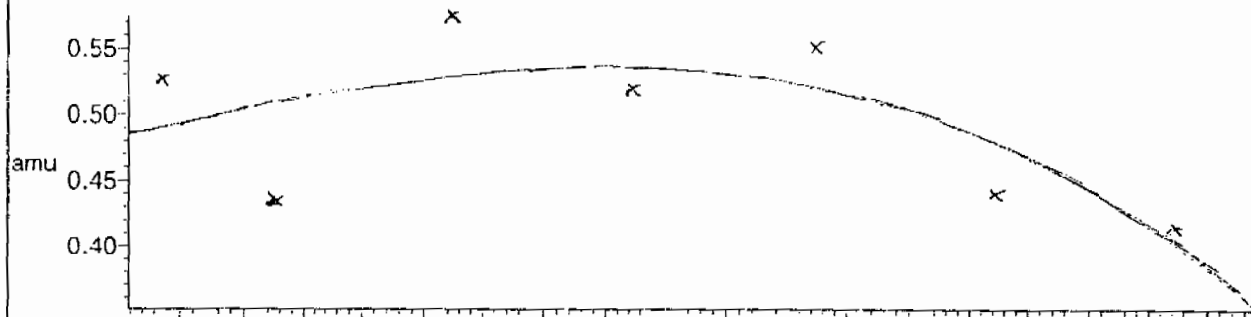
7 matches of 7 tested references



Reference file: Nairb

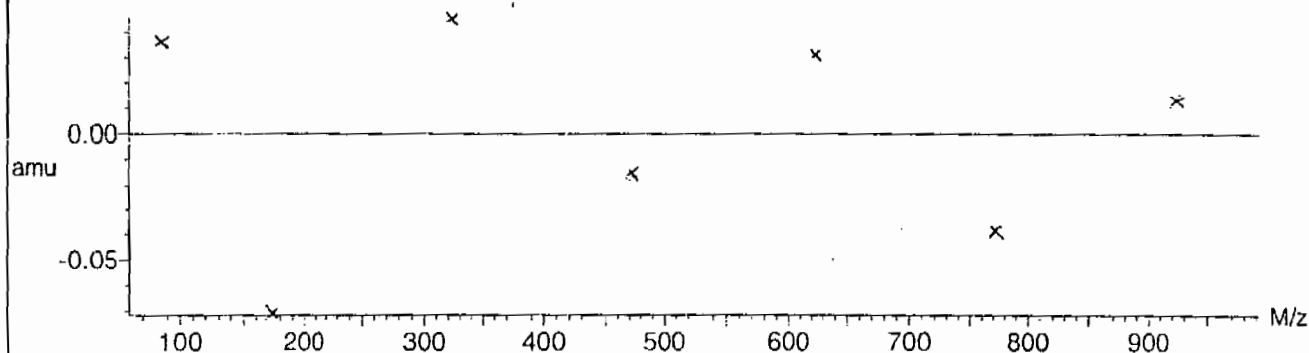


Mass difference (Raw - Ref mass)



Residuals

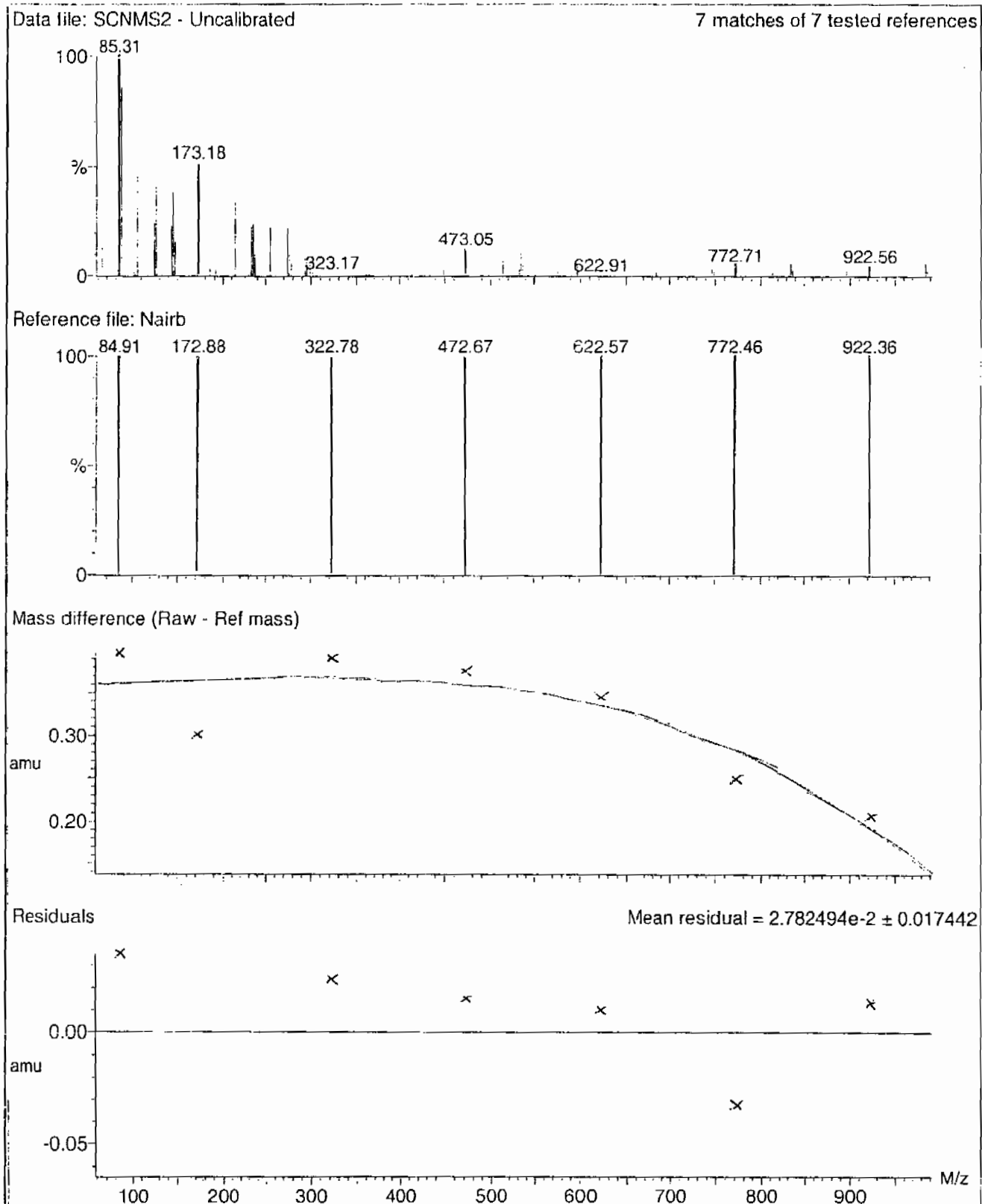
Mean residual = $3.598289 \times 10^{-2} \pm 0.017899$



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



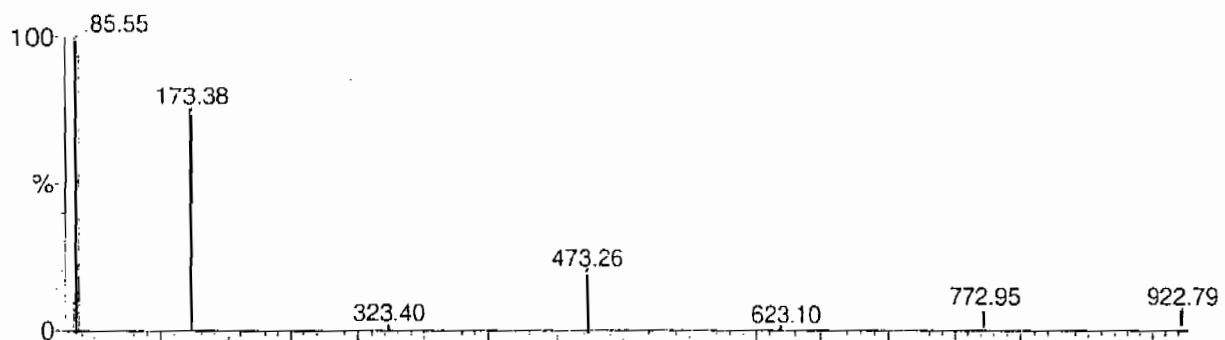
Calibration Report - MS2 Static

Page 1 of 1

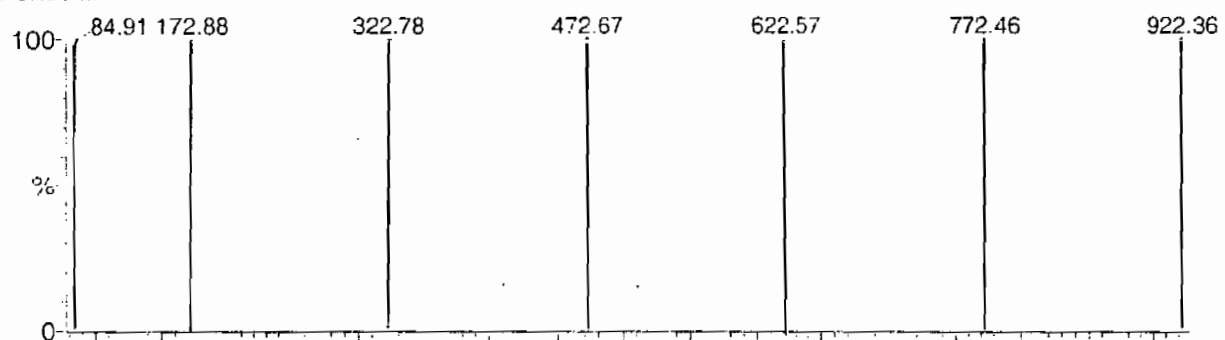
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

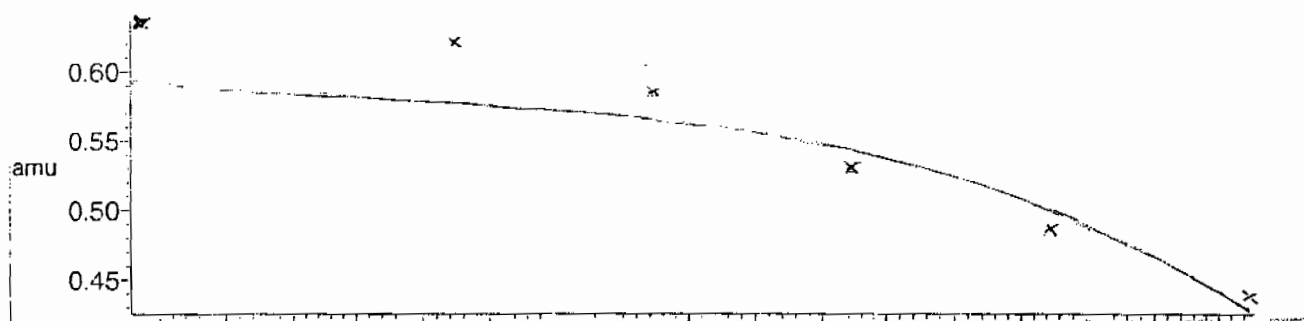
7 matches of 7 tested references



Reference file: Nairb

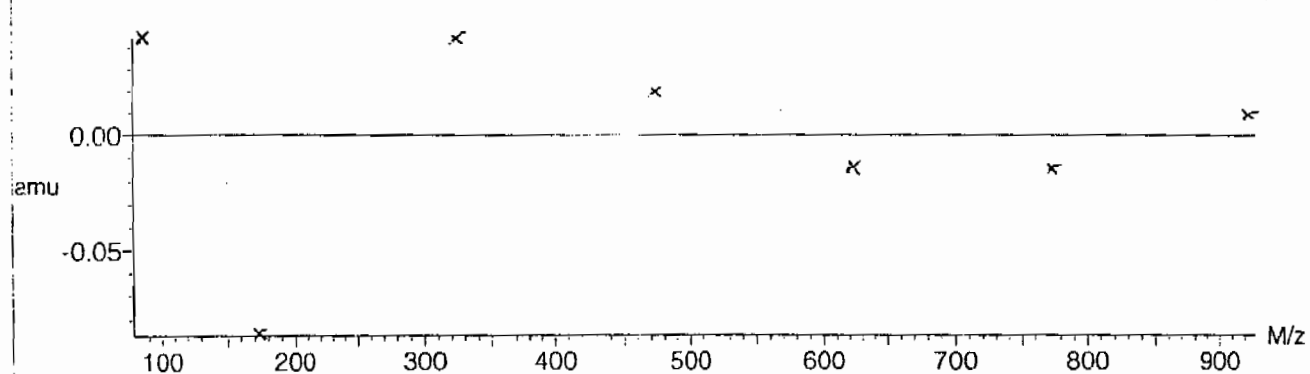


Mass difference (Raw - Ref mass)



Residuals

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



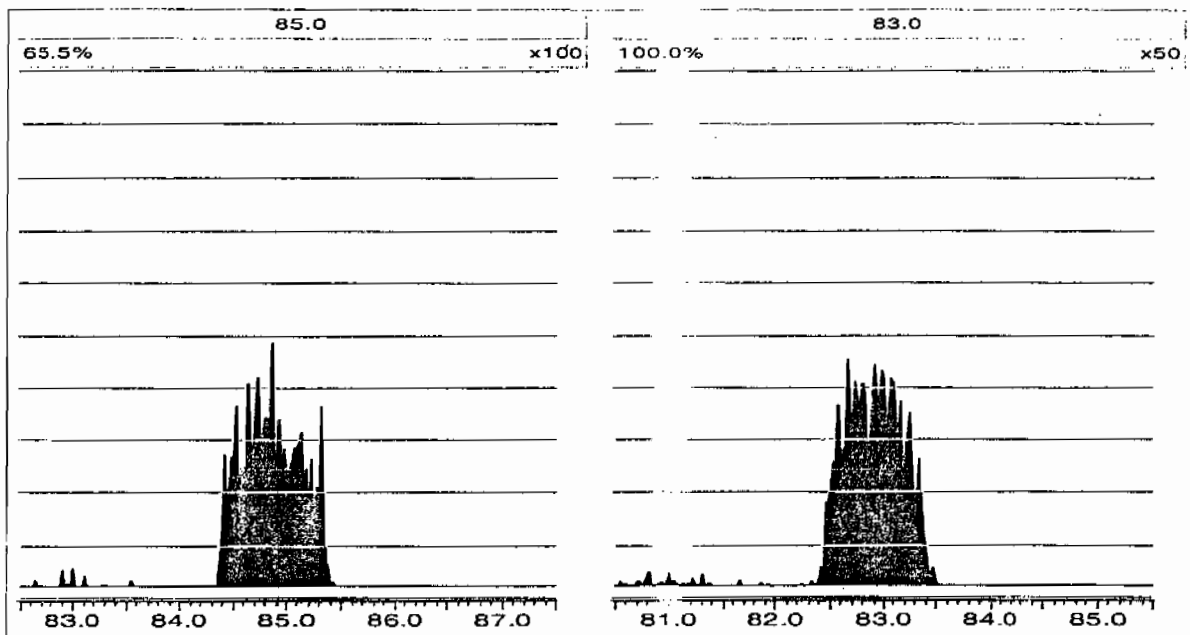
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Tuesday, February 23, 2010 10:32:55 Eastern Standard Time



Perchlorate RT And Area Summary

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1517

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	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
1202035660	per0223038a	23-FEB-10 17:32	20052.6	3.16	3.15988	1	
1202035661	per0223039a	23-FEB-10 17:40	19174.5	3.17	3.18465	1.005	
1202035664	per0223040a	23-FEB-10 17:48	19309.7	3.21	3.2219	1.004	
245998001	per0223041a	23-FEB-10 17:56	18173.1	3.16	3.18468	1.008	
245998002	per0223042a	23-FEB-10 18:04	17865.3	3.18	3.19708	1.005	
245998003	per0223043a	23-FEB-10 18:12	18656.6	3.17	3.18463	1.005	
245998004	per0223044a	23-FEB-10 18:20	17849.1	3.16	3.18467	1.008	
245998005	per0223045a	23-FEB-10 18:28	18707.3	3.16	3.15987	1	

PAGE 1 of 2

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories
GEL Job No.(SDG): 10-1517

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	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
245998006	per0223046a	23-FEB-10 18:36	18963.7	3.15	3.17232	1.007	
245998007	per0223047a	23-FEB-10 18:44	18558	3.15	3.17237	1.007	
245998008	per0223051a	23-FEB-10 19:17	18998.8	3.15	3.15988	1.003	
245998009	per0223052a	23-FEB-10 19:25	19163.3	3.15	3.17233	1.007	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8122

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.588	2.35	0.588	ug/kg	U	1	23-FEB-10 17:56	per0223041a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:56	per0223041a
14797-73-0	Perchlorate-101	.588	2.35	0.588	ug/kg	U	1	23-FEB-10 17:56	per0223041a
	Perchlorate-O(18)			5.22	ug/kg		1	23-FEB-10 17:56	per0223041a

[^] 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

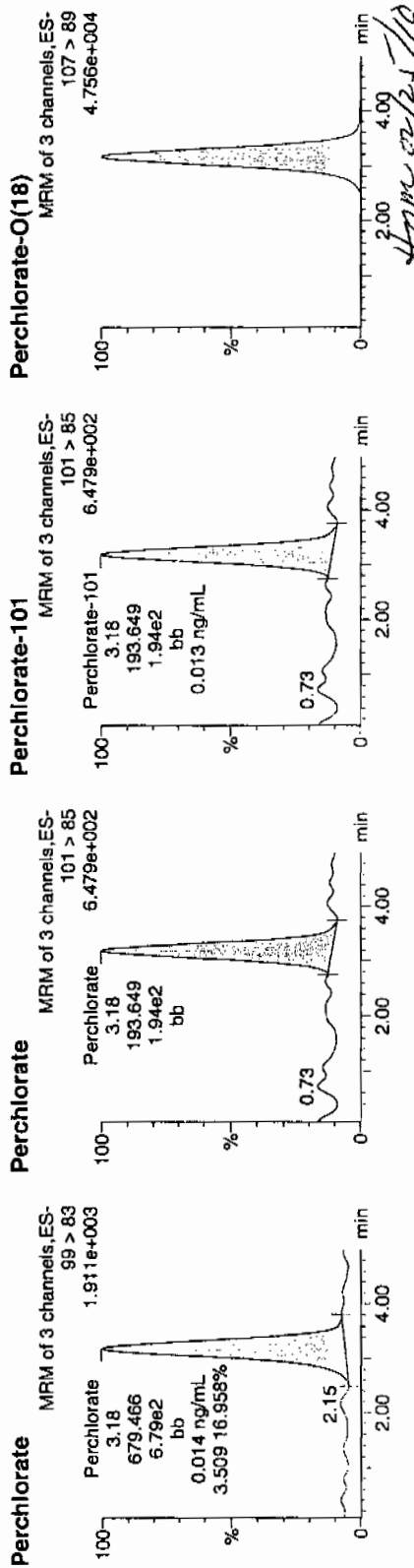
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223041a
Date: 23-Feb-2010
Time: 17:56:42
ID: 245998001
Vial: 2:1,D

02-24-10

19900711 5070 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
245998001	Perchlorate	99 > 83	3.18	679.466	679.466	bb			0.0139	101.767	3.51		
245998001	Perchlorate-101	101 > 85	3.18	193.649	193.649	bb			0.0127	146.797			
245998001	Perchlorate-O(18)	107 > 89	3.16	18173.072	18173.072	bb			0.4441	88.83	-11.17	869.912	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8112

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998002

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 67

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.746	2.98	0.746	ug/kg	U	1	23-FEB-10 18:04	per0223042a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:04	per0223042a
14797-73-0	Perchlorate-101	.746	2.98	0.746	ug/kg	U	1	23-FEB-10 18:04	per0223042a
	Perchlorate-O(18)			6.51	ug/kg		1	23-FEB-10 18:04	per0223042a

[^] 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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223042a

Date: 23-Feb-2010

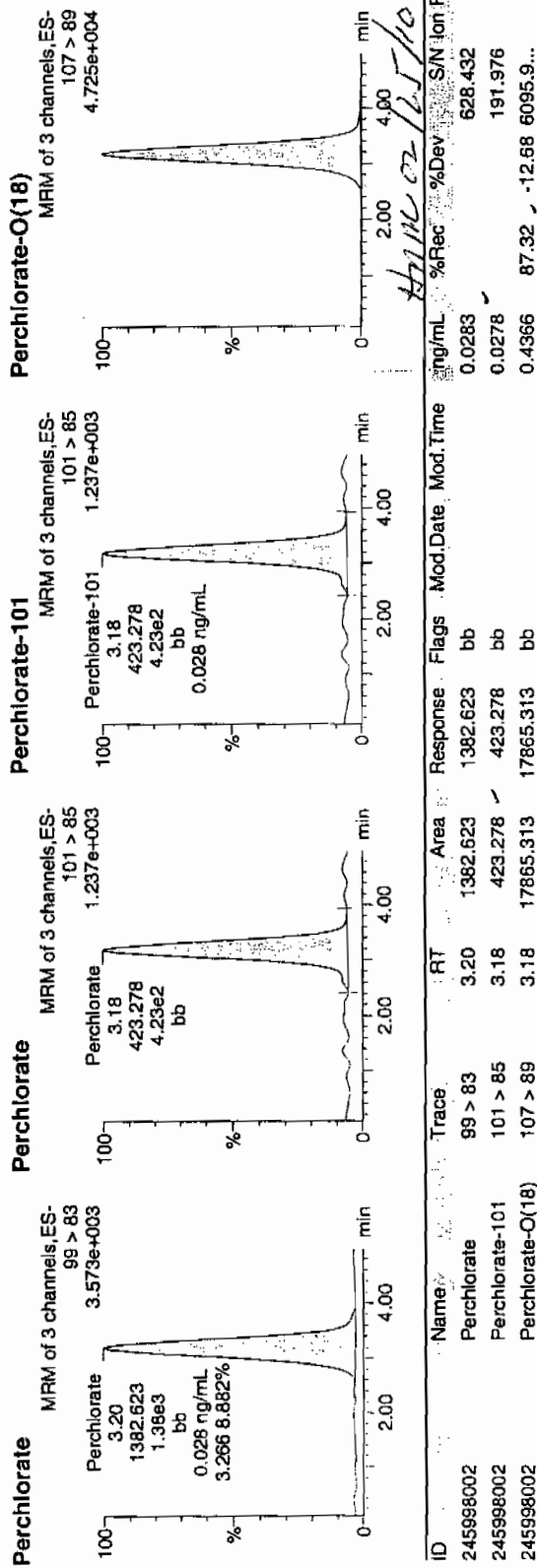
Time: 18:04:43

ID: 245998002

Vial: 2:1,E

02-24-10

1220071 | 5020 | 1 |



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8113

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998003

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.24	0.597	ug/kg	J	1	23-FEB-10 18:12	per0223043a
	Perchlorate Isotope Ratio			3.24			1	23-FEB-10 18:12	per0223043a
14797-73-0	Perchlorate-101	.561	2.24	0.590	ug/kg	J	1	23-FEB-10 18:12	per0223043a
	Perchlorate-O(18)			5.11	ug/kg		1	23-FEB-10 18:12	per0223043a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223043a

Date: 23-Feb-2010

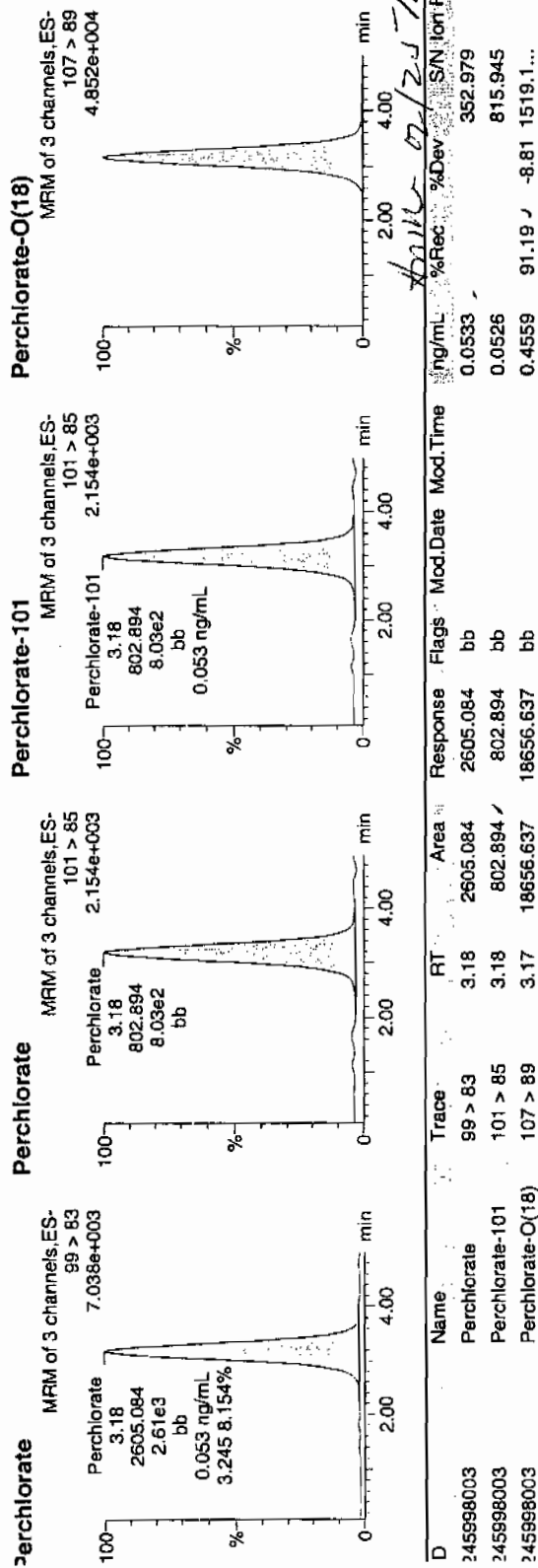
Time: 18:12:43

D: 245998003

Vial: 2:1,F

02-24-10

157201950071 | 5000 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8116

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998004

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 71

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.7	2.8	0.700	ug/kg	U	1	23-FEB-10 18:20	per0223044a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:20	per0223044a
14797-73-0	Perchlorate-101	.7	2.8	0.700	ug/kg	U	1	23-FEB-10 18:20	per0223044a
	Perchlorate-O(18)			6.11	ug/kg		1	23-FEB-10 18:20	per0223044a

^ 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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223044a

Date: 23-Feb-2010

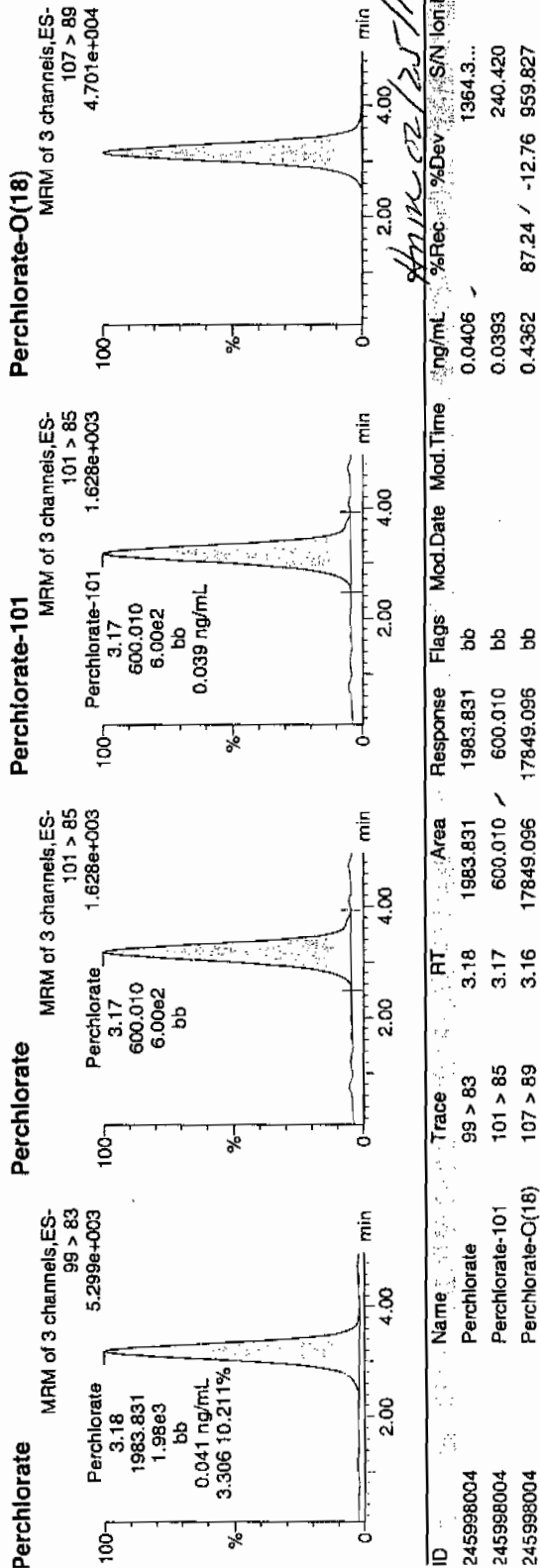
Time: 18:20:44

ID: 245998004

Vial: 2:2,A

02-24-10

1950071 | 9520 | 11



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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8119

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.25	0.564	ug/kg	U	1	23-FEB-10 18:28	per0223045a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:28	per0223045a
14797-73-0	Perchlorate-101	.564	2.25	0.564	ug/kg	U	1	23-FEB-10 18:28	per0223045a
	Perchlorate-O(18)			5.15	ug/kg		1	23-FEB-10 18:28	per0223045a

[^] 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

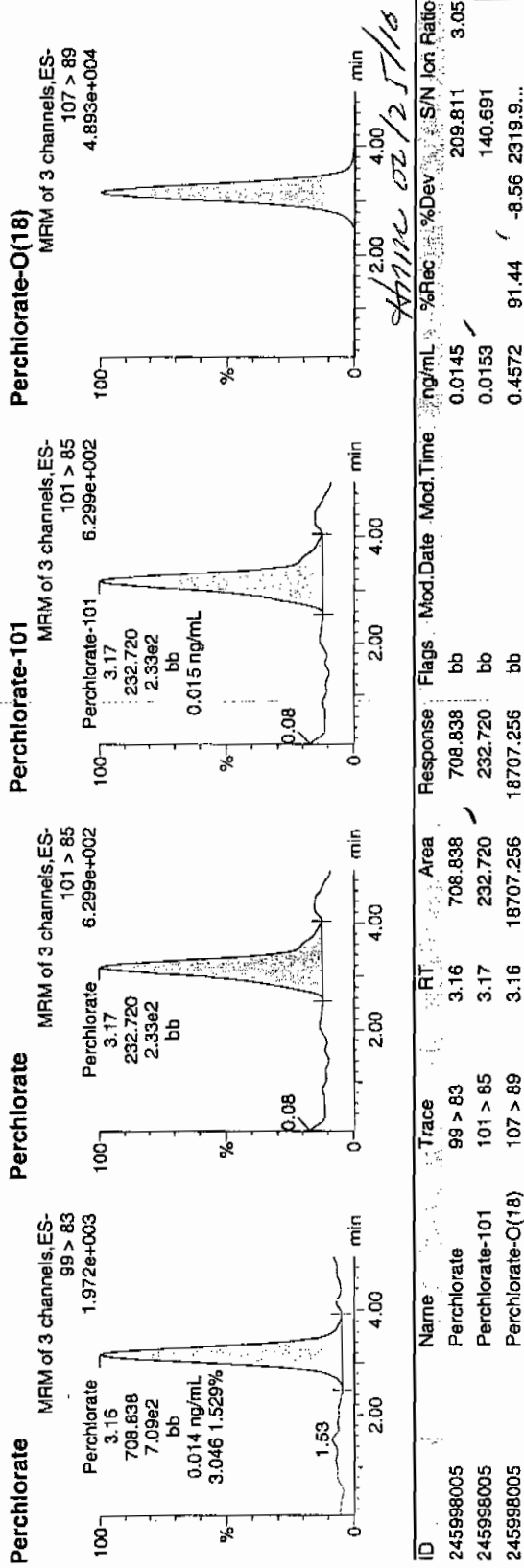
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223045a
Date: 23-Feb-2010
Time: 18:28:47
ID: 245998005
Vial: 2:2,B

622410

LAN-1950371 3020 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8114

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998006

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 56

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.891	3.57	0.891	ug/kg	U	1	23-FEB-10 18:36	per0223046a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:36	per0223046a
14797-73-0	Perchlorate-101	.891	3.57	0.891	ug/kg	U	1	23-FEB-10 18:36	per0223046a
	Perchlorate-O(18)			8.26	ug/kg		1	23-FEB-10 18:36	per0223046a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223046a

Date: 23-Feb-2010

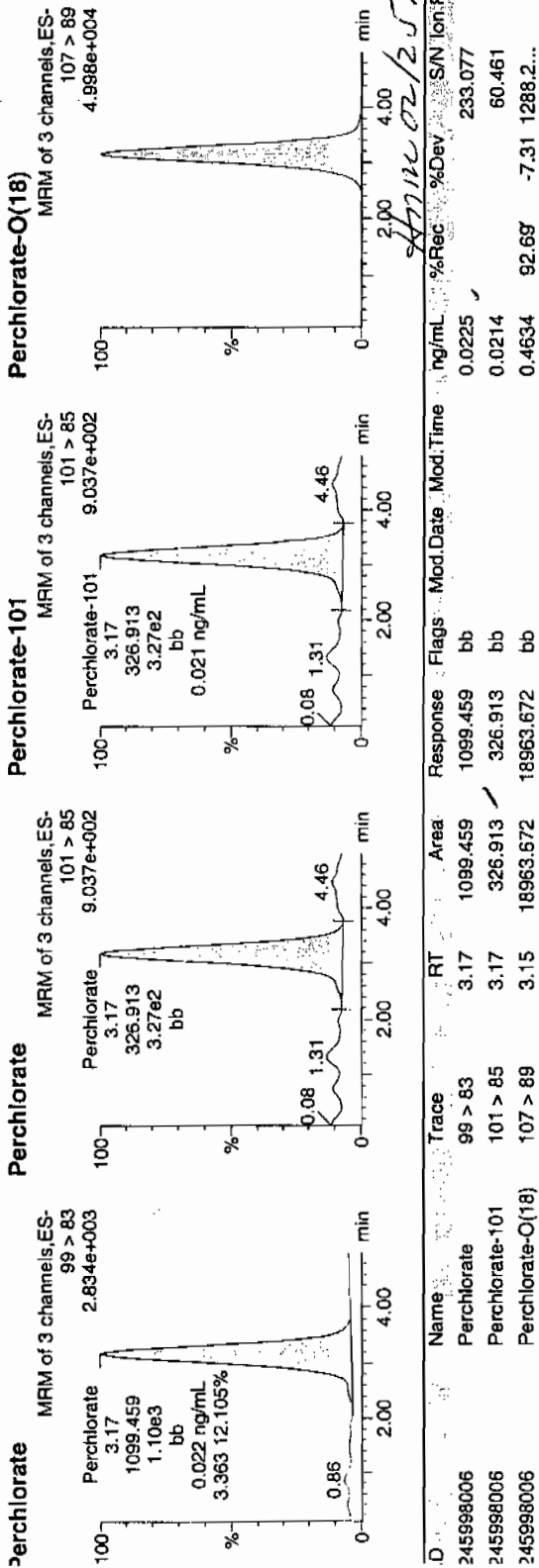
Time: 18:36:50

D: 245998006

Vial: 2:2,C

08-24-10

LANU | 95071 | 3020 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
245998006	Perchlorate	99 > 83	3.17	1099.459	1099.459	bb			0.0225			233.077	3.36
245998006	Perchlorate-101	101 > 85	3.17	326.913	326.913	bb			0.0214			60.461	
245998006	Perchlorate-O(18)	107 > 89	3.15	18963.672	18963.672	bb			0.4634	92.69	-7.31	1288.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8115

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 18:44	per0223047a
	Perchlorate Isotope Ratio						1	23-FEB-10 18:44	per0223047a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 18:44	per0223047a
	Perchlorate-O(18)			5.32	ug/kg		1	23-FEB-10 18:44	per0223047a

[^] 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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223047a

Date: 23-Feb-2010

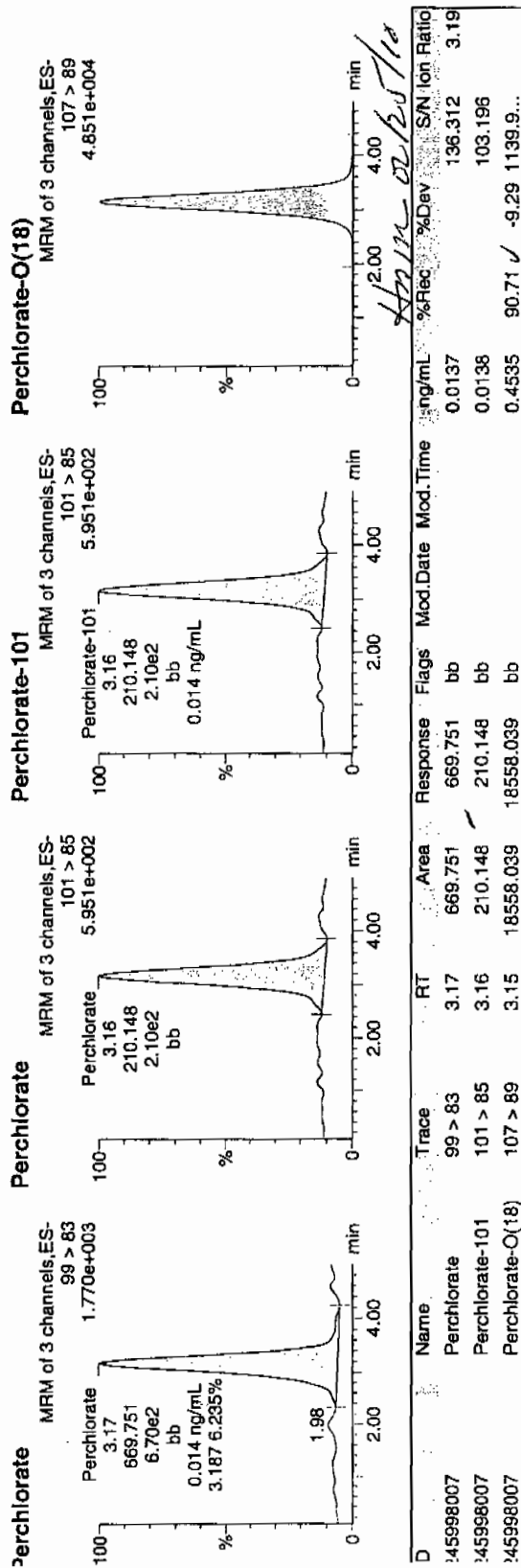
Time: 18:44:51

D: 245998007

/file: 2:2:D

022410

LANU | 950071 | 9000 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950068
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8117
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1517
 GEL Sample ID: 245998008
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 92.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.16	0.695	ug/kg	J	1	23-FEB-10 19:17	per0223051a
	Perchlorate Isotope Ratio			3.1			1	23-FEB-10 19:17	per0223051a
14797-73-0	Perchlorate-101	.539	2.16	0.718	ug/kg	J	1	23-FEB-10 19:17	per0223051a
	Perchlorate-O(18)			5.00	ug/kg		1	23-FEB-10 19:17	per0223051a

^ 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.

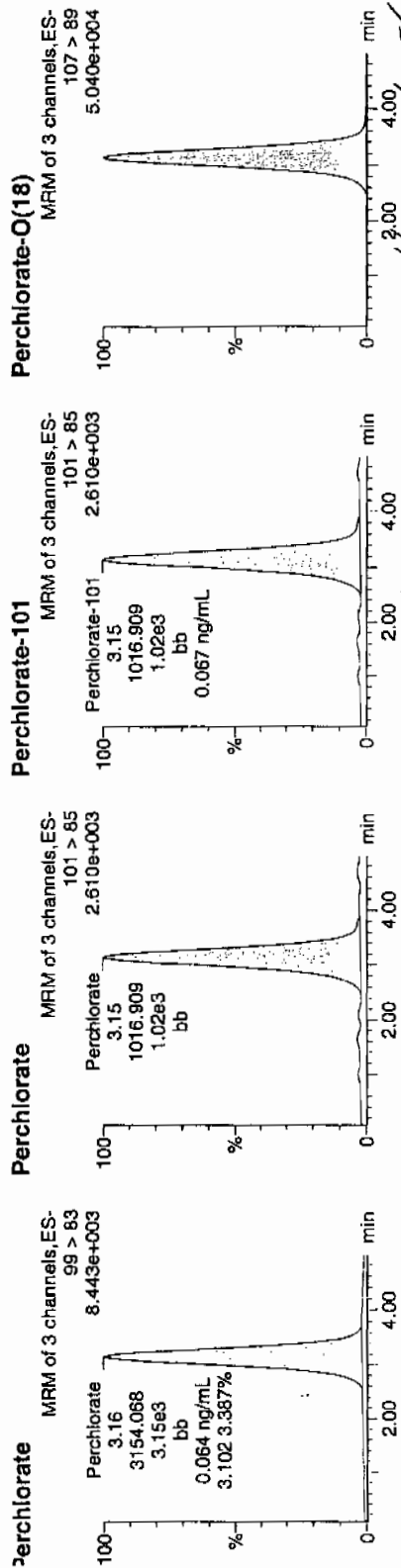
*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223051a
Date: 23-Feb-2010
Time: 19:17:13
D: 245998008
/lal: 2:2,E



D.	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245998008	Perchlorate	99 > 83	3.16	3154.068	3154.068	bb			0.0645			543.557	3.10
245998008	Perchlorate-101	101 > 85	3.15	1016.909	1016.909	bb			0.0667			66.856	
245998008	Perchlorate-O(18)	107 > 89	3.15	18998.781	18998.781	bb			0.4643	92.86	-7.14	2494.5...	

Handwritten calculations:

$$\frac{3154.068}{489014} \times 100 = 64.5$$

$$\frac{1016.909}{18998.781} \times 100 = 5.36$$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8118

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 245998009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 72

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.69	2.76	0.690	ug/kg	U	1	23-FEB-10 19:25	per0223052a
	Perchlorate Isotope Ratio						1	23-FEB-10 19:25	per0223052a
14797-73-0	Perchlorate-101	.69	2.76	0.690	ug/kg	U	1	23-FEB-10 19:25	per0223052a
	Perchlorate-O(18)			6.46	ug/kg		1	23-FEB-10 19:25	per0223052a

[^] 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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223052a

Date: 23-Feb-2010

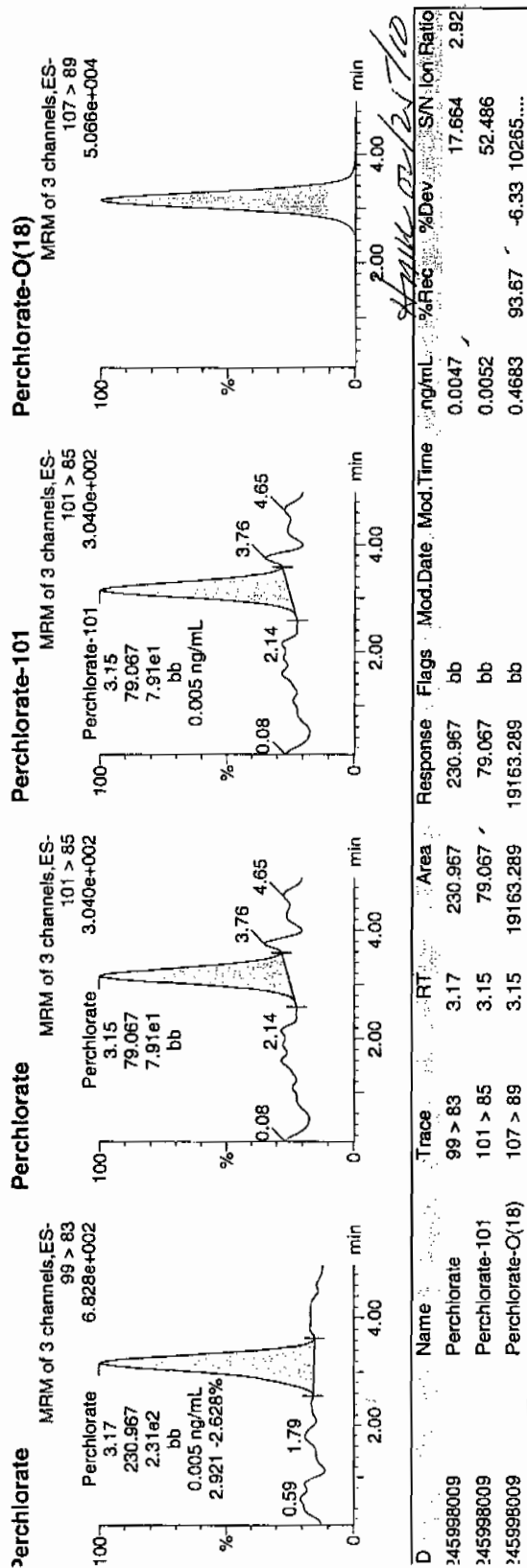
Time: 19:25:25

D: 245998009

/ial: 2:2,F

02-24-10

LANC | 950071 | 3000 | 11



STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1517

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 23-FEB-10

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

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

Parname Perchlorate
 Coefficient of Determination:
 Calibration Curve: 48901.36
 Response Type: External Standard
 Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1517

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 23-FEB-10

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

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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 15252.16

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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time

Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022310a.mdb 24 Feb 2010 09:36:48

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022310a.cdb 24 Feb 2010 09:37:11

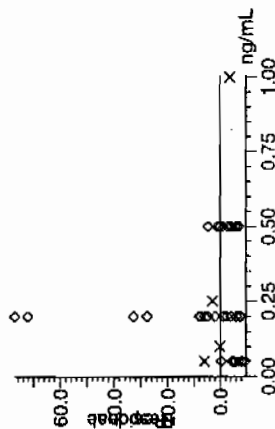
Compound name: Perchlorate

Response Factor: 48901.4

RF SD: 2330.99, % Relative SD: 4.76673

Response type: External Std, Area

Curve type: RF



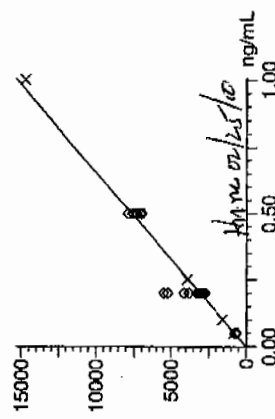
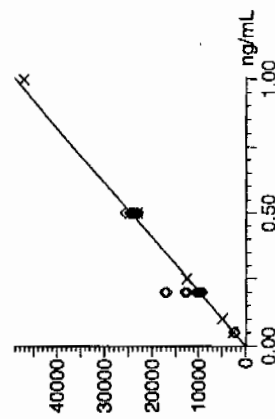
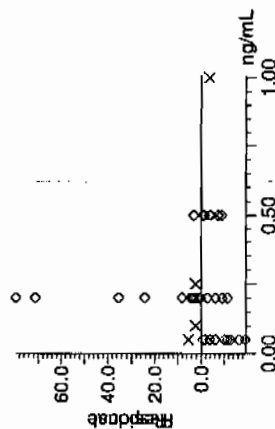
Compound name: Perchlorate-101

Response Factor: 15252.2

RF SD: 748.661, % Relative SD: 4.90856

Response type: External Std, Area

Curve type: RF

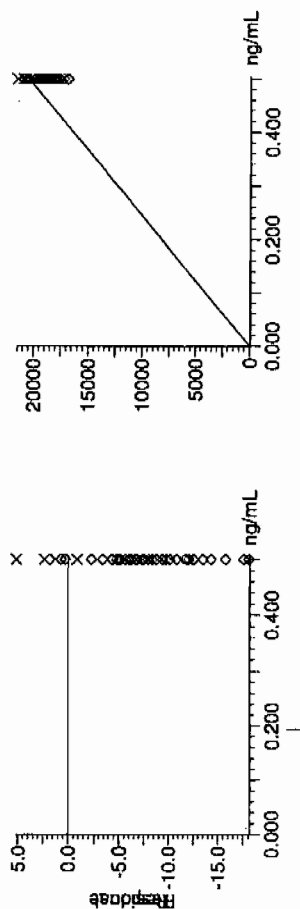


Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 40918.6
RF SD: 2026.62, % Relative SD: 4.9528 ✓
Response type: External Std, Area
Curve type: RF ✓



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1517

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.93	23-FEB-10 13:38	per0223009a
Perchlorate Isotope Ratio		3.22		23-FEB-10 13:38	per0223009a
Perchlorate-101	.5	.5	99.45	23-FEB-10 13:38	per0223009a

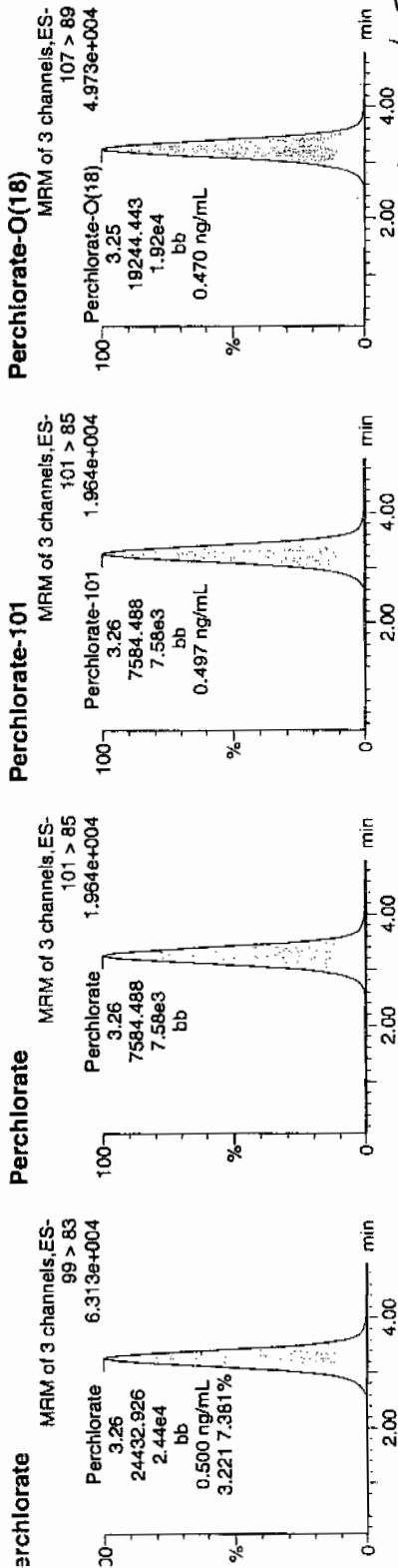
uantify Sample Report MassLynx 4.0 SP4
 re GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per022310a.qid

ast Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 rinted: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

ame: per0223009a
 ate: 23-Feb-2010
 ime: 13:38:42
 i: WCL100219-06ICV
 ial: 1:2,A

*Pass
 and
 02-24-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100219-06ICV	Perchlorate	3.26	24432.926	24432.926	bb			0.4996	99.93	-0.07	4797.0...	3.22
CL100219-06ICV	Perchlorate-101	3.26	7584.488	7584.488	bb			0.4973	99.45	-0.55	1371.9...	
CL100219-06ICV	Perchlorate-O(18)	3.25	19244.443	19244.443	bb			0.4703	94.06	-5.94	7972.2...	

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1517

Lab Name: General Engineering Laboratories

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.18	23-FEB-10 15:23	per0223022a
Perchlorate Isotope Ratio		3.26		23-FEB-10 15:23	per0223022a
Perchlorate-101	.5	.5	99.37	23-FEB-10 15:23	per0223022a
Perchlorate	.5	.52	104.6	23-FEB-10 17:08	per0223035a
Perchlorate Isotope Ratio		3.25		23-FEB-10 17:08	per0223035a
Perchlorate-101	.5	.52	103.03	23-FEB-10 17:08	per0223035a
Perchlorate	.5	.48	96.6	23-FEB-10 18:52	per0223048a
Perchlorate Isotope Ratio		3.23		23-FEB-10 18:52	per0223048a
Perchlorate-101	.5	.48	95.87	23-FEB-10 18:52	per0223048a
Perchlorate	.5	.5	100.19	23-FEB-10 20:37	per0223061a
Perchlorate Isotope Ratio		3.26		23-FEB-10 20:37	per0223061a
Perchlorate-101	.5	.49	98.63	23-FEB-10 20:37	per0223061a

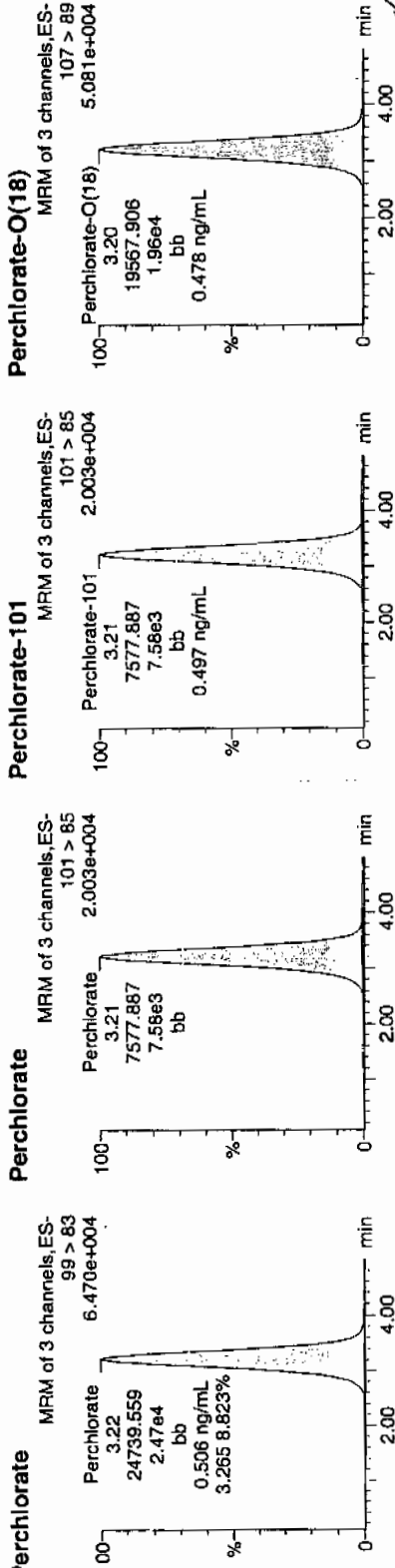
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223022a
Date: 23-Feb-2010
Time: 15:23:34
Job: WCL100219-06CCV
File: 1:2,A

Per
02-24-10



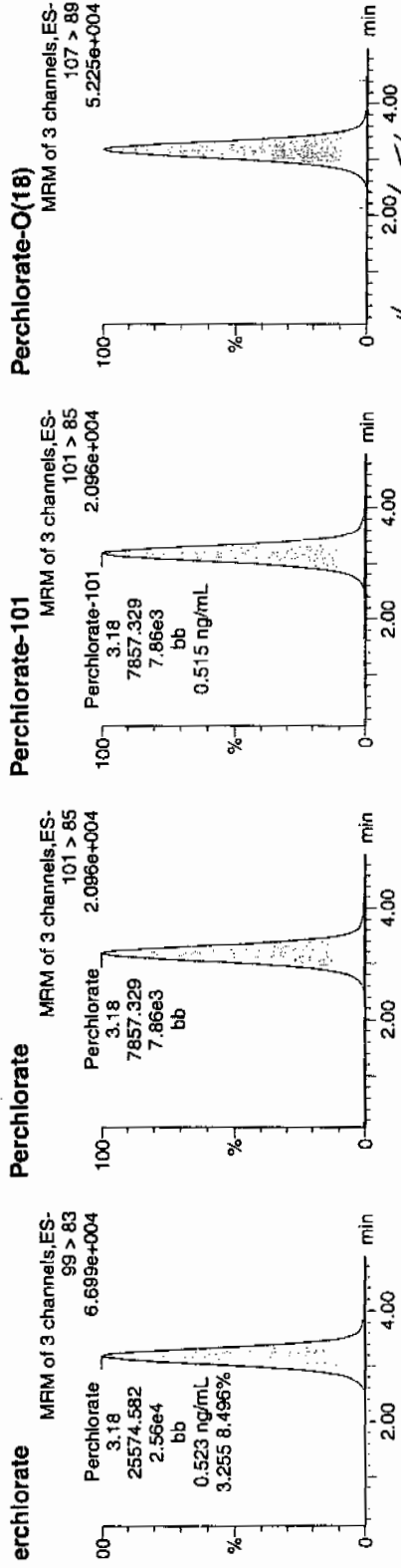
Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
/CL100219-06CCV	Perchlorate	3.22	24739.559	24739.559	bb			0.5059	101.18	1.18	3907.3...	3.26
/CL100219-06CCV	Perchlorate-101	3.21	7577.887	7577.887	bb			0.4968	99.37	-0.63	3206.1...	
/CL100219-06CCV	Perchlorate-O(18)	3.20	19567.906	19567.906	bb			0.4782	95.64	-4.36	3999.2...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Sample Name: per0223035a
 Date: 23-Feb-2010
 Time: 17:08:18
 Path: WCL100219-06CCV
 Label: 1:2,A

Pure
 CWS
 02-24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100219-06CCV	Perchlorate	3.18	25574.582	25574.582	bb			0.5230	104.60	4.60	5650.3...	3.25
CL100219-06CCV	Perchlorate-101	3.18	7857.329	7857.329	bb			0.5152	103.03	3.03	775.250	
CL100219-06CCV	Perchlorate-O(18)	3.17	20000.623	20000.623	bb			0.4888	97.76	-2.24	9648.1...	

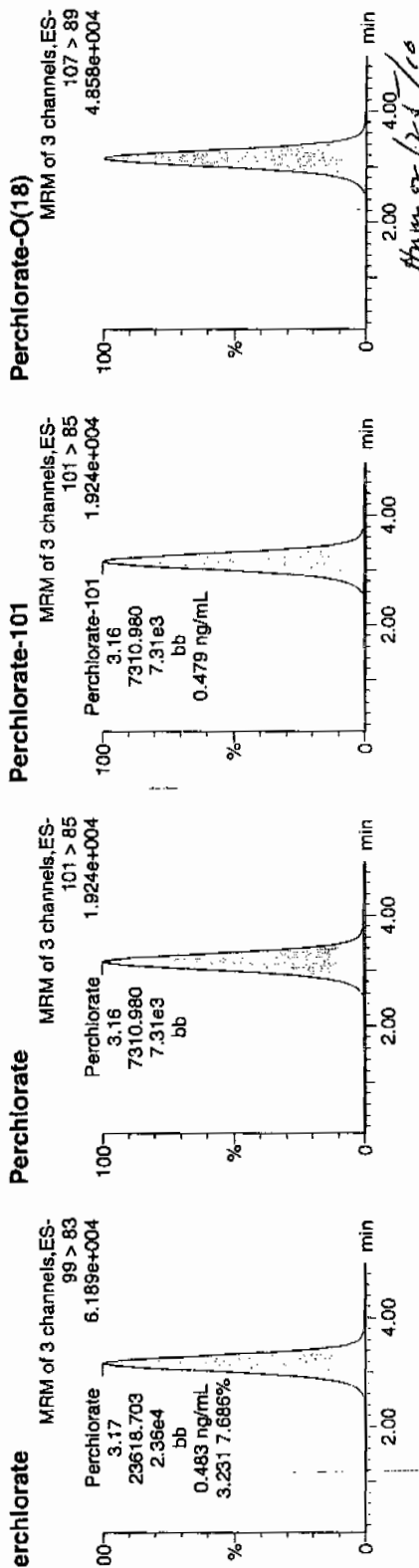
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223048a
Date: 23-Feb-2010
Time: 18:52:53
Job: WCL100219-06CCV
Label: 1:2,A

Per
WCL
0224-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100219-06CCV	Perchlorate	3.17	23618.703	23618.703	bb			0.4830	96.60	-3.40	5446.2...	3.23
CL100219-06CCV	Perchlorate-101	3.16	7310.980	7310.980	bb			0.4793	95.87	-4.13	41.802	
CL100219-06CCV	Perchlorate-O(18)	3.15	18393.375	18393.375	bb			0.4495	89.90	-10.10	1991.7...	

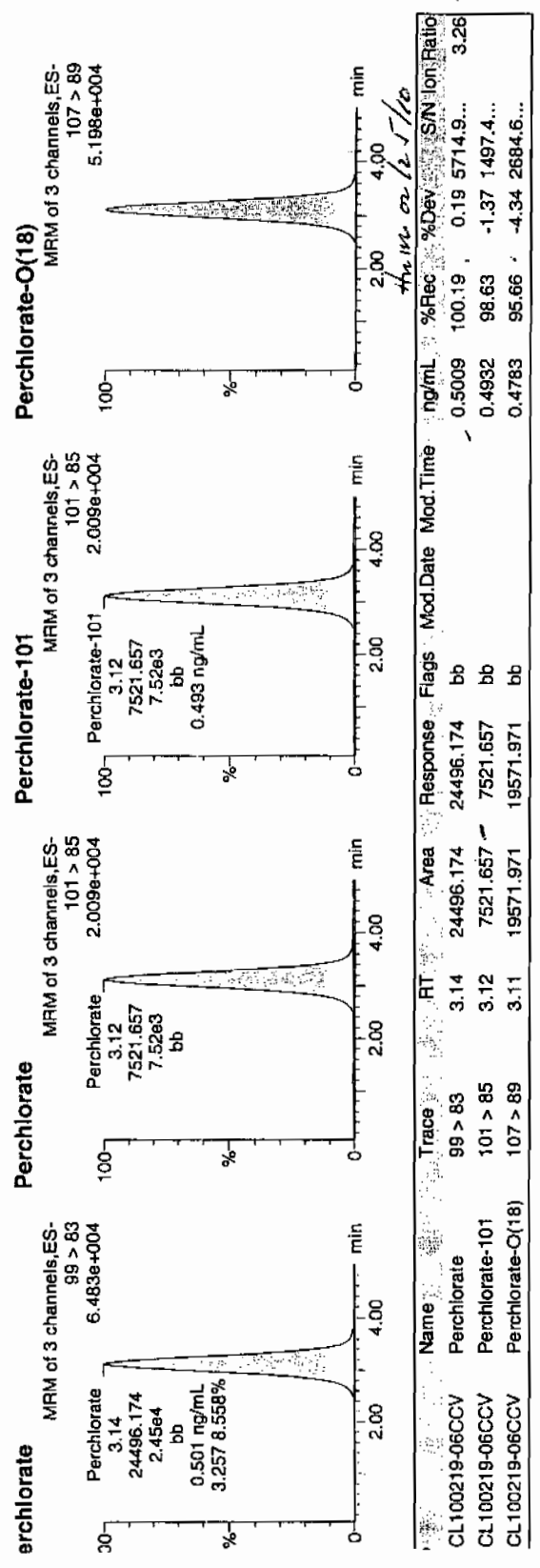
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223061a
Date: 23-Feb-2010
Time: 20:37:43
File: WCL100219-06CCV
Label: 1:2,A

Perchlorate
02-24-10



Perchlorate MDL Verification

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

GEL Job No.(SDG): 10-1517

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: µg/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.65	23-FEB-10 13:55	per0223011a
Perchlorate Isotope Ratio		3.41		23-FEB-10 13:55	per0223011a
Perchlorate-101	.05	.05	93.69	23-FEB-10 13:55	per0223011a
Perchlorate	.05	.05	94.13	23-FEB-10 15:39	per0223024a
Perchlorate Isotope Ratio		3.07		23-FEB-10 15:39	per0223024a
Perchlorate-101	.05	.05	98.19	23-FEB-10 15:39	per0223024a
Perchlorate	.05	.05	95.66	23-FEB-10 17:24	per0223037a
Perchlorate Isotope Ratio		3.19		23-FEB-10 17:24	per0223037a
Perchlorate-101	.05	.05	96.29	23-FEB-10 17:24	per0223037a
Perchlorate	.05	.05	94.19	23-FEB-10 19:09	per0223050a
Perchlorate Isotope Ratio		3.04		23-FEB-10 19:09	per0223050a

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1517

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	99.39	23-FEB-10 19:09	per0223050a
Perchlorate	.05	.05	94.93	23-FEB-10 20:54	per0223063a
Perchlorate Isotope Ratio		3.23		23-FEB-10 20:54	per0223063a
Perchlorate-101	.05	.05	94.12	23-FEB-10 20:54	per0223063a

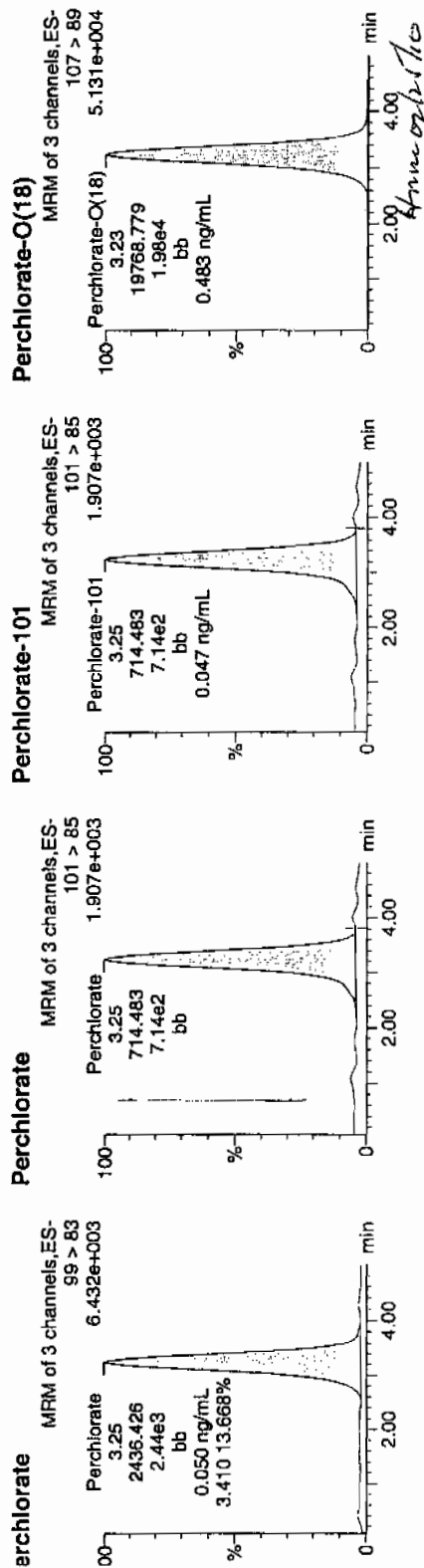
uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

ast Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
rinted: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

ame: per0223011a
ate: 23-Feb-2010
ime: 13:55:02
): WCL100219-07CRI
ial: 1:2,B

*pur
and
ratio*



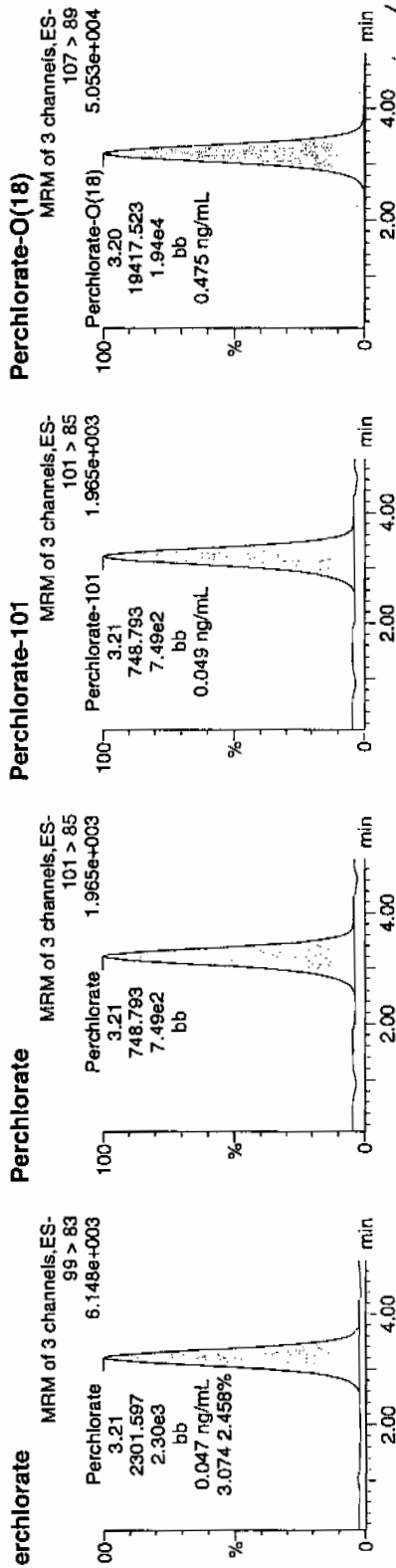
Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100219-07CRI	Perchlorate	99 > 83	2436.426	2436.426	bb			0.0498	99.65	-0.35	752.514	3.41
CL100219-07CRI	Perchlorate-101	101 > 85	714.483	714.483	bb			0.0468	93.69	-6.31	197.166	
CL100219-07CRI	Perchlorate-O(18)	107 > 89	19768.779	19768.779	bb			0.4831	96.63	-3.37	3562.3...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Sample Name: per0223024a
 Date: 23-Feb-2010
 Time: 15:39:48
 File: WCL100219-07CRI
 Label: 1:2,B

Per
and
02-24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100219-07CRI'	Perchlorate	3.21	2301.597	2301.597	bb			0.0471	94.13	-5.87	345.822	3.07
'CL100219-07CRI'	Perchlorate-101	3.21	748.793	748.793	bb			0.0491	98.19	-1.81	179.800	
'CL100219-07CRI'	Perchlorate-O(18)	3.20	19417.523	19417.523	bb			0.4745	94.91	-5.09	8390.9...	

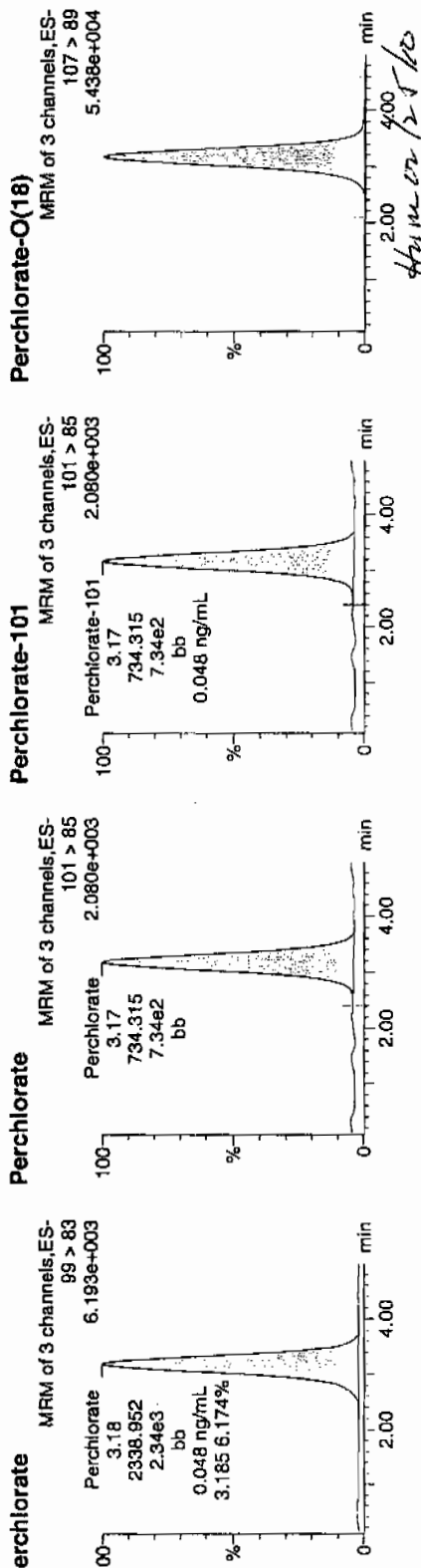
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223037a
Date: 23-Feb-2010
Time: 17:24:23
Job: WCL100219-07CRI
Label: 1:2,B

Per
and
022410



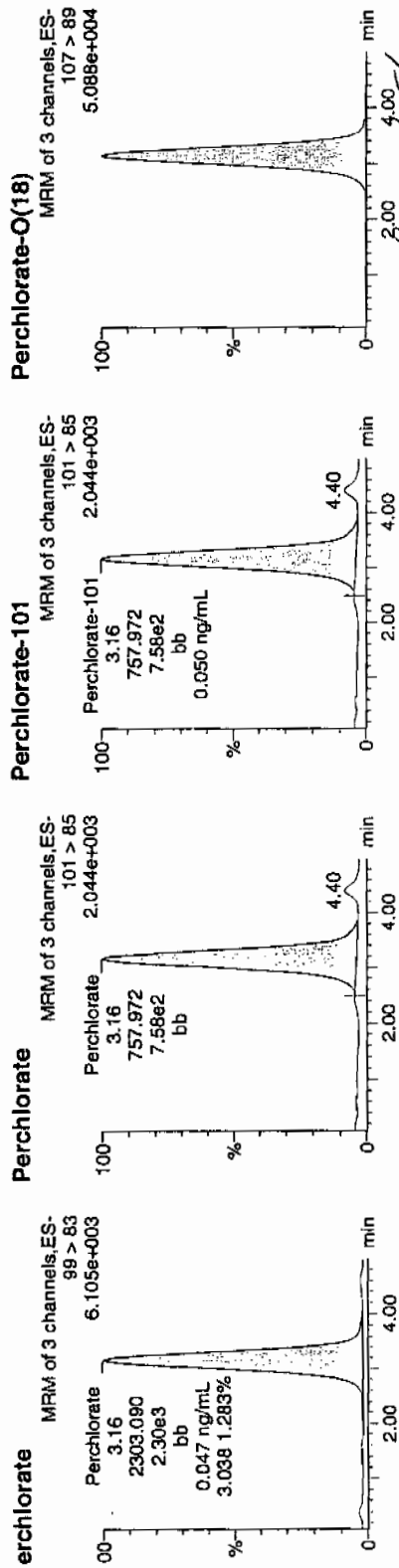
Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100219-07CRI	Perchlorate	3.18	2338.952	2338.952	bb			0.0478	95.66	-4.34	575.341	3.19
'CL100219-07CRI	Perchlorate-101	3.17	734.315	734.315	bb			0.0481	96.29	-3.71	259.348	
'CL100219-07CRI	Perchlorate-O(18)	3.17	20606.650	20606.650	bb			0.5036	100.72	0.72	10983...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Sample Name: per0223050a
 Date: 23-Feb-2010
 Time: 19:09:11
 Method: WCL100219-07CRI
 Label: 1:2,B

*Per
 02-24-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100219-07CRI	Perchlorate	3.16	2303.090	2303.090	bb			0.0471	94.19	-5.81	621.859	3.04
CL100219-07CRI	Perchlorate-101	3.16	757.972	757.972	bb			0.0497	99.39	-0.61	379.074	
CL100219-07CRI	Perchlorate-O(18)	3.15	19230.377	19230.377	bb			0.4700	93.99	-6.01	5771.8...	

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

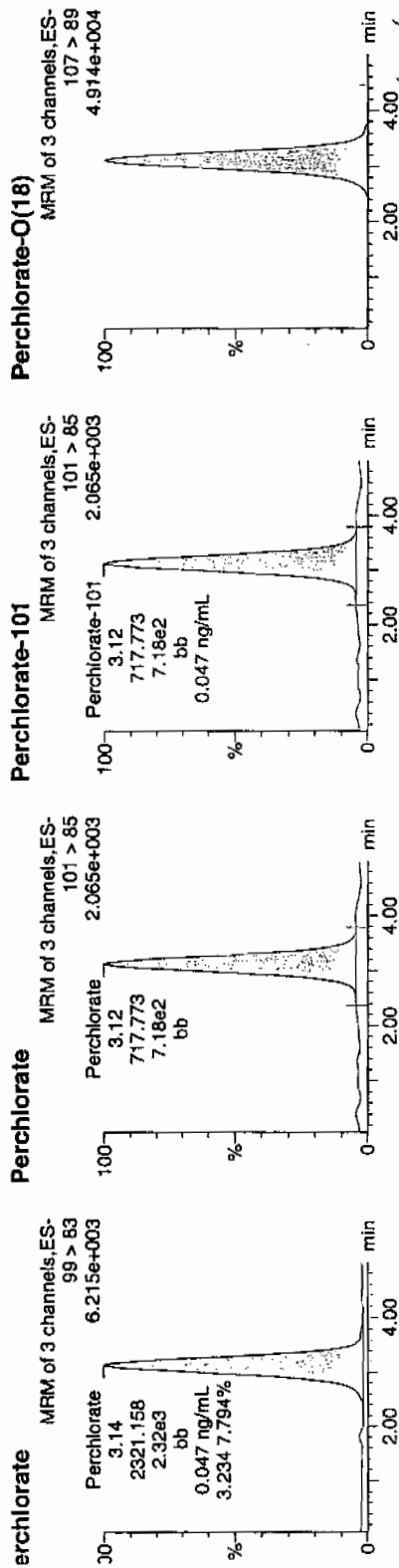
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charfers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

ast Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 rinted: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

ame: per0223063a
 ate: 23-Feb-2010
 ime: 20:54:02
 i: WCL100219-07CRI
 ial: 1:2,B

*Run
 and
 02:27:10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100219-07CRI	Perchlorate	3.14	2321.158	2321.158	bb			0.0475	94.93	-5.07	88.026	3.23
CL100219-07CRI	Perchlorate-101	3.12	717.773	717.773	bb			0.0471	94.12	-5.88	899.037	
CL100219-07CRI	Perchlorate-O(18)	3.11	18669.115	18669.115	bb			0.4563	91.25	-8.75	2265.6...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950068
 Extraction Type: Solid Prep
 Client Sample No. MB
 Date Received: 18-FEB-10
 GEL Job No (SDG): 10-1517
 GEL Sample ID: 1202035660
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	23-FEB-10 17:32	per0223038a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	23-FEB-10 17:32	per0223038a
	Perchlorate-O(18)			4.90	ug/kg		1	23-FEB-10 17:32	per0223038a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223038a

Date: 23-Feb-2010

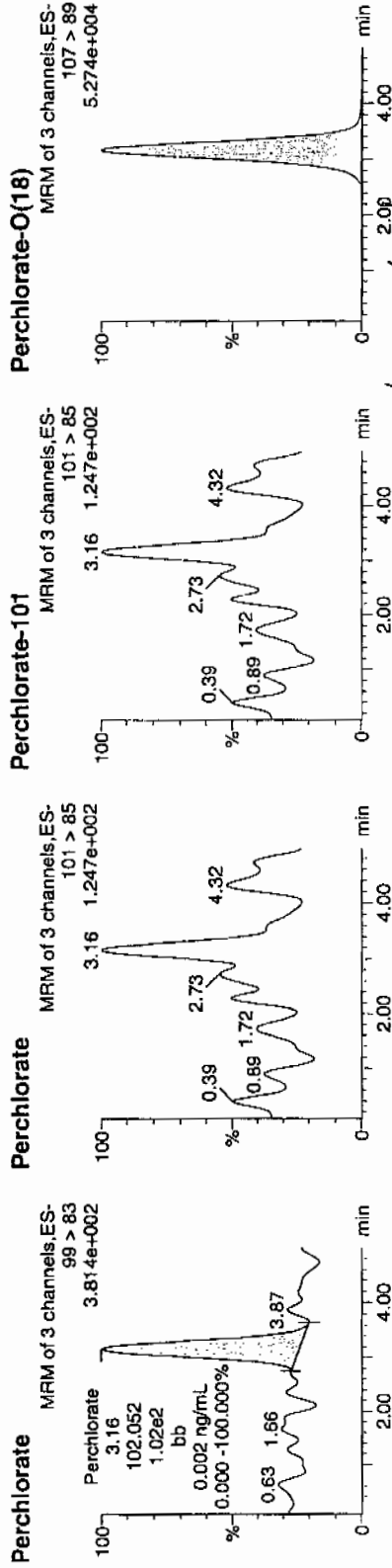
Time: 17:32:27

ID: 1202035660

Vial: 2:1,A

WZD
02-24-10

1202035660 | 1950071 | 103 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035660	Perchlorate	99 > 83	3.16	102.052	102.052	bb			0.0021			66.515	0.00
1202035660	Perchlorate-101	101 > 85											
1202035660	Perchlorate-O(18)	107 > 89	3.16	20052.578	20052.578	bb			0.4901	98.01	-1.99	3381.9...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1517

GEL Sample ID: 1202035661

Date Filtered: 18-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	1.98	ug/kg	J	1	23-FEB-10 17:40	per0223039a
	Perchlorate Isotope Ratio			3.1			1	23-FEB-10 17:40	per0223039a
14797-73-0	Perchlorate-101	.5	2	2.04	ug/kg		1	23-FEB-10 17:40	per0223039a
	Perchlorate-O(18)			4.69	ug/kg		1	23-FEB-10 17:40	per0223039a

[^] 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

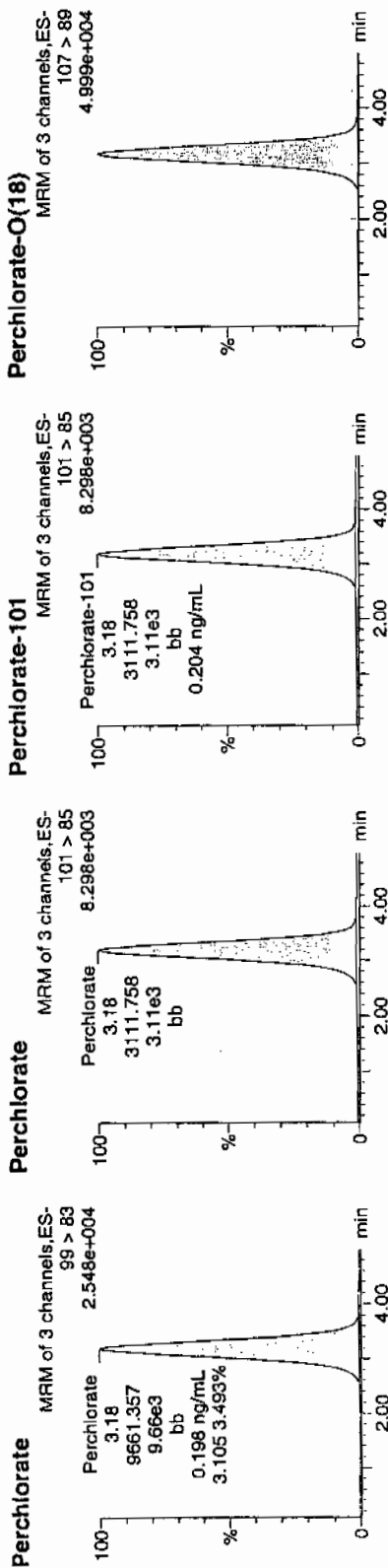
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223039a
 Date: 23-Feb-2010
 Time: 17:40:39
 ID: 1202035661
 Vial: 2:1,B

09.24.10

LANC | 950071 | 5000 | 65 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035661	Perchlorate	99 > 83	3.18	9661.357	9661.357	bb			-0.1976	98.78	-1.22	3441.0...	3.10
1202035661	Perchlorate-101	101 > 85	3.18	3111.758	3111.758	bb			0.2040	102.01	2.01	214.221	
1202035661	Perchlorate-O(18)	107 > 89	3.17	19174.484	19174.484	bb			0.4686	93.72	-6.28	5052.6...	

9661.357
 4890.4 = 0.1976
 4890.4 / 2510

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: 950068
 Analyst: Lynne Russell
 Method: SW846 6850 Modified
 Lab SOP: GL-OA-E-067 REV# 6
 Instrument: MicroMass Quattro Ultima

Verified by:

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202035660 NIB	18-FEB-2010 13:17:00	2	20	10
1202035661 LCS	18-FEB-2010 13:17:00	2	20	10
245998001	18-FEB-2010 13:17:00	2	20	10
245998002	18-FEB-2010 13:17:00	2	20	10
245998003	18-FEB-2010 13:17:00	2	20	10
245998004	18-FEB-2010 13:17:00	2	20	10
245998005	18-FEB-2010 13:17:00	2	20	10
245998006	18-FEB-2010 13:17:00	2	20	10
245998007	18-FEB-2010 13:17:00	2	20	10
245998008	18-FEB-2010 13:17:00	2	20	10
245998009	18-FEB-2010 13:17:00	2	20	10
246055001	18-FEB-2010 13:17:00	2	20	10
1202035662 MS (246055001)	18-FEB-2010 13:17:00	2	20	10
1202035663 MSD (246055001)	18-FEB-2010 13:17:00	2	20	10
246055002	18-FEB-2010 13:17:00	2	20	10
246055003	18-FEB-2010 13:17:00	2	20	10
246055004	18-FEB-2010 13:17:00	2	20	10
246055005	18-FEB-2010 13:17:00	2	20	10
246055006	18-FEB-2010 13:17:00	2	20	10
246055007	18-FEB-2010 13:17:00	2	20	10
246055008	18-FEB-2010 13:17:00	2	20	10
246055009	18-FEB-2010 13:17:00	2	20	10
1202035664 LCS	18-FEB-2010 13:17:00	2	20	10

Comments:

De-salting cartridges used: 091130-1-Ba and 100112-1-H.

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/23/10
Extr. Injection Volume: 20uL
Sequence Number: per022310a
Initial Calibration Date: 02/23/10

Method: EPA 6850-Modified
Int. Std.: UCL100126-01
Mobile Phase Lot#: 1269535, 1261217
Standard-Samp Reagent Lot#: 1261217

Reviewed BY: *[Signature]*
Date: 02/25/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100219-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0223001a	IPB001	CWW	2/23/2010 12:33			1		USE	B
per0223002a	IPB001	CWW	2/23/2010 12:42			1		USE	B
per0223003a	WCLICAL-01	CWW	2/23/2010 12:50			1		USE	I
per0223004a	WCLICAL-02	CWW	2/23/2010 12:58			1		USE	I
per0223005a	WCLICAL-03	CWW	2/23/2010 13:06			1		USE	I
per0223006a	WCLICAL-04	CWW	2/23/2010 13:14			1		USE	I
per0223007a	WCLICAL-05	CWW	2/23/2010 13:22			1		USE	I
per0223008a	IPB002	CWW	2/23/2010 13:30			1		USE	B
per0223009a	WCLICV	CWW	2/23/2010 13:38			1		USE	C
per0223010a	IPB003	CWW	2/23/2010 13:46			1		USE	B
per0223011a	WCLCRI	CWW	2/23/2010 13:55			1		USE	C
per0223012a	1202035646	CWW	2/23/2010 14:03	950063	10-1514	1	LANL	USE	S
per0223013a	1202035647	CWW	2/23/2010 14:11	950063	10-1514	1	LANL	USE	S
per0223014a	1202035650	CWW	2/23/2010 14:19	950063	10-1514	1	LANL	USE	S
per0223015a	245979001	CWW	2/23/2010 14:27	950063	10-1514	1	LANL	USE	S
per0223016a	1202035648	CWW	2/23/2010 14:35	950063	10-1514	1	LANL	USE	S
per0223017a	1202035649	CWW	2/23/2010 14:43	950063	10-1514	1	LANL	USE	S
per0223018a	245979002	CWW	2/23/2010 14:51	950063	10-1514	1	LANL	USE	S
per0223019a	245979003	CWW	2/23/2010 14:59	950063	10-1514	1	LANL	USE	S
per0223020a	245979004	CWW	2/23/2010 15:07	950063	10-1514	1	LANL	USE	S
per0223021a	245979005	CWW	2/23/2010 15:15	950063	10-1514	1	LANL	USE	S
per0223022a	WCLCCV	CWW	2/23/2010 15:23			1		USE	C
per0223023a	IPB004	CWW	2/23/2010 15:31			1		USE	B
per0223024a	WCLCRI	CWW	2/23/2010 15:39			1		USE	C
per0223025a	245979006	CWW	2/23/2010 15:47	950063	10-1514	1	LANL	USE	S
per0223026a	245979007	CWW	2/23/2010 15:55	950063	10-1514	1	LANL	USE	S
per0223027a	245979008	CWW	2/23/2010 16:03	950063	10-1514	1	LANL	USE	S
per0223028a	245979009	CWW	2/23/2010 16:11	950063	10-1514	1	LANL	USE	S
per0223029a	245979010	CWW	2/23/2010 16:20	950063	10-1514	1	LANL	USE	S

per0223030a	245979011	CWW	2/23/2010 16:28	950063	10-1514	1	LANL	USE	S
per0223031a	245979012	CWW	2/23/2010 16:36	950063	10-1514	1	LANL	USE	S
per0223032a	245979013	CWW	2/23/2010 16:44	950063	10-1514	1	LANL	USE	S
per0223033a	245979014	CWW	2/23/2010 16:52	950063	10-1514	1	LANL	USE	S
per0223034a	245979015	CWW	2/23/2010 17:00	950063	10-1514	1	LANL	USE	S
per0223035a	WCLCCV	CWW	2/23/2010 17:08			1		USE	C
per0223036a	IPB005	CWW	2/23/2010 17:16			1		USE	B
per0223037a	WCLCRI	CWW	2/23/2010 17:24			1		USE	C
per0223038a	1202035660	CWW	2/23/2010 17:32	950071	VARIOUS	1	LANL	USE	S
per0223039a	1202035661	CWW	2/23/2010 17:40	950071	VARIOUS	1	LANL	USE	S
per0223040a	1202035664	CWW	2/23/2010 17:48	950071	VARIOUS	1	LANL	USE	S
per0223041a	245998001	CWW	2/23/2010 17:56	950071	10-1517	1	LANL	USE	S
per0223042a	245998002	CWW	2/23/2010 18:04	950071	10-1517	1	LANL	USE	S
per0223043a	245998003	CWW	2/23/2010 18:12	950071	10-1517	1	LANL	USE	S
per0223044a	245998004	CWW	2/23/2010 18:20	950071	10-1517	1	LANL	USE	S
per0223045a	245998005	CWW	2/23/2010 18:28	950071	10-1517	1	LANL	USE	S
per0223046a	245998006	CWW	2/23/2010 18:36	950071	10-1517	1	LANL	USE	S
per0223047a	245998007	CWW	2/23/2010 18:44	950071	10-1517	1	LANL	USE	S
per0223048a	WCLCCV	CWW	2/23/2010 18:52			1		USE	C
per0223049a	IPB006	CWW	2/23/2010 19:01			1		USE	B
per0223050a	WCLCRI	CWW	2/23/2010 19:09			1		USE	C
per0223051a	245998008	CWW	2/23/2010 19:17	950071	10-1517	1	LANL	USE	S
per0223052a	245998009	CWW	2/23/2010 19:25	950071	10-1517	1	LANL	USE	S
per0223053a	246055001	CWW	2/23/2010 19:33	950071	10-1545	1	LANL	USE	S
per0223054a	1202035662	CWW	2/23/2010 19:41	950071	10-1545	1	LANL	USE	S
per0223055a	1202035663	CWW	2/23/2010 19:49	950071	10-1545	1	LANL	USE	S
per0223056a	246055002	CWW	2/23/2010 19:57	950071	10-1545	1	LANL	USE	S
per0223057a	246055003	CWW	2/23/2010 20:05	950071	10-1545	1	LANL	USE	S
per0223058a	246055004	CWW	2/23/2010 20:13	950071	10-1545	1	LANL	USE	S
per0223059a	246055005	CWW	2/23/2010 20:21	950071	10-1545	1	LANL	USE	S
per0223060a	246055006	CWW	2/23/2010 20:29	950071	10-1545	1	LANL	USE	S
per0223061a	WCLCCV	CWW	2/23/2010 20:37			1		USE	C
per0223062a	IPB007	CWW	2/23/2010 20:46			1		USE	B
per0223063a	WCLCRI	CWW	2/23/2010 20:54			1		USE	C
per0223064a	246055007	CWW	2/23/2010 21:02	950071	10-1545	1	LANL	USE	S
per0223065a	246055008	CWW	2/23/2010 21:10	950071	10-1545	1	LANL	USE	S
per0223066a	246055009	CWW	2/23/2010 21:18	950071	10-1545	1	LANL	USE	S

per0223067a	IPB008	CWW	2/23/2010 21:26	952906	VARIOUS	1	LANL	USE	B
per0223068a	1202042433	CWW	2/23/2010 21:34	952906	VARIOUS	1	LANL	USE	S
per0223069a	1202042434	CWW	2/23/2010 21:42	952906	VARIOUS	1	LANL	USE	S
per0223070a	1202042437	CWW	2/23/2010 21:50	952906	VARIOUS	1	LANL	USE	S
per0223071a	246607001	CWW	2/23/2010 21:58	952906	10-1699-1	1	LANL	USE	S
per0223072a	246607002	CWW	2/23/2010 22:06	952906	10-1699-1	1	LANL	USE	S
per0223073a	246607003	CWW	2/23/2010 22:14	952906	10-1699-1	1	LANL	USE	S
per0223074a	WCLCCV	CWW	2/23/2010 22:22			1		USE	C
per0223075a	IPB009	CWW	2/23/2010 22:31			1		USE	B
per0223076a	WCLCRI	CWW	2/23/2010 22:39			1		USE	C
per0223077a	246607004	CWW	2/23/2010 22:47	952906	10-1699-1	1	LANL	USE	S
per0223078a	246607005	CWW	2/23/2010 22:55	952906	10-1699-1	1	LANL	USE	S
per0223079a	246607006	CWW	2/23/2010 23:03	952906	10-1699-1	1	LANL	USE	S
per0223080a	246610001	CWW	2/23/2010 23:11	952906	10-1701	1	LANL	USE	S
per0223081a	246610002	CWW	2/23/2010 23:19	952906	10-1701	1	LANL	USE	S
per0223082a	246610003	CWW	2/23/2010 23:27	952906	10-1701	1	LANL	USE	S
per0223083a	246611001	CWW	2/23/2010 23:35	952906	10-1702	1	LANL	USE	S
per0223084a	246611002	CWW	2/23/2010 23:43	952906	10-1702	1	LANL	USE	S
per0223085a	246611003	CWW	2/23/2010 23:51	952906	10-1702	1	LANL	USE	S
per0223086a	WCLCCV	CWW	2/23/2010 23:59			1		USE	C
per0223087a	IPB010	CWW	2/24/2010 0:08			1		USE	B
per0223088a	WCLCRI	CWW	2/24/2010 0:16			1		USE	C
per0223089a	246679001	CWW	2/24/2010 0:24	952906	10-1704	1	LANL	USE	S
per0223090a	1202042435	CWW	2/24/2010 0:32	952906	10-1704	1	LANL	USE	S
per0223091a	1202042436	CWW	2/24/2010 0:40	952906	10-1704	1	LANL	USE	S
per0223092a	246679002	CWW	2/24/2010 0:48	952906	10-1704	1	LANL	USE	S
per0223093a	246679003	CWW	2/24/2010 0:56	952906	10-1704	1	LANL	USE	S
per0223094a	246679004	CWW	2/24/2010 1:04	952906	10-1704	1	LANL	USE	S
per0223095a	246679005	CWW	2/24/2010 1:12	952906	10-1704	1	LANL	USE	S
per0223096a	246679006	CWW	2/24/2010 1:20	952906	10-1704	1	LANL	USE	S
per0223097a	246679007	CWW	2/24/2010 1:28	952906	10-1704	1	LANL	USE	S
per0223098a	246679008	CWW	2/24/2010 1:36	952906	10-1704	1	LANL	USE	S
per0223099a	WCLCCV	CWW	2/24/2010 1:44			1		USE	C
per0223100a	IPB011	CWW	2/24/2010 1:52			1		USE	B
per0223101a	WCLCRI	CWW	2/24/2010 2:00			1		USE	C
per0223102a	1202042671	CWW	2/24/2010 2:08	952990	VARIOUS	1	LANL	USE	S
per0223103a	1202042672	CWW	2/24/2010 2:17	952990	VARIOUS	1	LANL	USE	S

per0223104a	1202042675	CWW	2/24/2010 2:25	952990	VARIOUS	1	LANL	USE	S
per0223105a	246719001	CWW	2/24/2010 2:33	952990	10-1729	1	LANL	USE	S
per0223106a	1202042673	CWW	2/24/2010 2:41	952990	10-1729	1	LANL	USE	S
per0223107a	1202042674	CWW	2/24/2010 2:49	952990	10-1729	1	LANL	USE	S
per0223108a	246719002	CWW	2/24/2010 2:57	952990	10-1729	1	LANL	USE	S
per0223109a	246719003	CWW	2/24/2010 3:05	952990	10-1729	1	LANL	USE	S
per0223110a	WCLCCV	CWW	2/24/2010 3:13			1		USE	C
per0223111a	IPB012	CWW	2/24/2010 3:21			1		USE	B
per0223112a	WCLCRI	CWW	2/24/2010 3:29			1		USE	C
per0223113a	246719004	CWW	2/24/2010 3:37	952990	10-1729	1	LANL	USE	S
per0223114a	246719005	CWW	2/24/2010 3:46	952990	10-1729	1	LANL	USE	S
per0223115a	246719006	CWW	2/24/2010 3:54	952990	10-1729	1	LANL	USE	S
per0223116a	246719007	CWW	2/24/2010 4:02	952990	10-1729	1	LANL	USE	S
per0223117a	246719008	CWW	2/24/2010 4:10	952990	10-1729	1	LANL	USE	S
per0223118a	246741001	CWW	2/24/2010 4:18	952990	10-1711	1	LANL	USE	S
per0223119a	246741002	CWW	2/24/2010 4:26	952990	10-1711	1	LANL	USE	S
per0223120a	246741003	CWW	2/24/2010 4:34	952990	10-1711	1	LANL	USE	S
per0223121a	WCLCCV	CWW	2/24/2010 4:42			1		USE	C
per0223122a	IPB013	CWW	2/24/2010 4:50			1		USE	B
per0223123a	WCLCRI	CWW	2/24/2010 4:58			1		USE	C
per0223124a	246741004	CWW	2/24/2010 5:06	952990	10-1711	1	LANL	USE	S
per0223125a	246741005	CWW	2/24/2010 5:14	952990	10-1711	1	LANL	USE	S
per0223126a	246741006	CWW	2/24/2010 5:22	952990	10-1711	1	LANL	USE	S
per0223127a	246741007	CWW	2/24/2010 5:30	952990	10-1711	1	LANL	USE	S
per0223128a	246741008	CWW	2/24/2010 5:38	952990	10-1711	1	LANL	USE	S
per0223129a	246741009	CWW	2/24/2010 5:46	952990	10-1711	1	LANL	USE	S
per0223130a	246741010	CWW	2/24/2010 5:54	952990	10-1711	1	LANL	USE	S
per0223131a	246741011	CWW	2/24/2010 6:02	952990	10-1711	1	LANL	USE	S
per0223132a	WCLCCV	CWW	2/24/2010 6:11			1		USE	C
per0223133a	IPB014	CWW	2/24/2010 6:19			1		USE	B
per0223134a	WCLCRI	CWW	2/24/2010 6:27			1		USE	C

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

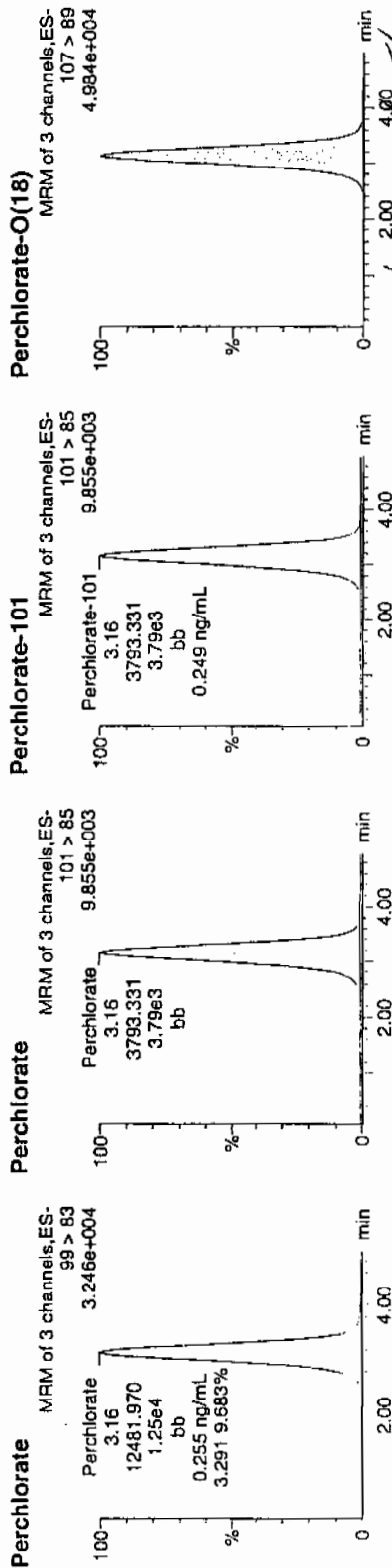
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223054a
Date: 23-Feb-2010
Time: 19:41:29
ID: 1202035662
Vial: 2:3B

08-24-10

LANC | 95071 | 5020 | MS | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035662	Perchlorate	99 > 83	3.16	12481.970	12481.970	bb			0.2552	127.62	27.62	7557.7...	3.29
1202035662	Perchlorate-101	101 > 85	3.16	3793.331	3793.331	bb			0.2487	124.35	24.35	857.059	
1202035662	Perchlorate-O(18)	107 > 89	3.14	18922.586	18922.586	bb			0.4624	92.49	-7.51	4697.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223055a

Date: 23-Feb-2010

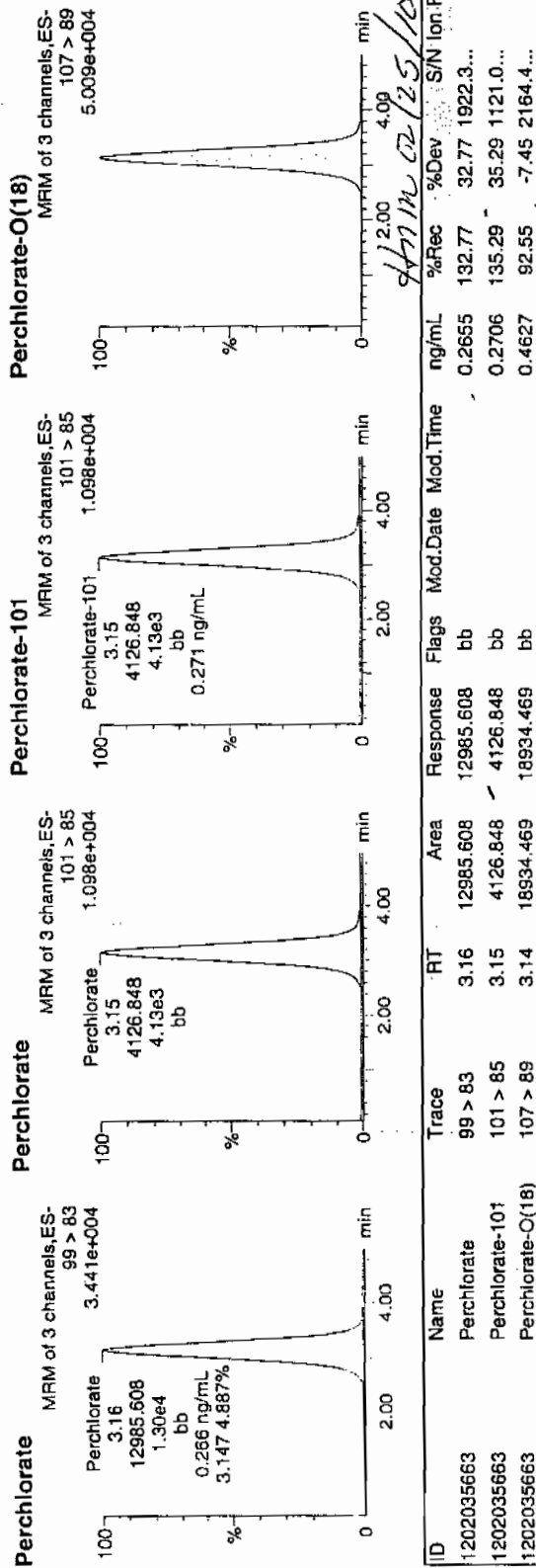
Time: 19:49:31

ID: 1202035663

Vial: 2:3,C

16720 | 950071 | 50020 | MSD | 11

02-24-10



Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1517-1**

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: 950028

Prep Batch Number: 950027

Sample Analysis

Sample ID	Client ID
246000001	RE15-10-8124
1202035573	Interference Check Sample (ICS)
1202035565	Method Blank (MB)
1202035566	Laboratory Control Sample (LCS)
1202035571	245911001(RE16-10-1400) Matrix Spike (MS)
1202035572	245911001(RE16-10-1400) 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.

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.

10-1517-1-PERLCMS

Page 1 of 4

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 245911001 (RE16-10-1400) from SDG 10-1487-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

10-1517-1-PERLCMS

Page 2 of 4

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Harbert N. Maurz Date: 02/11/10

SAMPLE DATA SUMMARY

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: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8124

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517-1

GEL Sample ID: 246000001

Date Filtered: 07-FEB-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	08-FEB-10 21:13	per0208068a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:13	per0208068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:13	per0208068a
	Perchlorate-O(18)			0.478	ug/L		1	08-FEB-10 21:13	per0208068a

[^] 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): 10-1517-1

Extract Batch Code: 950027 Date Filtered: 07-FEB-10

Matrix: WASTE WATER Sample ID: 1202035566

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.196	ug/L	98.0		85 - 115
Perchlorate Isotope Ratio		3.01				-
Perchlorate-101	0.200	.207	ug/L	103		85 - 115
Perchlorate-O(18)		.483	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): 10-1517-1

Extract Batch Code: 950027 Date Filtered: 07-FEB-10

Matrix: WATER Sample ID: 1202035573

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.211	ug/L	105		70 - 130
Perchlorate Isotope Ratio		3.12				
Perchlorate-101	0.200	.214	ug/L	107		70 - 130
Perchlorate-O(18)		.488	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

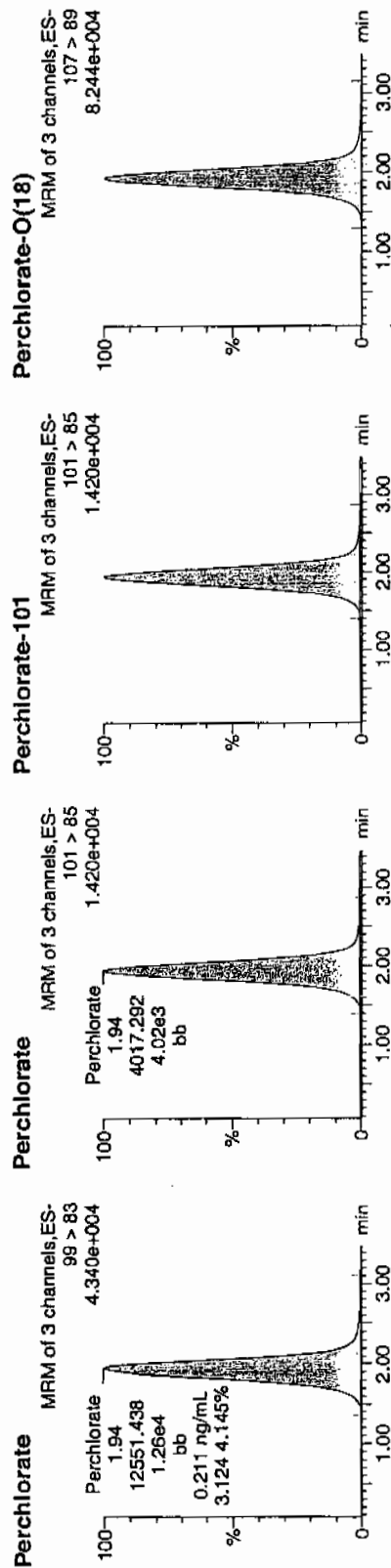
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208052a
Date: 08-Feb-2010
Time: 19:28:20
ID: 1202035573
Vial: 2:1,C

02-09-10

Law | 950078 | 122 | 105 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	Dev	SN/ION Ratio
1202035573	Perchlorate	99 > 83	1.94	12551.438	12551.438	bb			0.2108	105.42	5.42 1217.2...
1202035573	Perchlorate-101	101 > 85	1.94	4017.292	4017.292	bb			0.2140	107.01	7.01 2883.8...
1202035573	Perchlorate-O(18)	107 > 89	1.93	23733.555	23733.555	bb			0.4879	97.59	-2.41 5289.0...

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering LaboratoriesLab Code: GELGEL Job No (SDG): 10-1517-1Extract Batch Code: 950027Date Extracted: 07-FEB-10GEL MS/PS ID: 1202035571Client ID: RE16-10-1400GEL MSD/PSD ID: 1202035572QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00204	ug/L	0.192	94.8		.198	98.1		3.39		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3			3.01			0			-
Perchlorate-101	0.200	0.00319	ug/L	0.203	99.9		.209	103		2.76		30	75 - 125
Perchlorate-O(18)	0	0.461	ug/L	0.468			.462			1.31			-

^ 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

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

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1517-1Lab Code: GELReporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-FEB-10	per0208001a	IPB001
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208001a	IPB001
Perchlorate	0.00	0	NA	08-FEB-10	per0208002a	IPB001
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208002a	IPB001

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

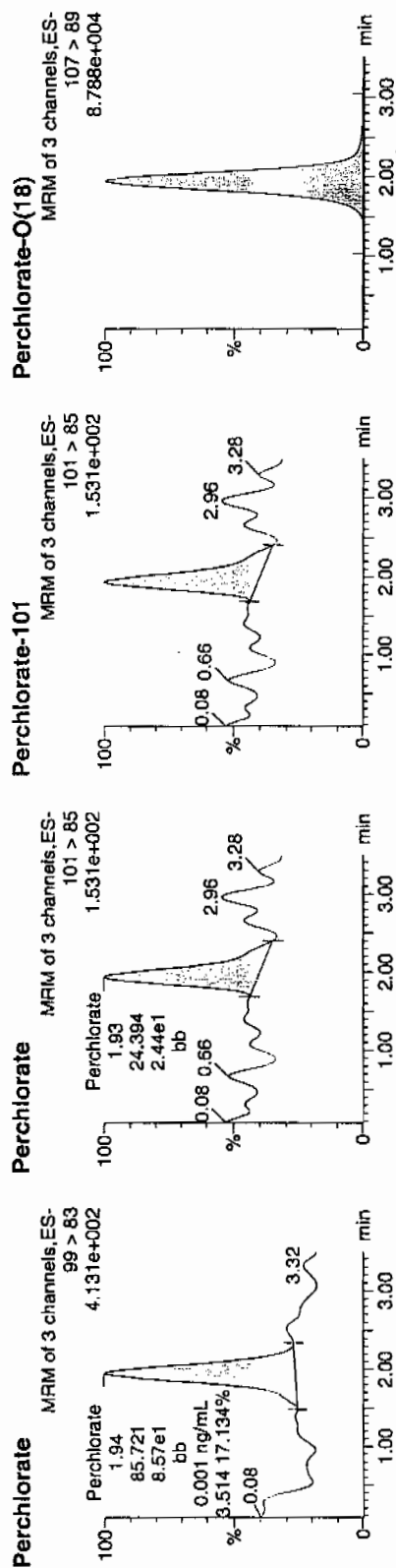
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020810a.mdb 09 Feb 2010 07:47:59
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020810a.cdb 09 Feb 2010 07:48:17

Name: per0208001a
Date: 08-Feb-2010
Time: 13:54:09
ID: IPB001
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.94	85.721	85.721	bb			0.0014	29.463		21.780	3.51
IPB001	Perchlorate-101	101 > 85	1.93	24.394	24.394	bb			0.0013	106.15		6.15	6489.2...
IPB001	Perchlorate-O(18)	107 > 89	1.94	25816.436	25816.436	bb			0.5308				

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
 Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208002a

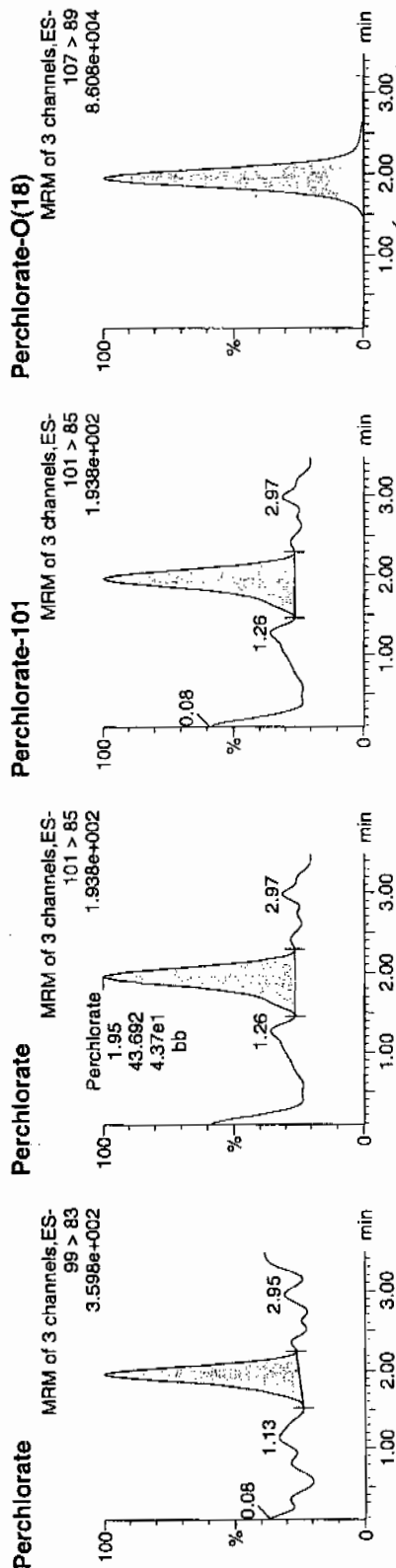
Date: 08-Feb-2010

Time: 14:00:52

ID: IPB001

Vial: 1:1,A

620
0209-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.97	72.177	72.177	bb			0.0012			25.847	1.65
IPB001	Perchlorate-101	101 > 85	1.95	43.692	43.692	bb			0.0023			6.442	
IPB001	Perchlorate-O(18)	107 > 89	1.94	25472.947	25472.947	bb			0.5237	104.74	4.74	6120.9...	

0.444
620500

Perchlorate Continuing Calibration Blank

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1517-1

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	08-FEB-10	per0208008a	IPB002
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208008a	IPB002
Perchlorate	0.00	0	NA	08-FEB-10	per0208010a	IPB003
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208010a	IPB003
Perchlorate	0.00	0	NA	08-FEB-10	per0208022a	IPB004
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208022a	IPB004
Perchlorate	0.00	0	NA	08-FEB-10	per0208026a	IPB005
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208026a	IPB005
Perchlorate	0.00	0	NA	08-FEB-10	per0208035a	IPB006
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208035a	IPB006
Perchlorate	0.00	0	NA	08-FEB-10	per0208048a	IPB007
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208048a	IPB007
Perchlorate	0.00	0	NA	08-FEB-10	per0208061a	IPB008

Perchlorate Continuing Calibration Blank

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

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1517-1Lab Code: GELReporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208061a	IPB008
Perchlorate	0.00	0	NA	08-FEB-10	per0208074a	IPB009
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208074a	IPB009

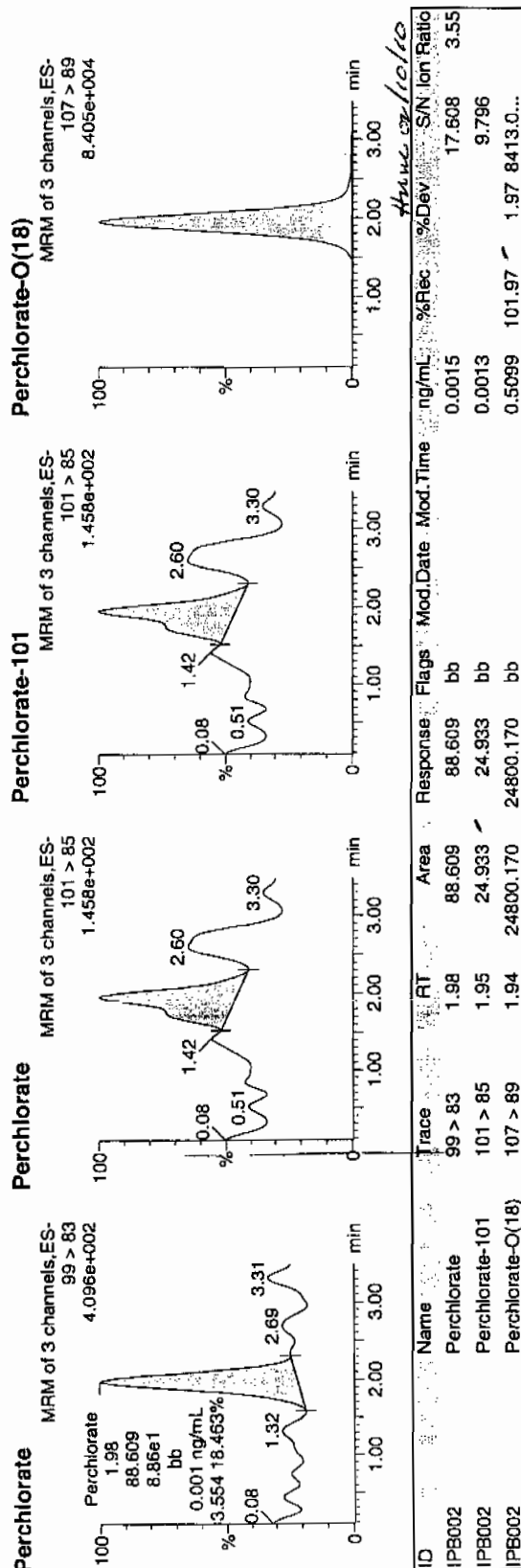
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208008a
Date: 08-Feb-2010
Time: 14:40:00
ID: IPB002
Vial: 1:1,A

02-01-10



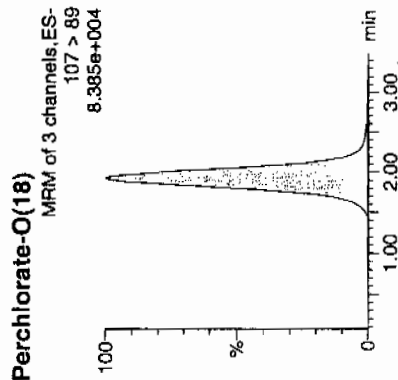
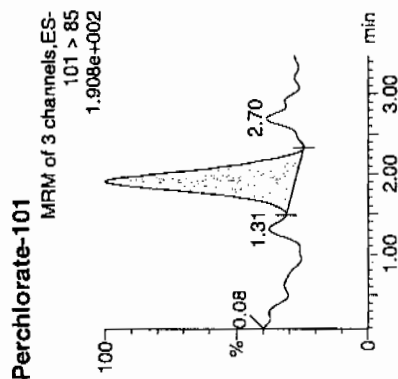
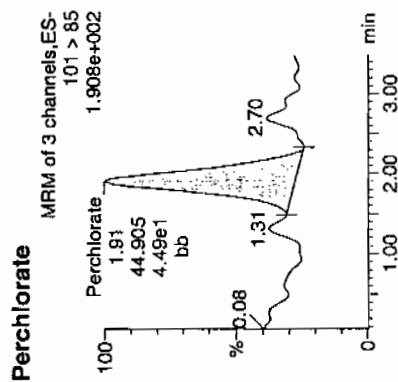
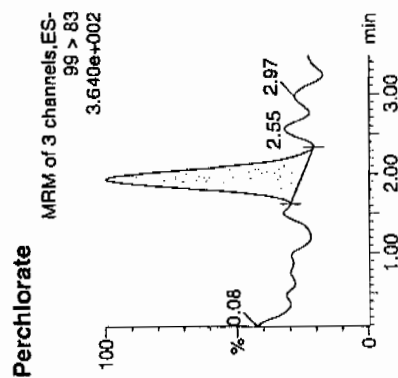
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208010a
Date: 08-Feb-2010
Time: 14:53:04
ID: IPB003
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
IPB003	Perchlorate	99 > 83	1.93	78.058	78.058	bb			0.0013			17.447	1.74
IPB003	Perchlorate-101	101 > 85	1.91	44.905	44.905	bb			0.0024			6.119	
IPB003	Perchlorate-O(18)	107 > 89	1.93	24645.639	24645.639	bb			0.5067	101.34	1.34	10100	

0624
200323

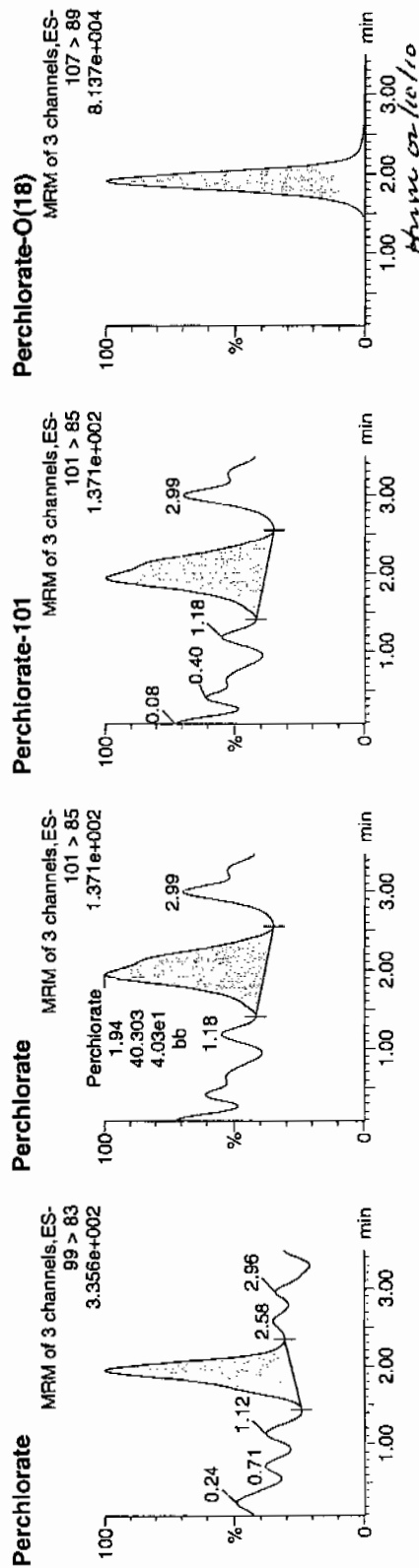
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208022a
Date: 08-Feb-2010
Time: 16:11:45
ID: IPB004
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83	1.94	78.709	78.709	bb			0.0013	20.514	1.95	20.91	
IPB004	Perchlorate-101	101 > 85	1.94	40.303	40.303	bb			0.0021	13.319		20.91	
IPB004	Perchlorate-O(18)	107 > 89	1.92	23985.541	23985.541	bb			0.4931	98.62	-1.38	5434.3..	20.91

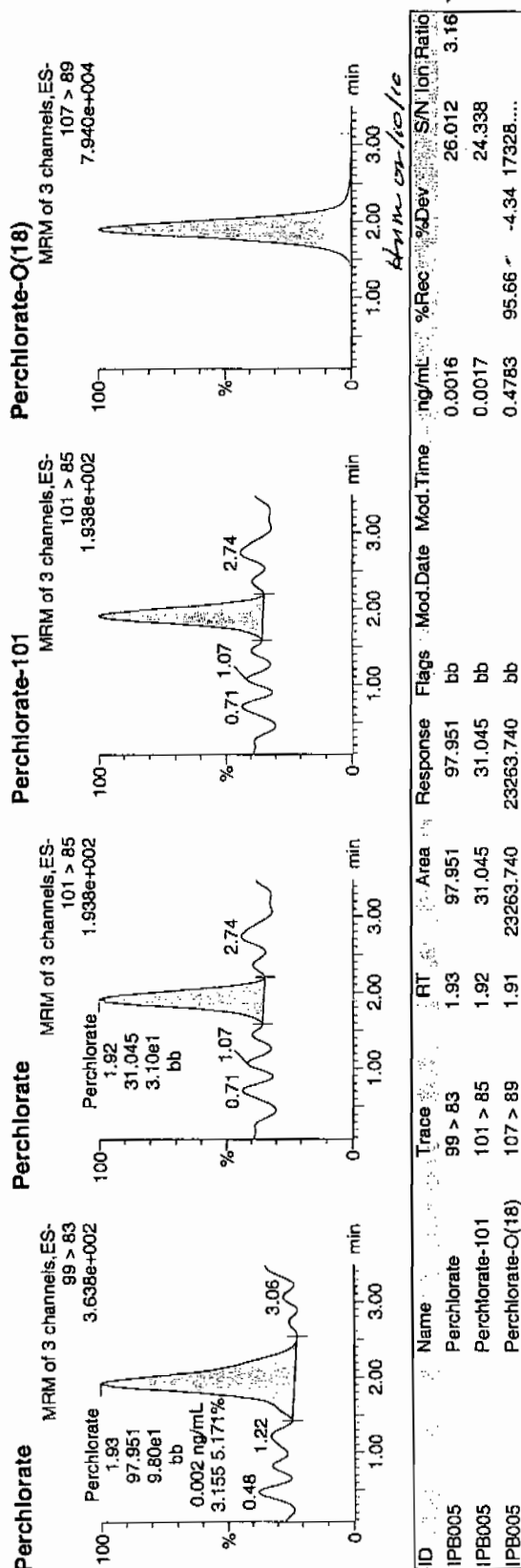
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208026a
Date: 08-Feb-2010
Time: 16:37:55
ID: IPB005
Vial: 1:1,A

0209-10



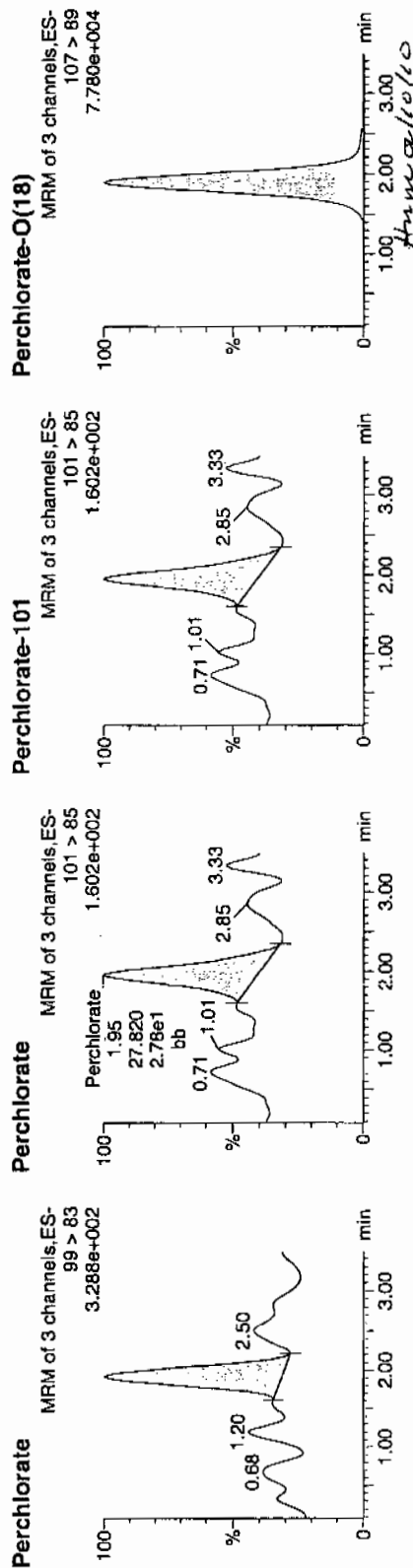
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208035a
Date: 08-Feb-2010
Time: 17:36:50
ID: IPB006
Vial: 1:1,A

CSJ
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83	1.92	61.682	61.682	bb			0.0010			7.589	2.22
IPB006	Perchlorate-101	101 > 85	1.95	27.820	27.820	bb			0.0015			8.535	
IPB006	Perchlorate-O(18)	107 > 89	1.89	22700.701	22700.701	bb			0.4667	93.34	-6.66	9296.2...	

0.004
2.0533

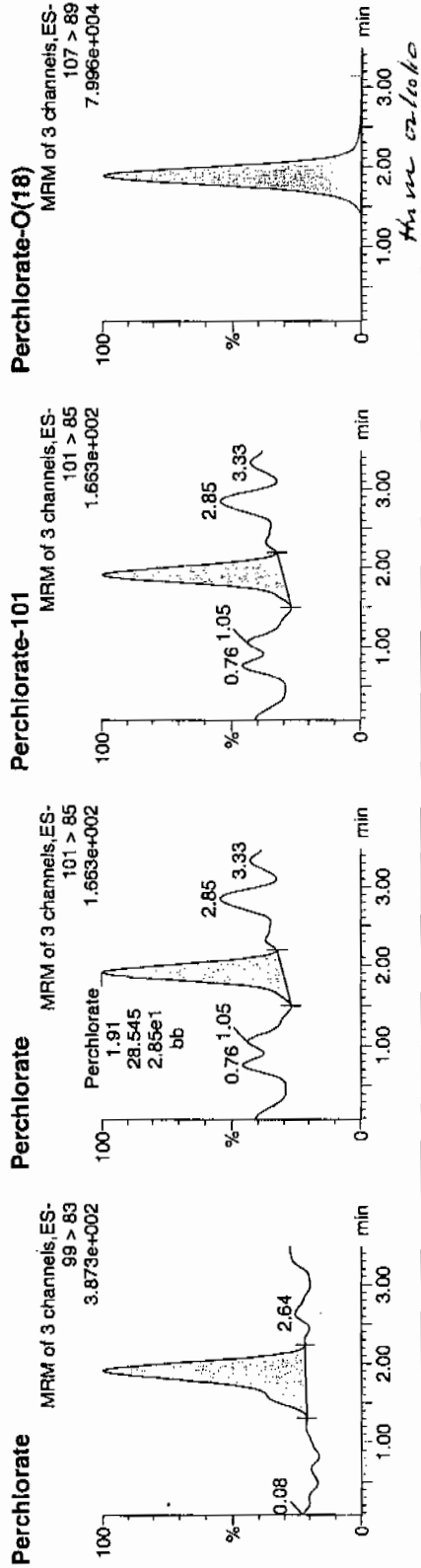
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208048a
Date: 08-Feb-2010
Time: 19:01:59
ID: IPB007
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83	1.92	98.695	98.695	bb			0.0017			45.617	3.46
IPB007	Perchlorate-101	101 > 85	1.91	28.545	28.545	bb			0.0015			16.585	
IPB007	Perchlorate-O(18)	107 > 89	1.88	23201.119	23201.119	bb			0.4770	95.40	-4.60	2781.0...	

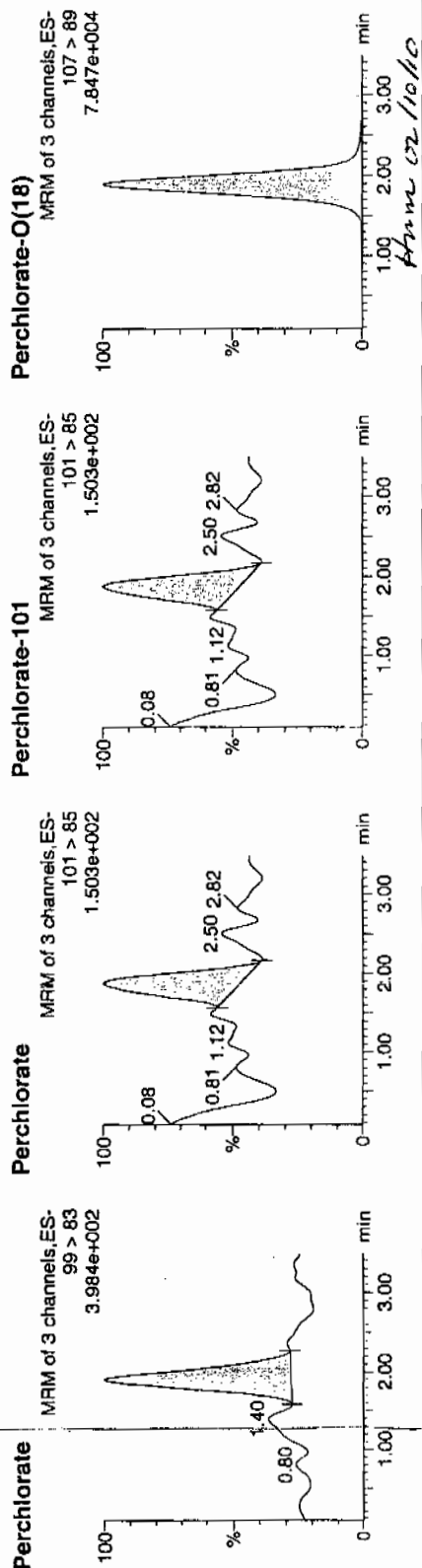
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208061a
Date: 08-Feb-2010
Time: 20:27:18
ID: IPB008
Vial: 1:1,A

Curry
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83	1.91	82.327	82.327	bb			0.0014			25.247	3.44
IPB008	Perchlorate-101	101 > 85	1.88	23.921	23.921	bb			0.0013			7.965	
IPB008	Perchlorate-O(18)	107 > 89	1.89	22850.625	22850.625	bb			0.4698	93.96	-6.04	9586.1...	

Quantify Sample Report MassLynx 4.0 SP4

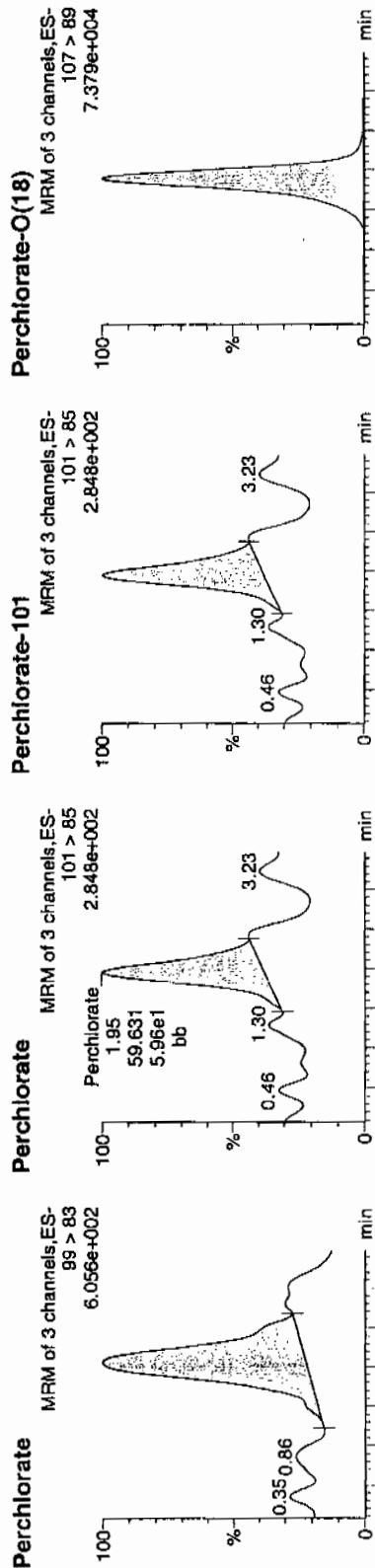
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
 Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208074a
 Date: 08-Feb-2010
 Time: 21:52:41
 ID: IPB009
 Vial: 1:1,A

Sum
 02-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83	2.05	246.817	246.817	bb			0.0041			12.504	4.14
IPB009	Perchlorate-101	101 > 85	1.95	59.631	59.631	bb			0.0032			10.438	
IPB009	Perchlorate-O(18)	107 > 89	1.89	23201.656	23201.656	bb			0.4770	95.40	-4.60	2554.5...	

0.024
 20.0300

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

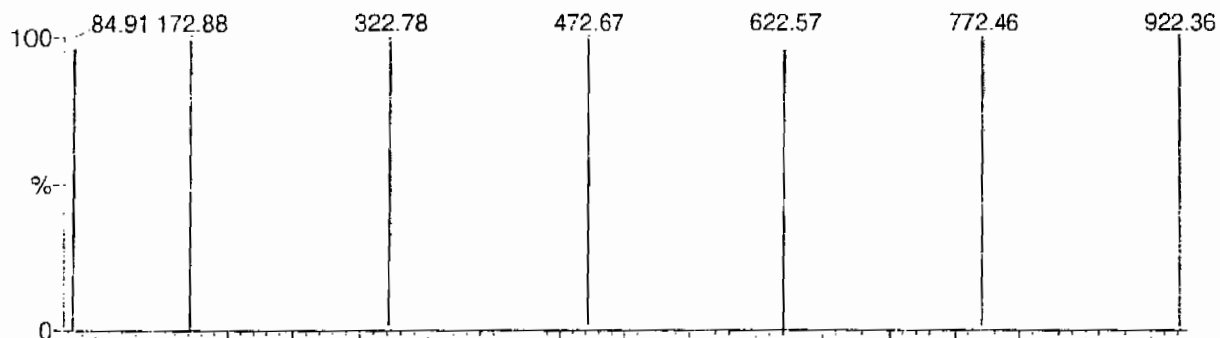
DATA HIGHLIGHTED BY CURVE 01-01-03

Data file: STATMS1 - Uncalibrated

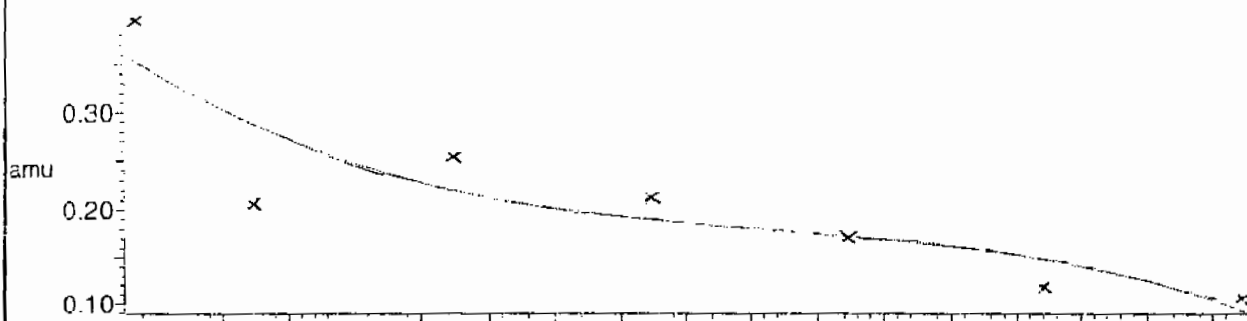
7 matches of 7 tested references



Reference file: Nairb

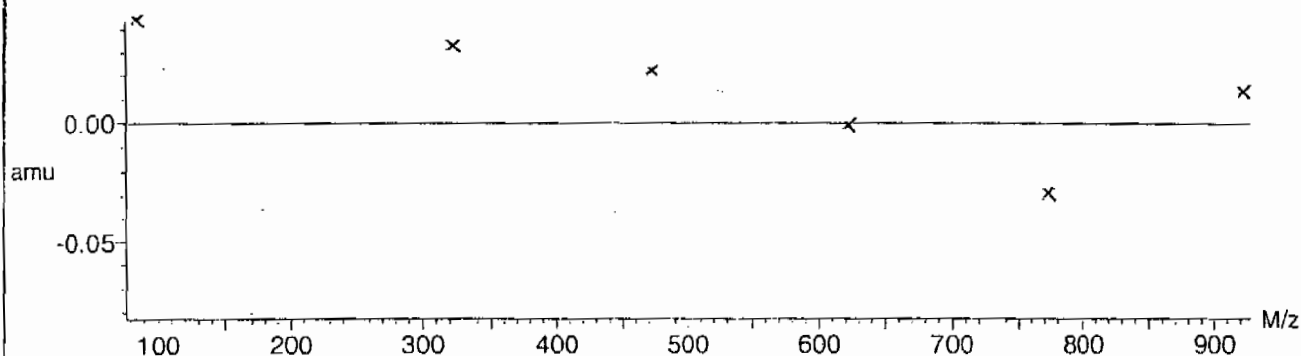


Mass difference (Raw - Ref mass)



Residuals

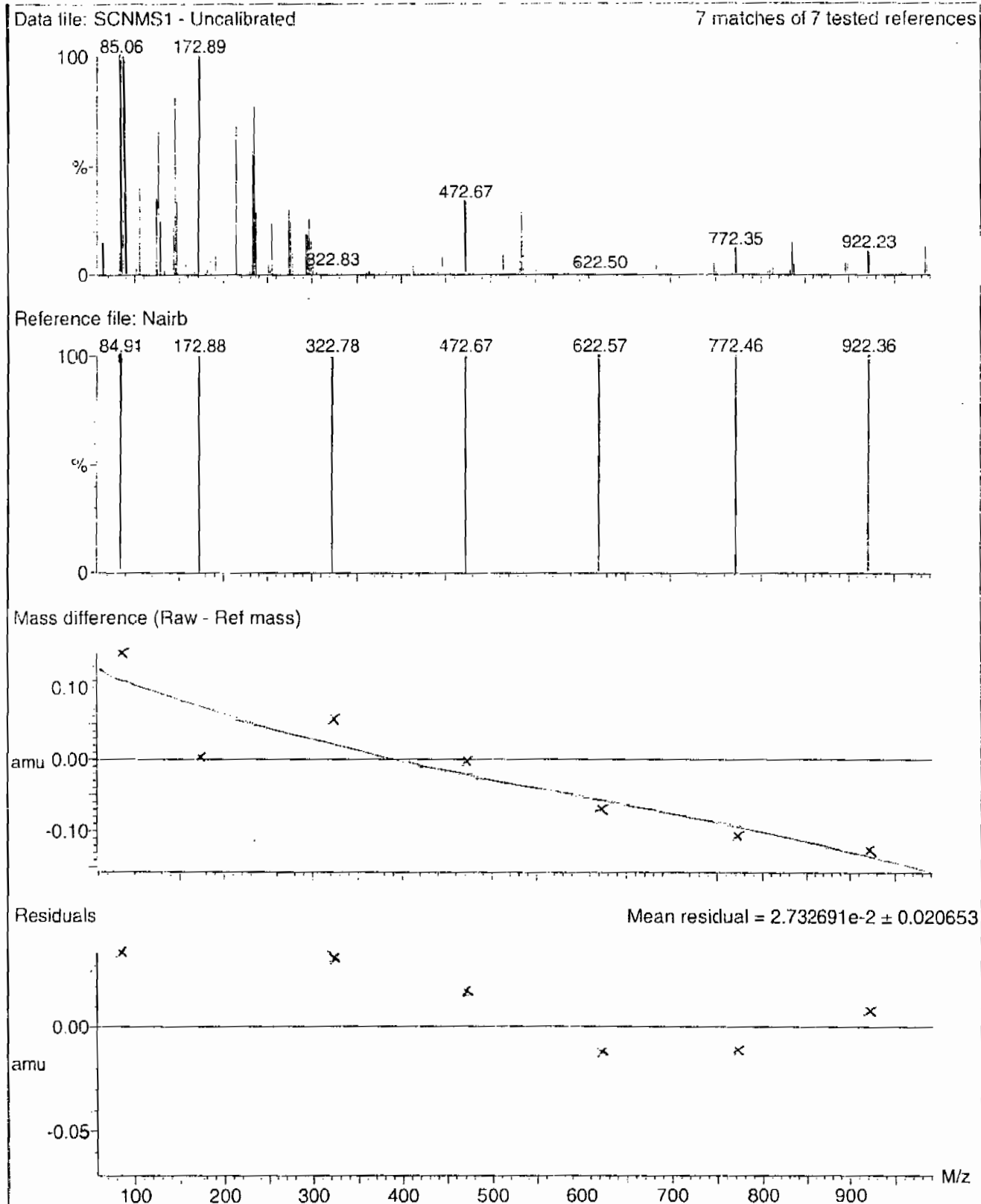
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:20:09 2008



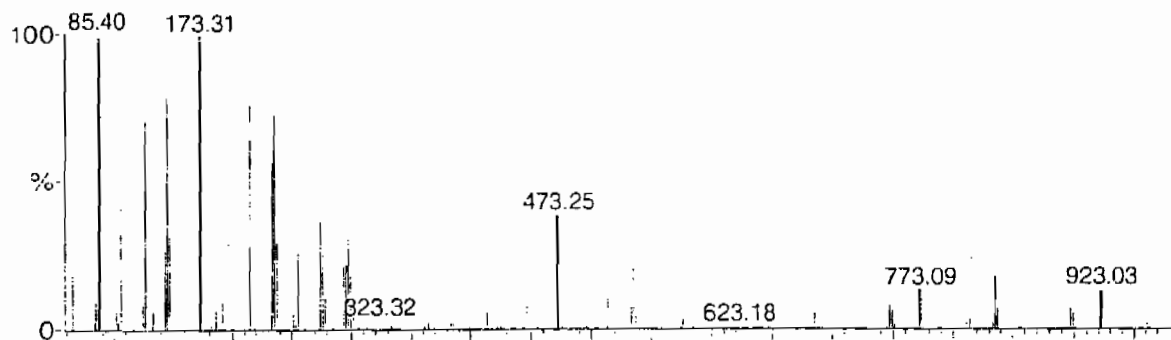
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

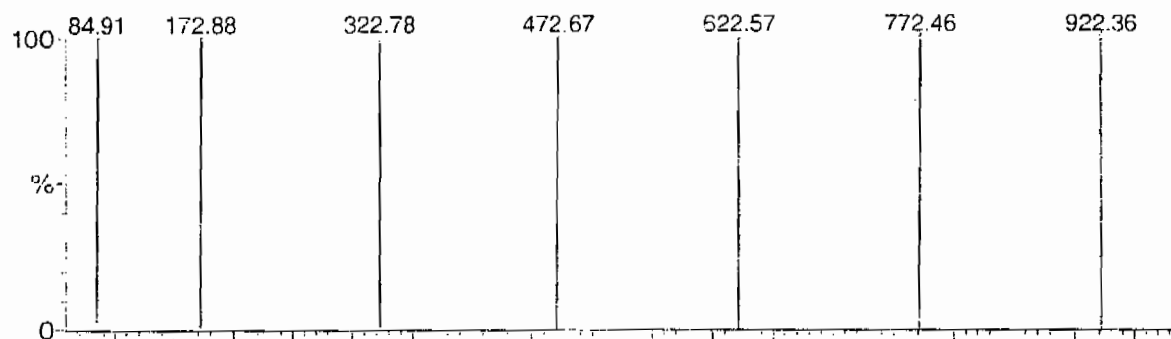
Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

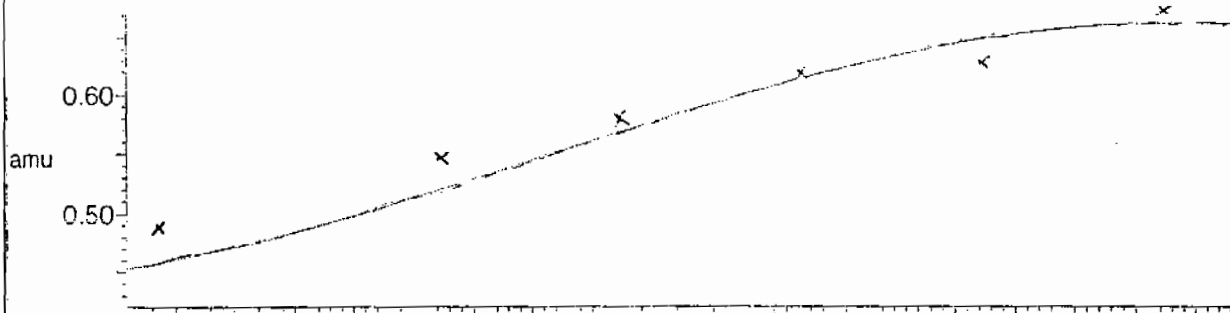
7 matches of 7 tested references



Reference file: Nairb

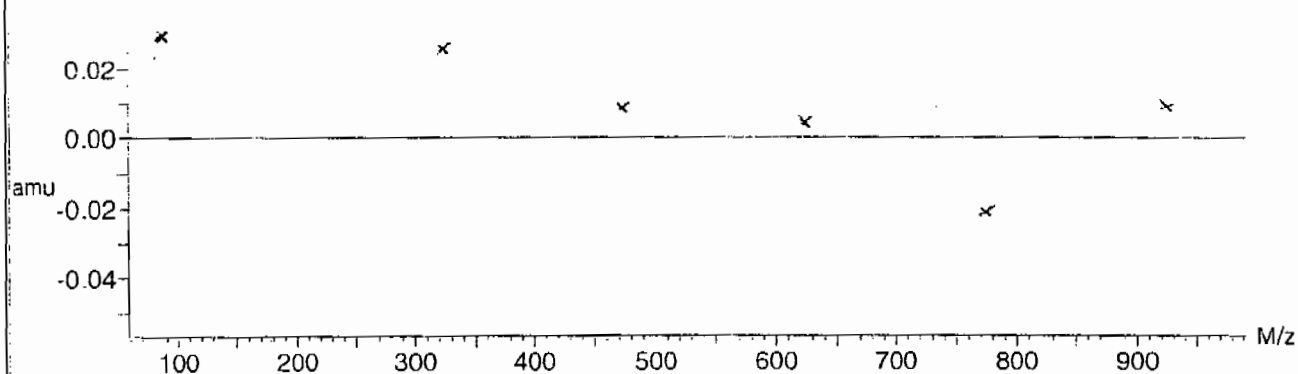


Mass difference (Raw - Ref mass)



Residuals

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



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

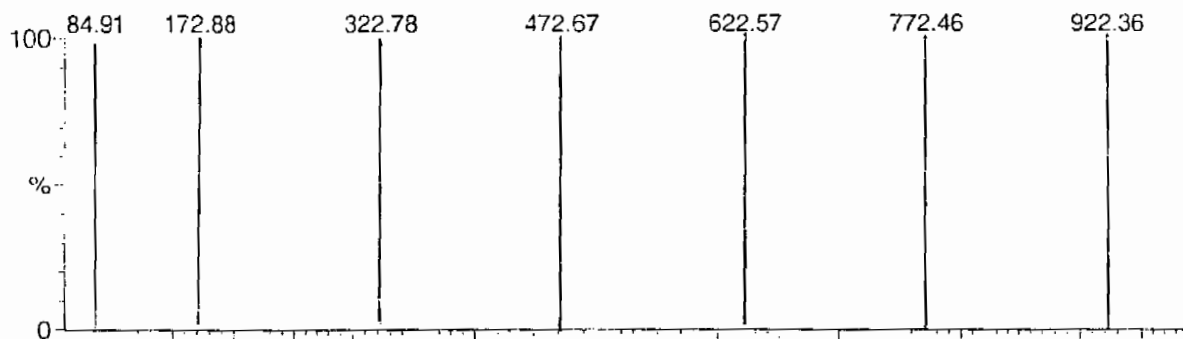
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

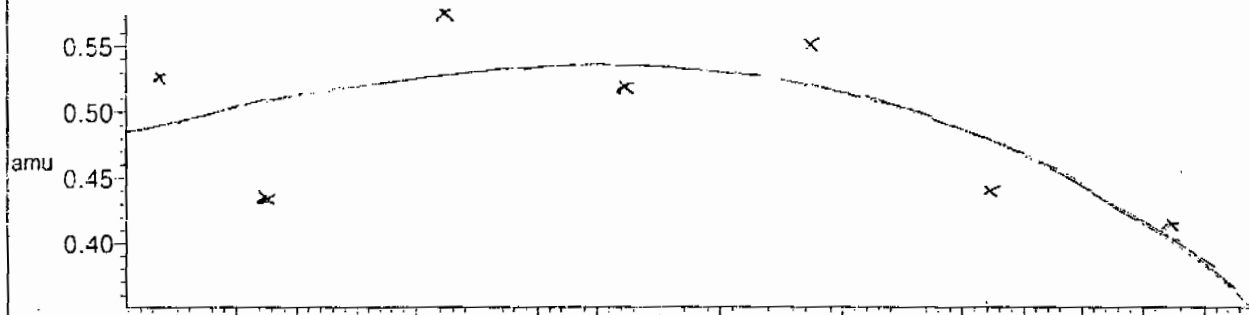
7 matches of 7 tested references



Reference file: Nairb

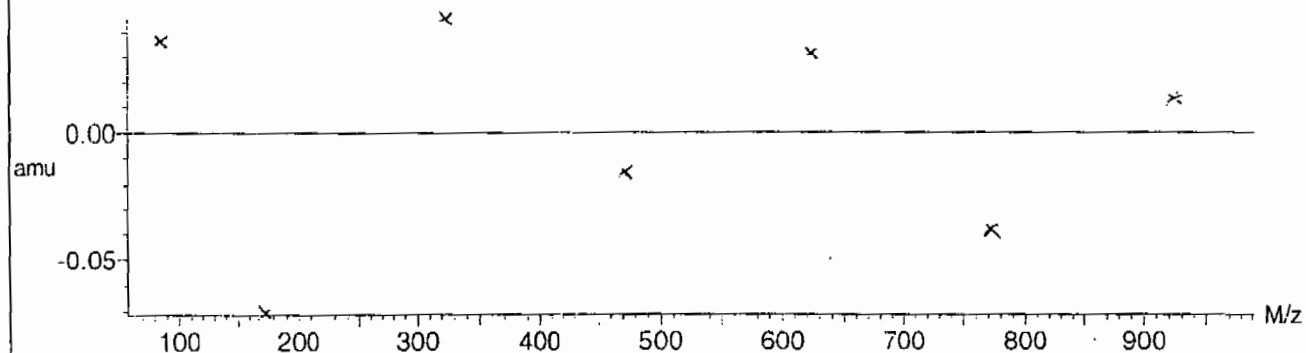


Mass difference (Raw - Ref mass)



Residuals

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



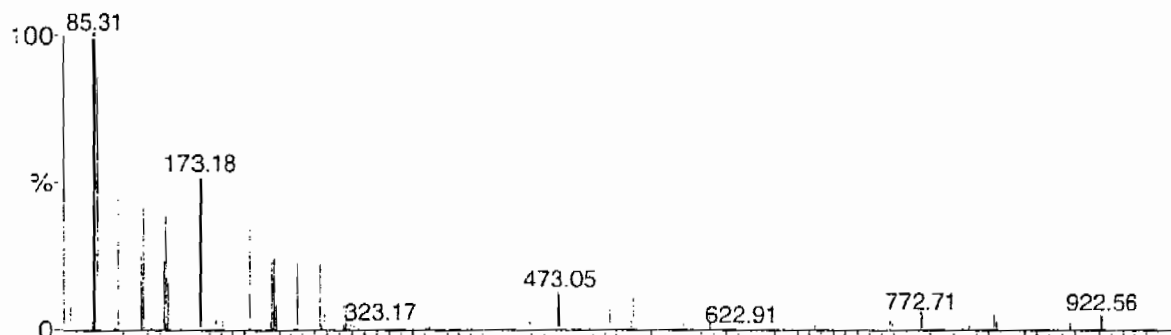
Calibration Report - MS2 Scanning

Page 1 of 1

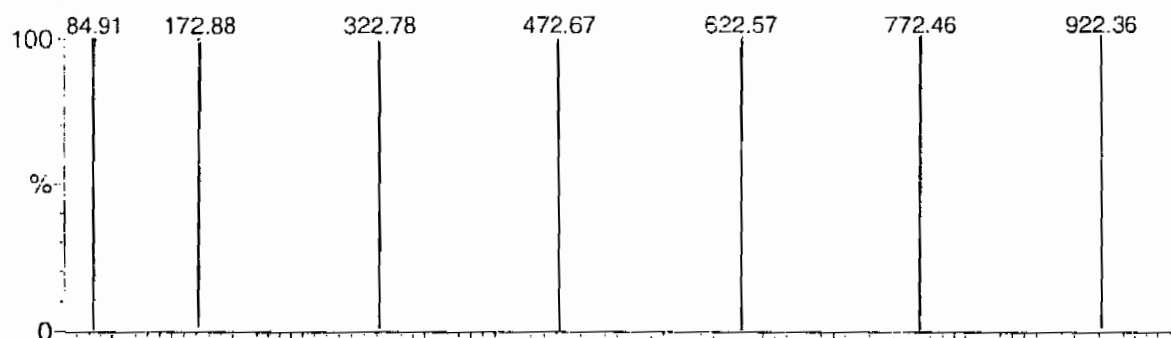
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

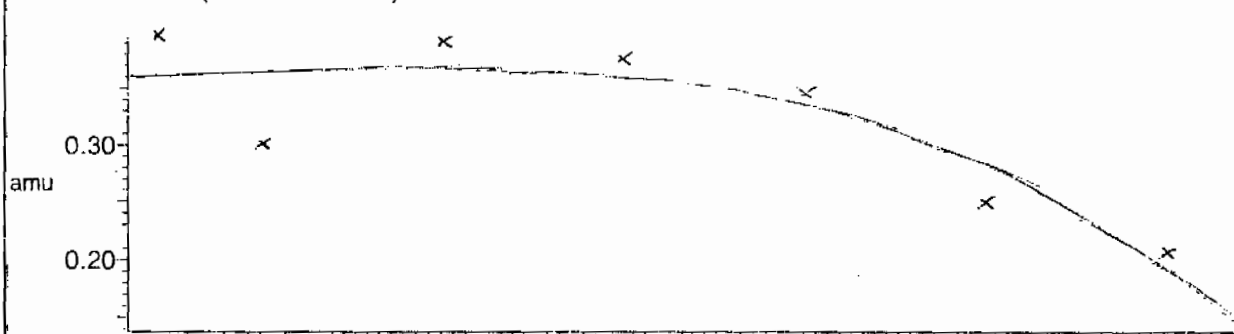
7 matches of 7 tested references



Reference file: Nairb

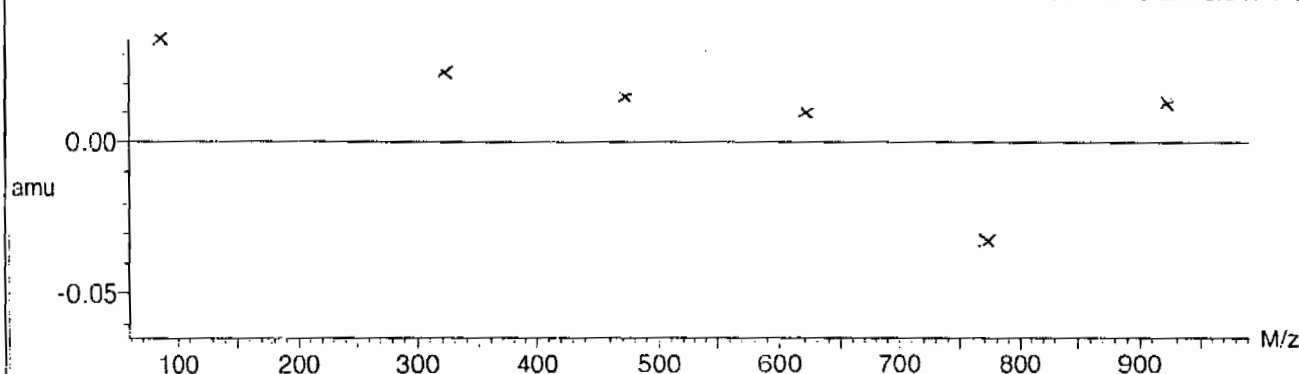


Mass difference (Raw - Ref mass)



Residuals

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



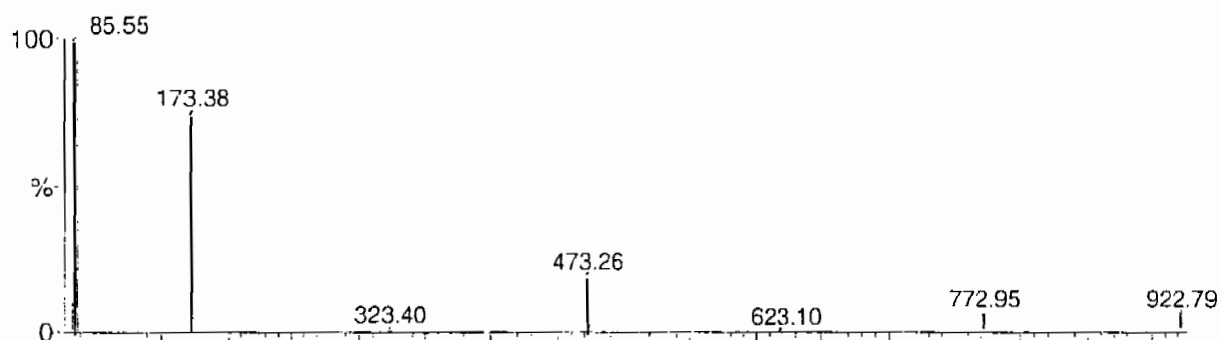
Calibration Report - MS2 Static

Page 1 of 1

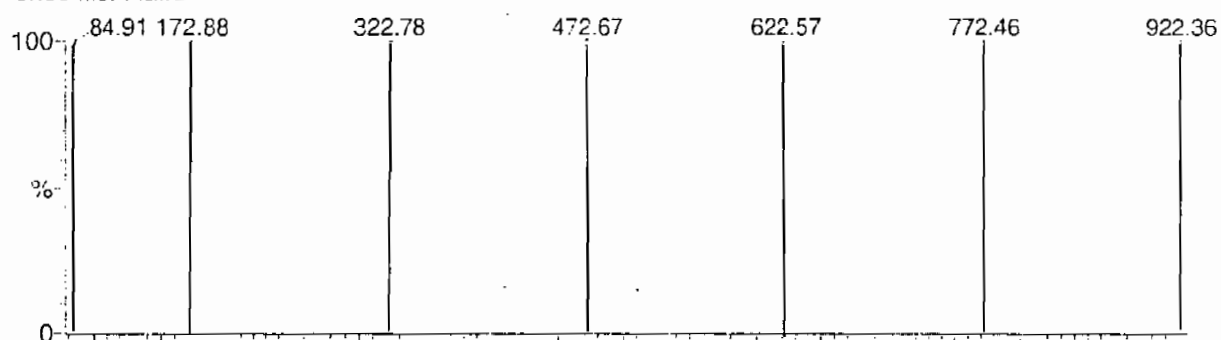
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

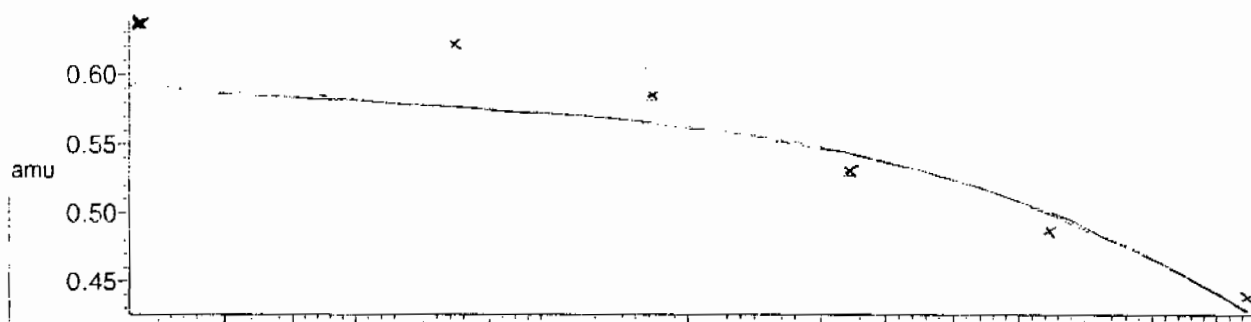
7 matches of 7 tested references



Reference file: Nairb

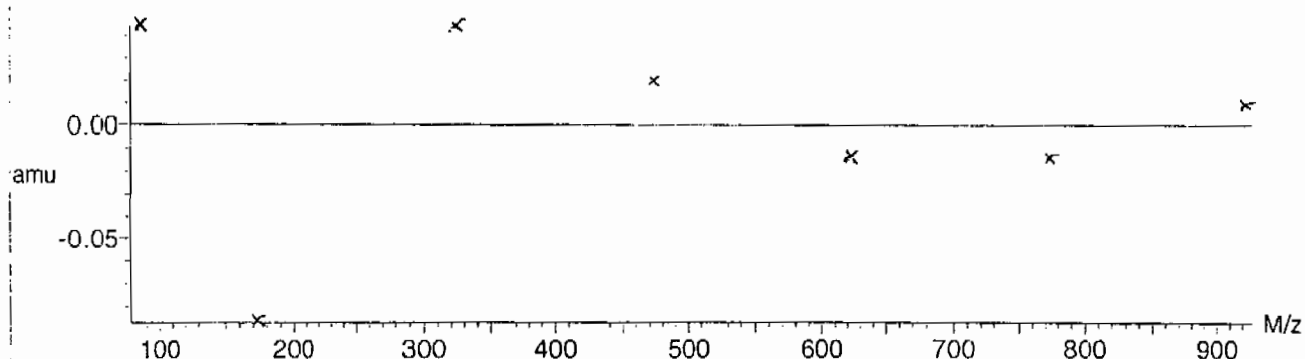


Mass difference (Raw - Ref mass)



Residuals

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



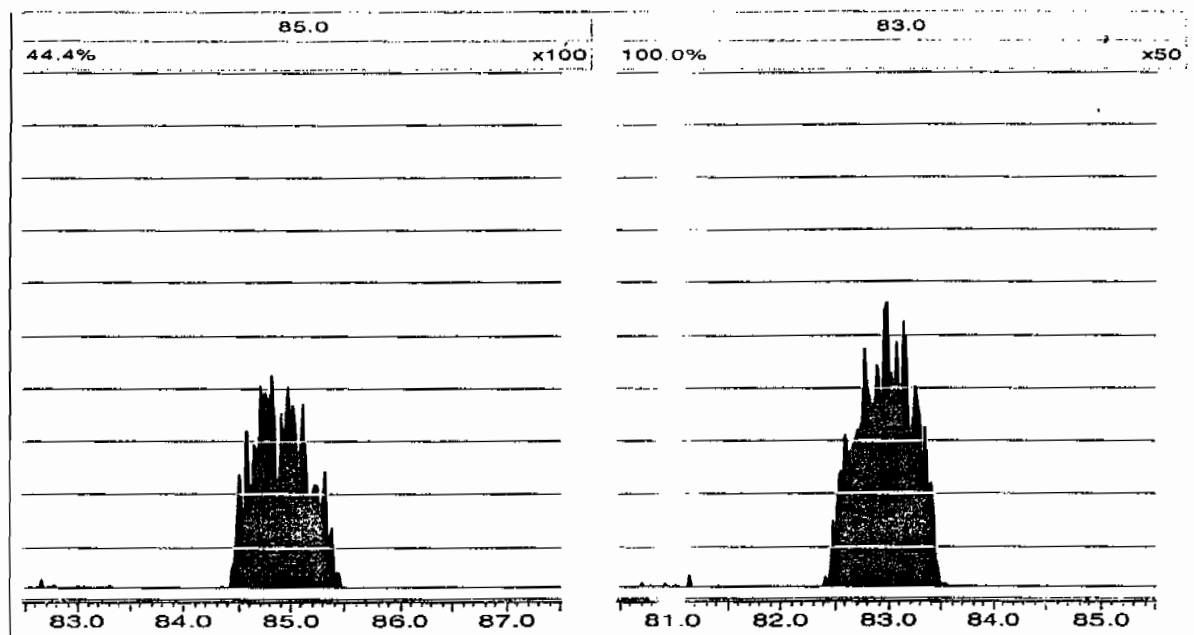
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, February 08, 2010 12:29:43 Eastern Standard Time



Perchlorate RT And Area Summary

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1517-1

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per020806a	08-FEB-10	24441.6				
Lower Area Limit			12220.8				
Upper Area Limit			48883.2				
1202035565	per0208050a	08-FEB-10 19:15	22209.3	1.88	1.89273	1.007	
1202035566	per0208051a	08-FEB-10 19:21	23514.8	1.88	1.89277	1.007	
1202035573	per0208052a	08-FEB-10 19:28	23733.6	1.93	1.94248	1.006	
246000001	per0208068a	08-FEB-10 21:13	23270.1	1.88	1.89275	1.007	

SAMPLE DATA

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: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8124

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1517-1

GEL Sample ID: 246000001

Date Filtered: 07-FEB-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	08-FEB-10 21:13	per0208068a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:13	per0208068a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:13	per0208068a
	Perchlorate-O(18)			0.478	ug/L		1	08-FEB-10 21:13	per0208068a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

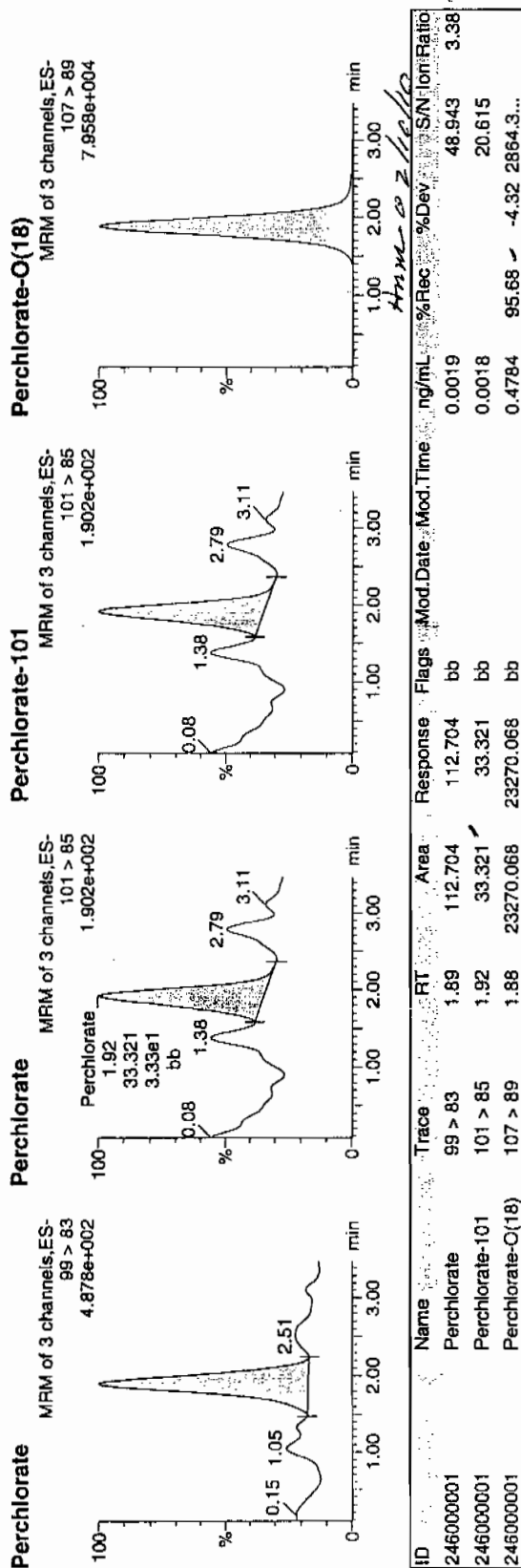
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208068a
Date: 08-Feb-2010
Time: 21:13:14
ID: 246000001
Vial: 2:3,D

02-01-10

16722 | 950023 | 122 | 11 |



STANDARDS DATA

Perchlorate Initial Calibration

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

GEL Job No.(SDG): 10-1517-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-FEB-10

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

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 59530.66

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1517-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-FEB-10

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

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

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 18771.12

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

Page 1 of 2

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020810a.mdb 09 Feb 2010 07:47:59
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020810a.cdb 09 Feb 2010 07:48:17

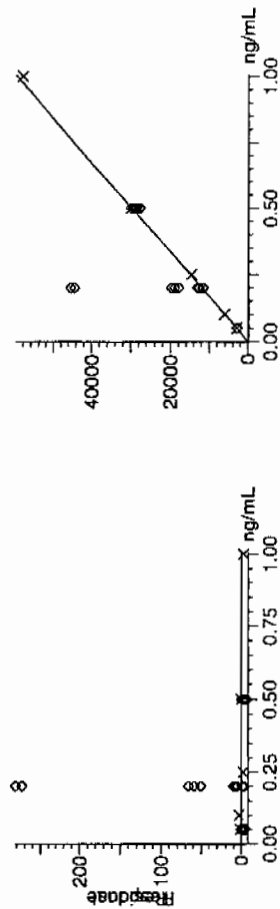
Compound name: Perchlorate

Response Factor: 59530.6

RRF SD: 1393.77, % Relative SD: 2.34126

Response type: External Std, Area

Curve type: RF



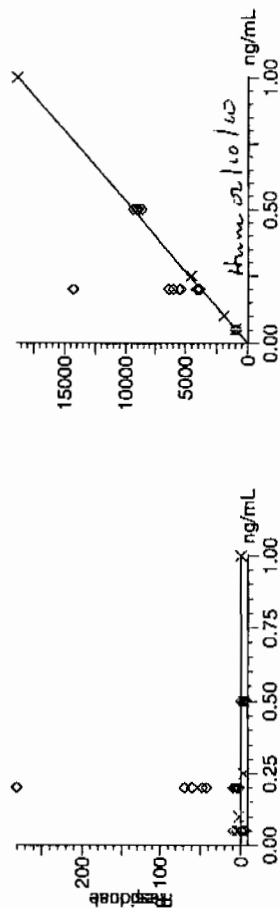
Compound name: Perchlorate-101

Response Factor: 18771.1

RRF SD: 687.466, % Relative SD: 3.66236

Response type: External Std, Area

Curve type: RF



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Page 2 of 2

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time

Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

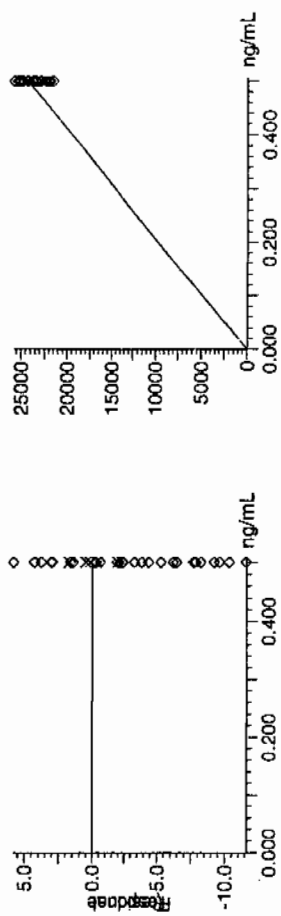
Compound name: Perchlorate-O(18)

Response Factor: 48640

RRF SD: 647.782, % Relative SD: 1.33179

Response type: External Std, Area

Curve type: RF ✓



Perchlorate Initial Calibration Verification

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1517-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.59	08-FEB-10 14:46	per0208009a
Perchlorate Isotope Ratio		3.19		08-FEB-10 14:46	per0208009a
Perchlorate-101	.5	.5	99.88	08-FEB-10 14:46	per0208009a

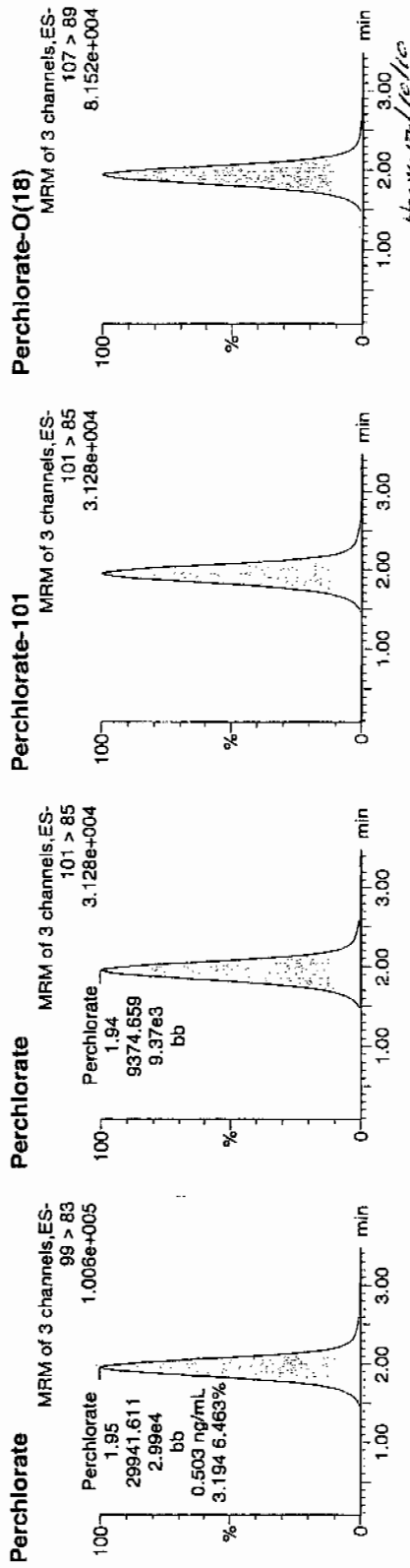
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208009a
Date: 08-Feb-2010
Time: 14:46:32
ID: WCL100128-06ICV
Vial: 1:2,A

Per
CWS
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06ICV	Perchlorate	99 > 83	1.95	29941.611	29941.611	bb			0.5030	100.59	0.59	5446.9...	3.19
WCL100128-06ICV	Perchlorate-101	101 > 85	1.94	9374.659	9374.659	bb			0.4994	99.88	-0.12	264.354	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	1.93	24277.504	24277.504	bb			0.4991	99.83	-0.17	3258.6...	

Perchlorate Continuing Calibration Verification

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1517-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.49	08-FEB-10 16:05	per0208021a
Perchlorate Isotope Ratio		3.13		08-FEB-10 16:05	per0208021a
Perchlorate-101	.5	.5	99.83	08-FEB-10 16:05	per0208021a
Perchlorate	.5	.49	97.32	08-FEB-10 17:30	per0208034a
Perchlorate Isotope Ratio		3.24		08-FEB-10 17:30	per0208034a
Perchlorate-101	.5	.48	95.26	08-FEB-10 17:30	per0208034a
Perchlorate	.5	.48	95.6	08-FEB-10 18:55	per0208047a
Perchlorate Isotope Ratio		3.13		08-FEB-10 18:55	per0208047a
Perchlorate-101	.5	.49	97	08-FEB-10 18:55	per0208047a
Perchlorate	.5	.47	93.45	08-FEB-10 20:20	per0208060a
Perchlorate Isotope Ratio		3.05		08-FEB-10 20:20	per0208060a
Perchlorate-101	.5	.49	97.09	08-FEB-10 20:20	per0208060a
Perchlorate	.5	.48	96.67	08-FEB-10 21:45	per0208073a

Perchlorate Continuing Calibration Verification

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1517-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.22		08-FEB-10 21:45	per0208073a
Perchlorate-101	.5	.48	95.12	08-FEB-10 21:45	per0208073a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208021a

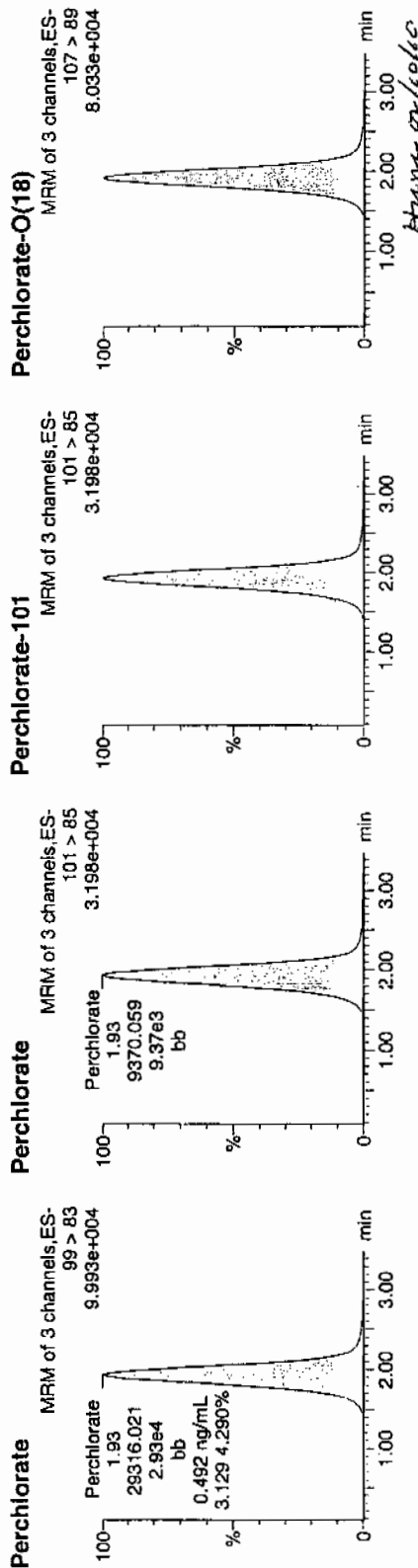
Date: 08-Feb-2010

Time: 16:05:12

ID: WCL100128-06CCV

Vial: 1:2,A

Run
and
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.93	29316.021	29316.021	bb			0.4925	98.49	-1.51	1324.3...	3.13
WCL100128-06CCV	Perchlorate-101	101 > 85	1.93	9370.059	9370.059	bb			0.4992	99.83	-0.17	4157.5...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.92	23385.551	23385.551	bb			0.4808	96.16	-3.84	3253.6...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208034a

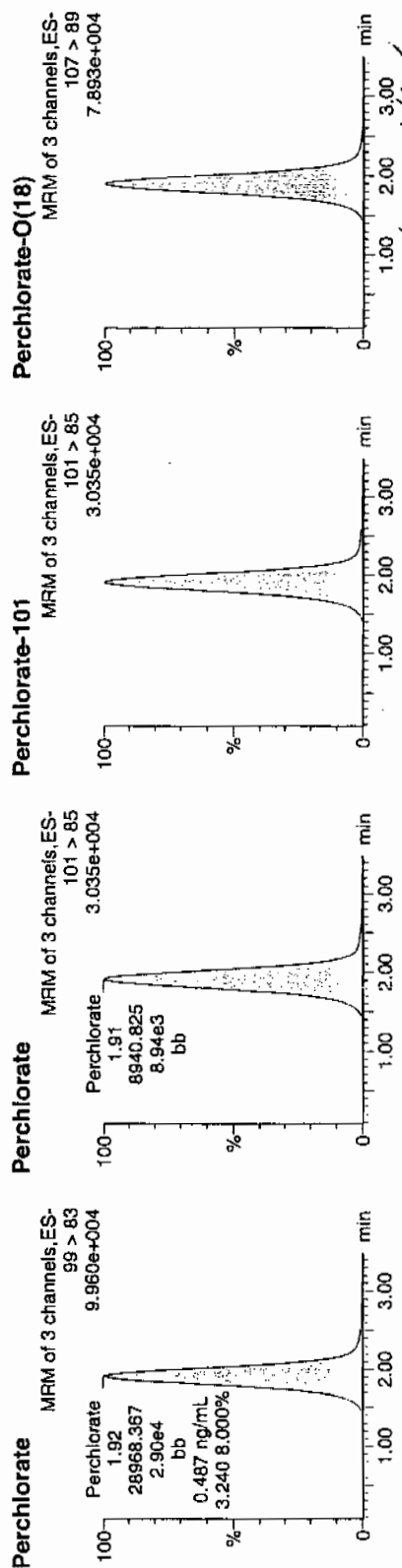
Date: 08-Feb-2010

Time: 17:30:17

ID: WCL100128-06CCV

Vial: 1:2,A

*Perp
020810*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.92	28968.367	28968.367	bb			0.4866	97.32	-2.68	7606.4...	3.24
WCL100128-06CCV	Perchlorate-101	101 > 85	1.91	8940.825	8940.825	bb			0.4763	95.26	-4.74	3381.0...	
WCL100128-06CCV	Perchlorate-Q(18)	107 > 89	1.91	23019.350	23019.350	bb			0.4733	94.65	-5.35	4411.7...	

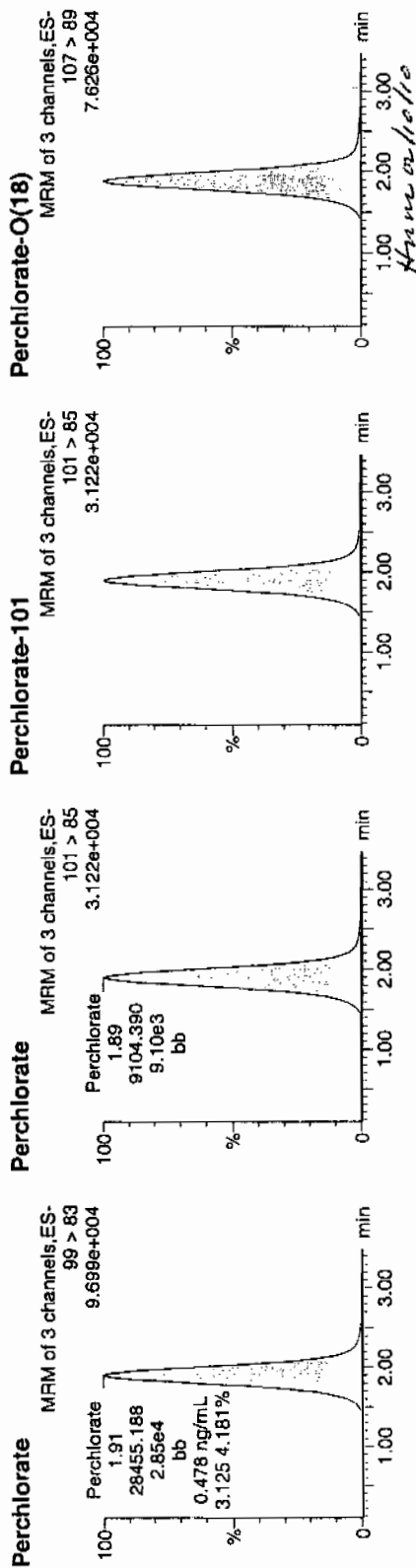
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208047a
Date: 08-Feb-2010
Time: 18:55:25
ID: WCL100128-06CCV
Vial: 1:2,A

*Per
and
02-09-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	IonRatio
WCL100128-06CCV	Perchlorate	99 > 83	1.89	28455.188	28455.188	bb			0.4780	95.60	-4.40	6190.9...	3.13
WCL100128-06CCV	Perchlorate-101	101 > 85	1.89	9104.390	9104.390	bb			0.4850	97.00	-3.00	681.071	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22404.150	22404.150	bb			0.4606	92.12	-7.88	2959.4...	

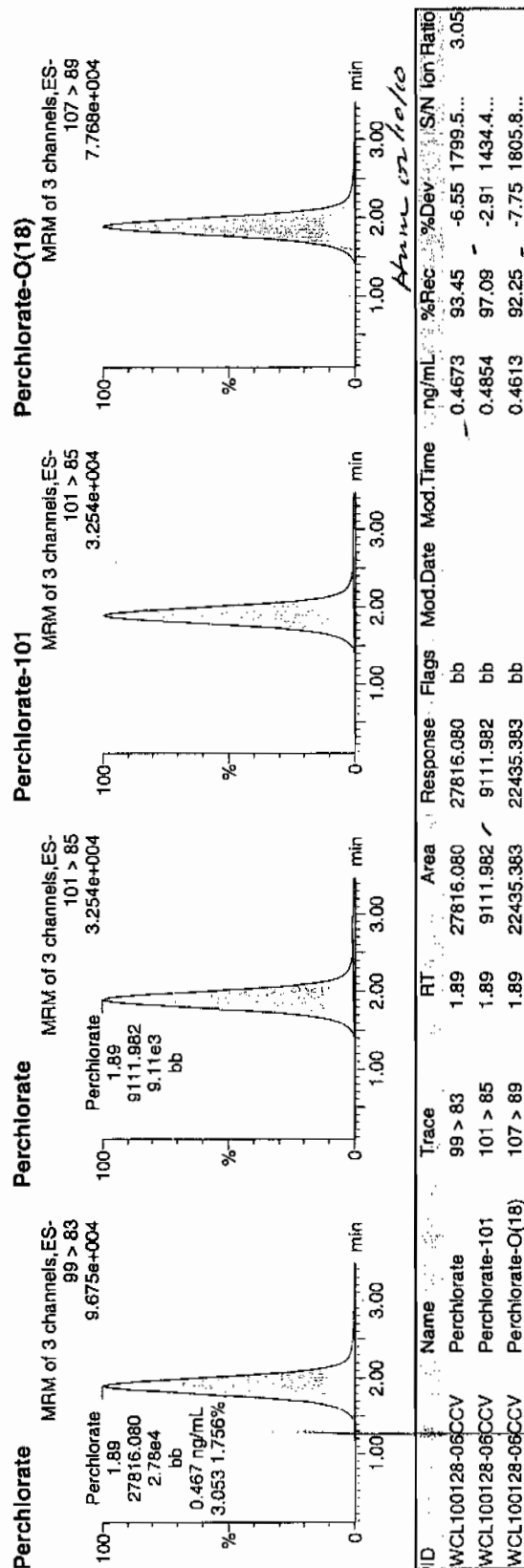
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208060a
Date: 08-Feb-2010
Time: 20:20:32
ID: WCL100128-06CCV
Vial: 1:2,A

Per
and
02-21-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208073a

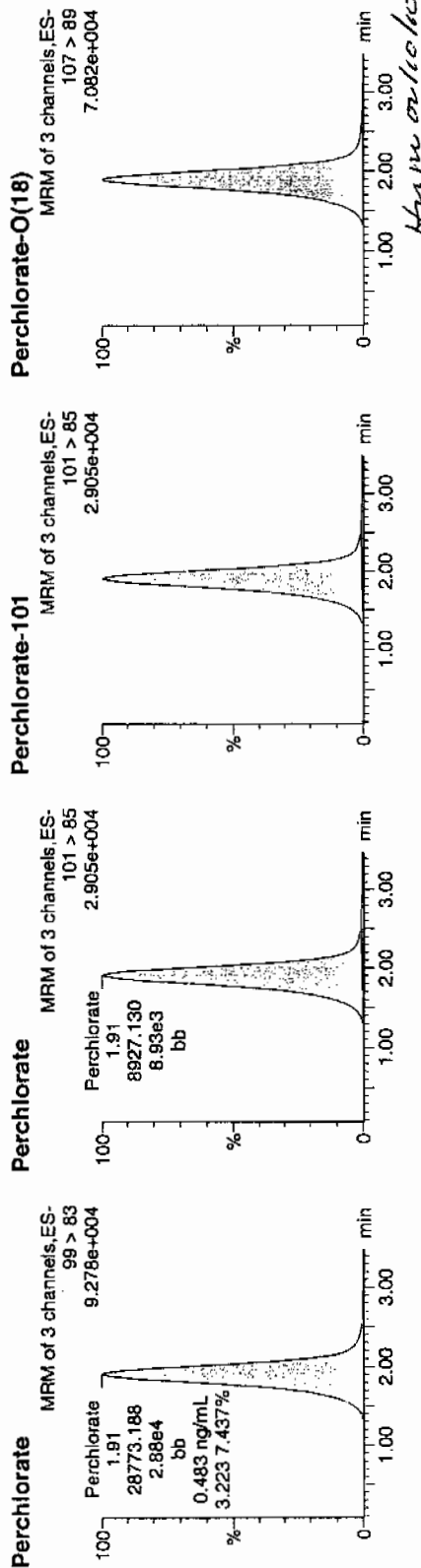
Date: 08-Feb-2010

Time: 21:45:55

ID: WCL100128-06CCV

Vial: 1:2,A

Puss
CWW
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.91	28773.188	28773.188	bb			0.4833	96.67	-3.33	3174.1...	3.22
WCL100128-06CCV	Perchlorate-101	101 > 85	1.91	8927.130	8927.130	bb			0.4756	95.12	-4.88	5417.8...	
WCL100128-06CCV	Perchlorate-O(16)	107 > 89	1.89	22077.664	22077.664	bb			0.4539	90.78	-9.22	7805.6...	

Perchlorate MDL Verification

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

GEL Job No.(SDG): 10-1517-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	101.73	08-FEB-10 14:59	per0208011a
Perchlorate Isotope Ratio		2.96		08-FEB-10 14:59	per0208011a
Perchlorate-101	.05	.05	109.1	08-FEB-10 14:59	per0208011a
Perchlorate	.05	.05	100.29	08-FEB-10 16:18	per0208023a
Perchlorate Isotope Ratio		3.21		08-FEB-10 16:18	per0208023a
Perchlorate-101	.05	.05	98.94	08-FEB-10 16:18	per0208023a
Perchlorate	.05	.05	101.53	08-FEB-10 17:43	per0208036a
Perchlorate Isotope Ratio		3.05		08-FEB-10 17:43	per0208036a
Perchlorate-101	.05	.05	105.49	08-FEB-10 17:43	per0208036a
Perchlorate	.05	.05	101.45	08-FEB-10 19:08	per0208049a
Perchlorate Isotope Ratio		3.36		08-FEB-10 19:08	per0208049a

Perchlorate MDL Verification

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

GEL Job No.(SDG): 10-1517-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	95.78	08-FEB-10 19:08	per0208049a
Perchlorate	.05	.05	97.2	08-FEB-10 20:33	per0208062a
Perchlorate Isotope Ratio		3.14		08-FEB-10 20:33	per0208062a
Perchlorate-101	.05	.05	98.24	08-FEB-10 20:33	per0208062a
Perchlorate	.05	.05	99.1	08-FEB-10 21:59	per0208075a
Perchlorate Isotope Ratio		3.16		08-FEB-10 21:59	per0208075a
Perchlorate-101	.05	.05	99.59	08-FEB-10 21:59	per0208075a

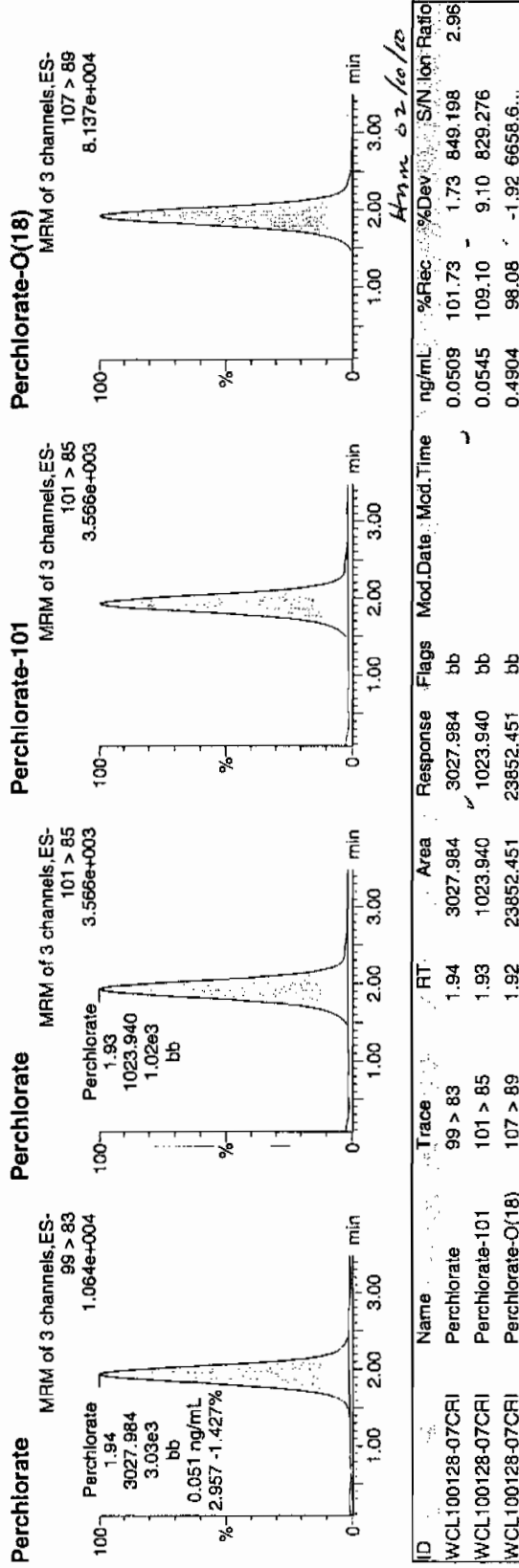
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208011a
Date: 08-Feb-2010
Time: 14:59:36
ID: WCL100128-07CRI
Vial: 1:2,B

Run
CWS
01-29-10



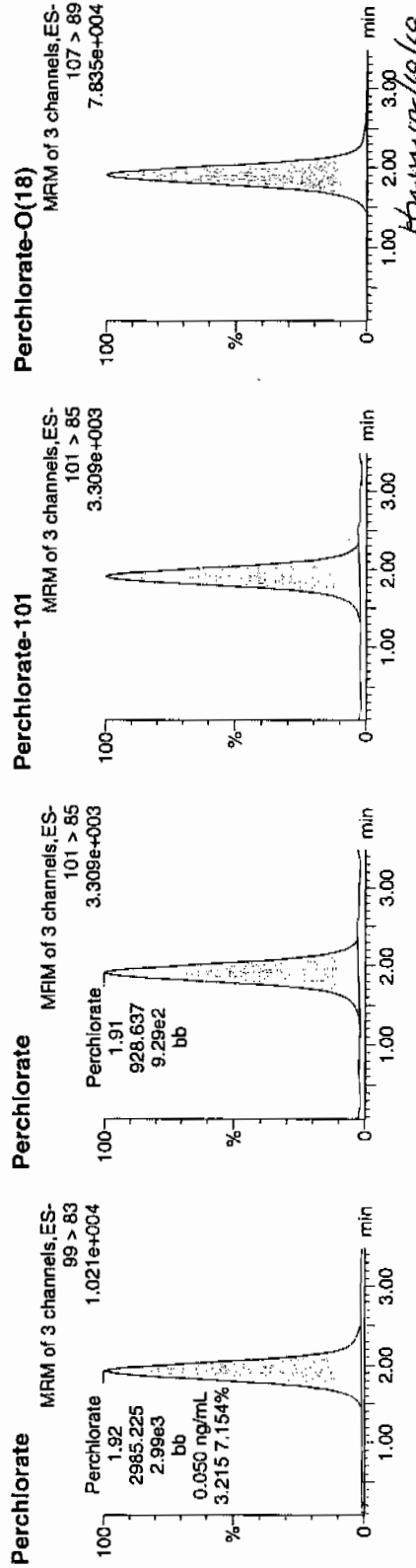
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208023a
Date: 08-Feb-2010
Time: 16:18:17
ID: WCL100128-07CRI
Vial: 1:2,B

*Per
and
02-09-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.92	2985.225	2985.225	bb			0.0501	100.29	0.29	2277.7...	3.21
WCL100128-07CRI	Perchlorate-101	101 > 85	1.91	928.637	928.637	bb			0.0495	98.94	-1.06	1285.2...	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.91	22805.957	22805.957	bb			0.4689	93.77	-6.23	2391.8...	

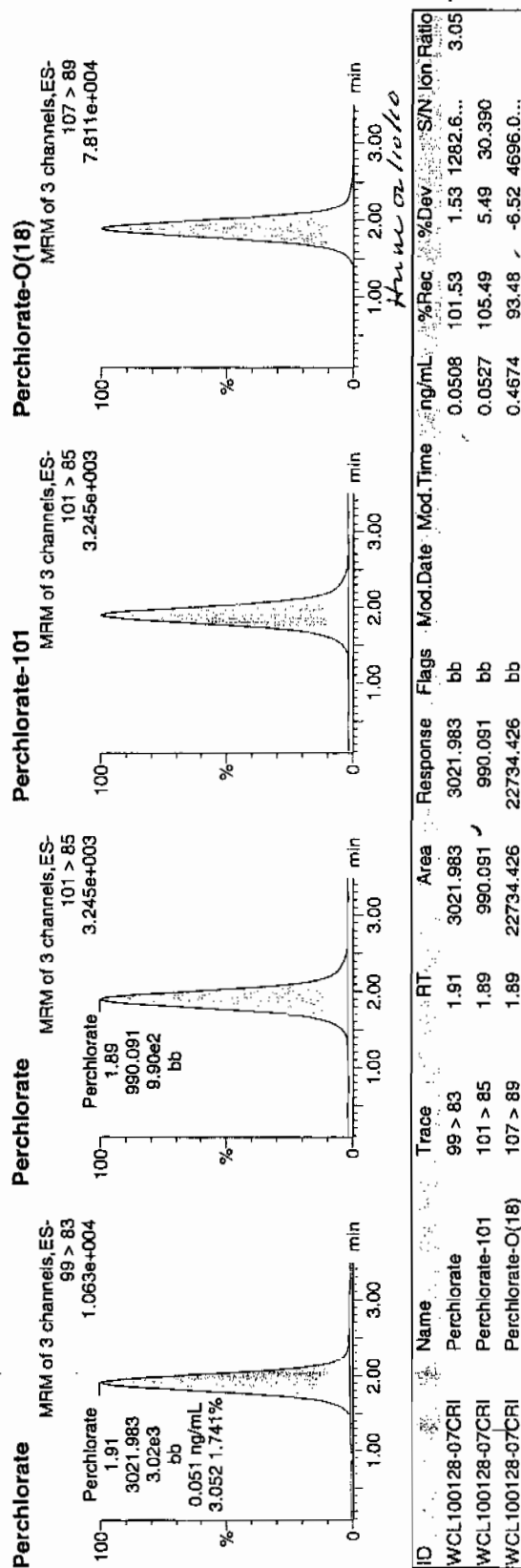
Quantify Sample Report **MassLynx 4.0 SP4** The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208036a
Date: 08-Feb-2010
Time: 17:43:22
ID: WCL100128-07CRI
Vial: 1:2,B

Pass
02-09-10



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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208049a

Date: 08-Feb-2010

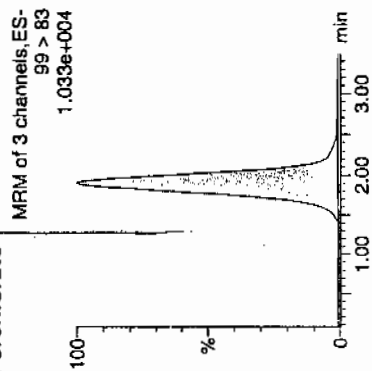
Time: 19:08:31

ID: WCL100128-07CRI

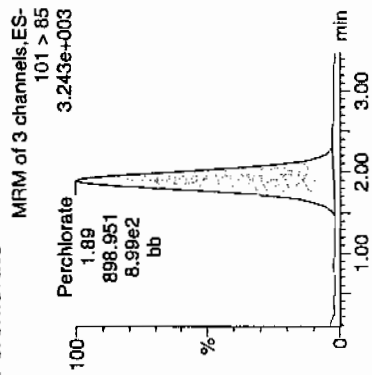
Vial: 1:2,B

Pure
and
02-21-10

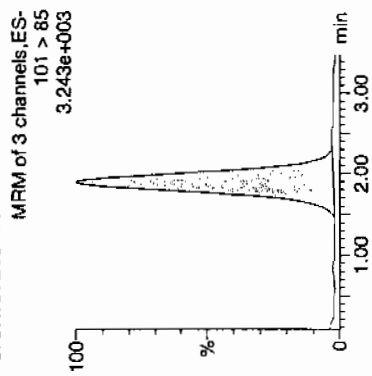
Perchlorate



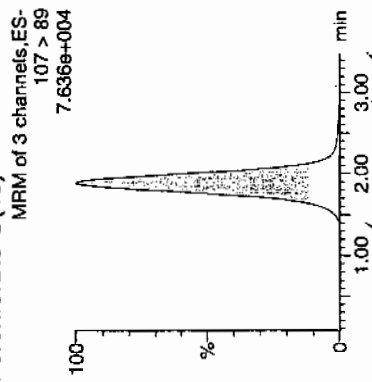
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	3019.704	3019.704	bb			0.0507	101.45	1.45	1111.1...	3.36
WCL100128-07CRI	Perchlorate-101	101 > 85	1.89	898.951	898.951	bb			0.0479	95.78	-4.22	607.346	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	22316.896	22316.896	bb			0.4588	91.76	-8.24	6290.4...	

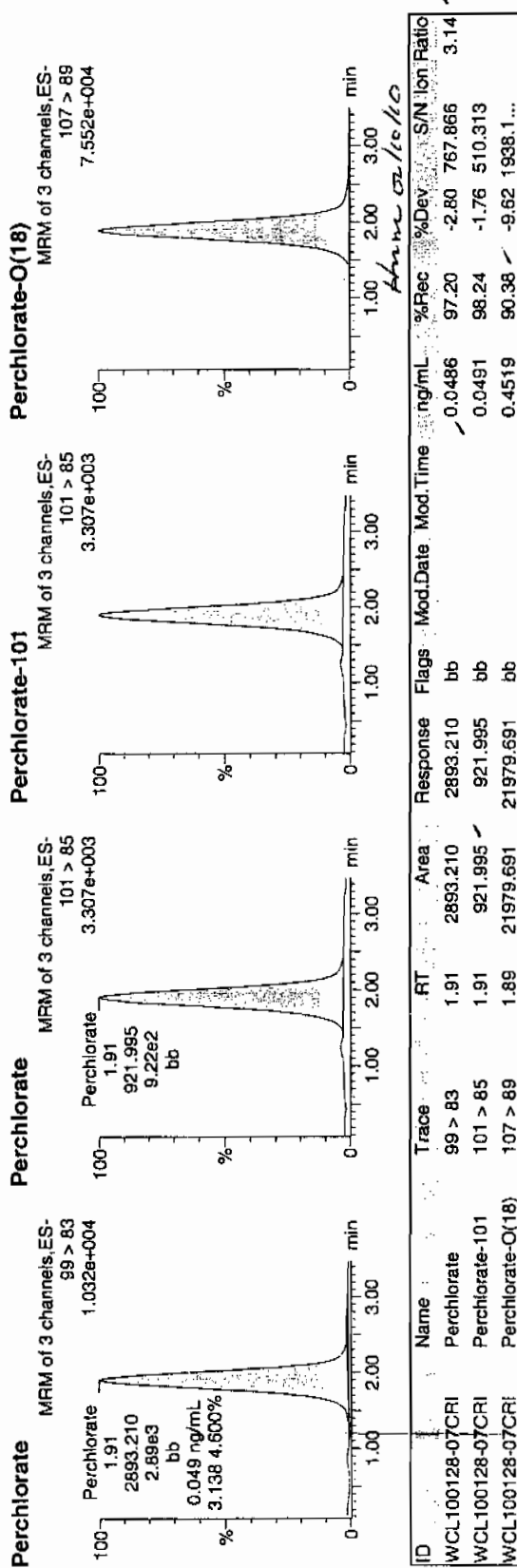
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208062a
Date: 08-Feb-2010
Time: 20:33:51
ID: WCL100128-07CRI
Vial: 1:2,B

Per
and
02-29-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	2893.210	2893.210	bb			0.0486	97.20	-2.80	767.866	3.14
WCL100128-07CRI	Perchlorate-101	101 > 85	1.91	921.995	921.995	bb			0.0491	98.24	-1.76	510.313	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	21979.691	21979.691	bb			0.4519	90.38	-9.62	1938.1...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
 Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208075a

Date: 08-Feb-2010

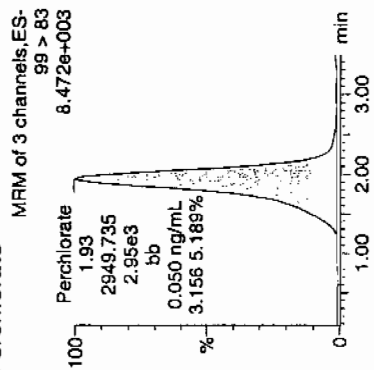
Time: 21:59:15

ID: WCL100128-07CRI

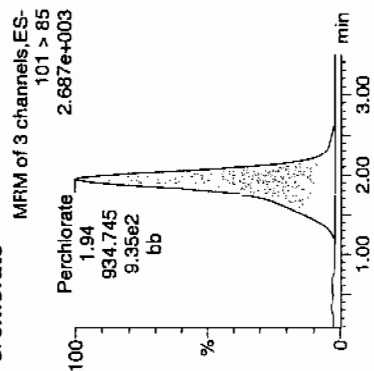
Vial: 1:2,B

*Pers
and
OL-31-10*

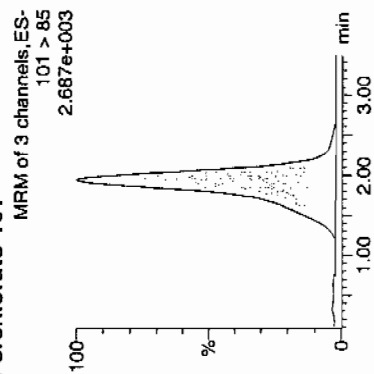
Perchlorate



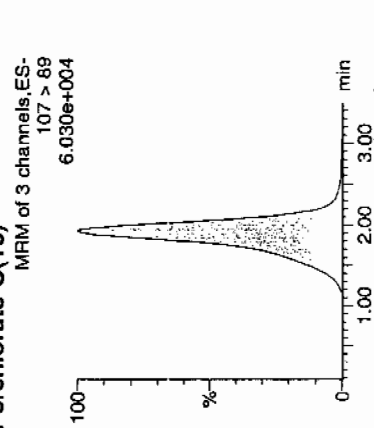
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.93	2949.735	2949.735	bb			0.0495	99.10	-0.90	555.102	3.16
WCL100128-07CRI	Perchlorate-101	101 > 85	1.94	934.745	934.745	bb			0.0498	99.59	-0.41	523.923	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.93	21809.545	21809.545	bb			0.4484	89.68	-10.32	1949.9...	

Manual 10/10

QUALITY CONTROL

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: EPA 6850 ModifiedMatrix: WASTE WATERExtraction Batch ID: 950027Extraction Type: Filter/DAISample Volume/Weight: 10.0 mLConcentrated Extract Volume: 10.0

Client Sample No.

MBDate Received: 07-FEB-10GEL Job No (SDG): 10-1517-1GEL Sample ID: 1202035565Date Filtered: 07-FEB-10Injection 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	08-FEB-10 19:15	per0208050a
	Perchlorate Isotope Ratio						1	08-FEB-10 19:15	per0208050a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 19:15	per0208050a
	Perchlorate-O(18)			0.457	ug/L		1	08-FEB-10 19:15	per0208050a

[^] 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

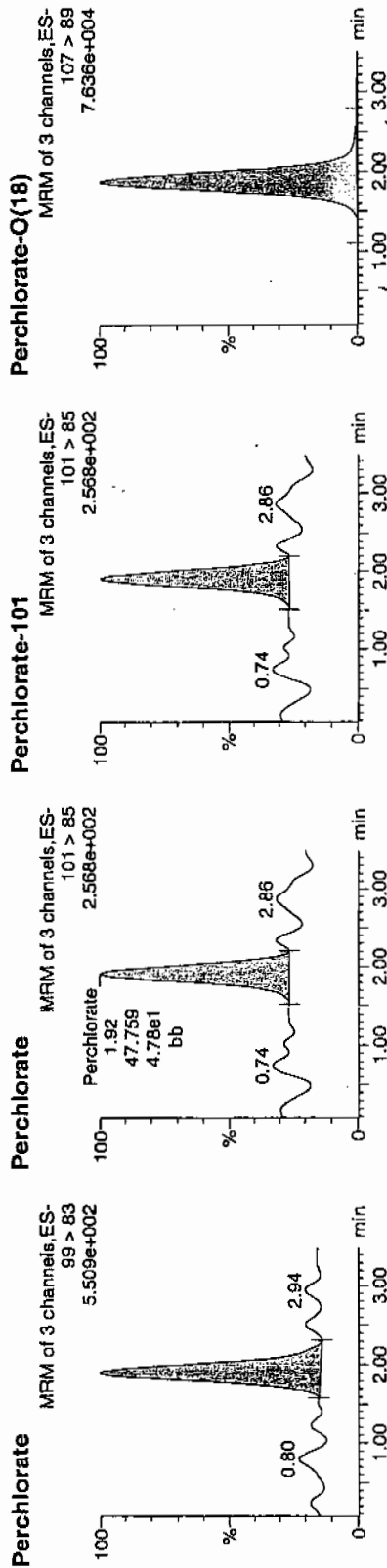
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
 Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208050a
 Date: 08-Feb-2010
 Time: 19:15:05
 ID: 1202035565
 Vial: 2:1,A

WJ
 02-09-10

1202035565 | 1202035565 | 1202035565



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	Integ	Peak	Dev	Signal Ratio
1202035565	Perchlorate	99 > 83	1.89	121.925	121.925	bb			0.0020	39.295	2.55	
1202035565	Perchlorate-101	101 > 85	1.92	47.759	47.759	bb			0.0025	14.790		
1202035565	Perchlorate-O(18)	107 > 89	1.88	22209.346	22209.346	bb			0.4566	91.32	-8.68	5376.4...

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: EPA 6850 Modified
 Matrix: WASTE WATER
 Extraction Batch ID: 950027
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. LCS
 Date Received: 07-FEB-10
 GEL Job No (SDG): 10-1517-1
 GEL Sample ID: 1202035566
 Date Filtered: 07-FEB-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	0.196	ug/L	J	1	08-FEB-10 19:21	per0208051a
	Perchlorate Isotope Ratio			3.01			1	08-FEB-10 19:21	per0208051a
14797-73-0	Perchlorate-101	.05	.2	0.207	ug/L		1	08-FEB-10 19:21	per0208051a
	Perchlorate-O(18)			0.483	ug/L		1	08-FEB-10 19:21	per0208051a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

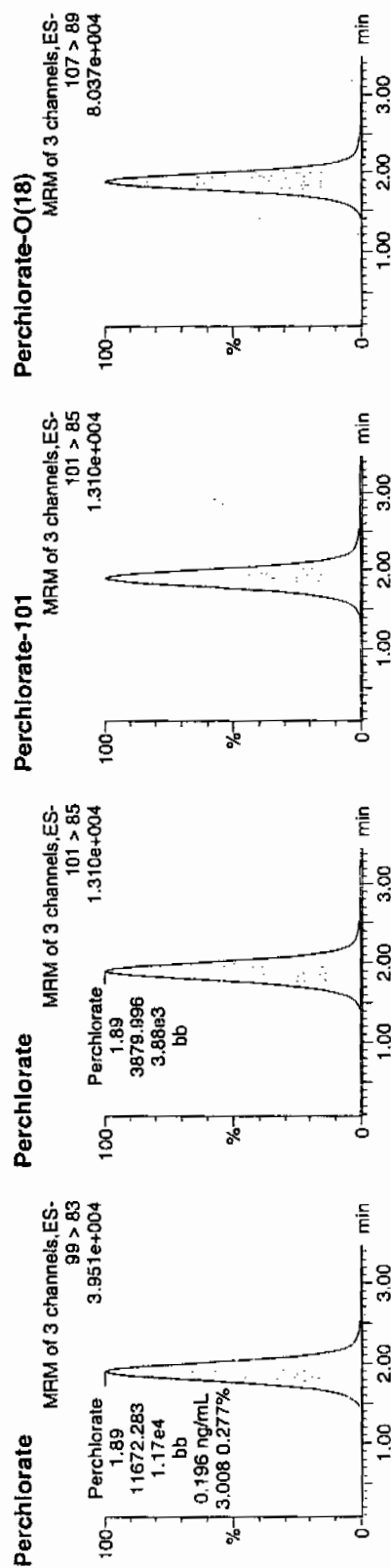
Name: per0208051a

Date: 08-Feb-2010

Time: 19:21:48

ID: 1202035566

Vial: 2:1,B



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035566	Pechlorate	99 > 83	1.89	11672.283	11672.283	bb			0.1961	98.04	-1.96	1706.5...	3.01
1202035566	Pechlorate-101	101 > 85	1.89	3879.996	3879.996	bb			0.2067	103.35	3.35	835.288	
202035566	Pechlorate-O(18)	107 > 89	1.88	23514.770	23514.770	bb			0.4834	95.69	-3.31	6317.6...	

$$\frac{1672.283}{59530.6} = 0.1961 \quad \text{HmW } 10/10$$

MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 950027 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Charles Wilson Instrument: MicroMass Quattro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202035565 MB	07-FEB-2010 14:31:00	10	10	1
1202035566 LCS	07-FEB-2010 14:31:00	10	10	1
245911001	07-FEB-2010 14:31:00	10	10	1
1202035571 MS (245911001)	07-FEB-2010 14:31:00	10	10	1
1202035572 MSD (245911001)	07-FEB-2010 14:31:00	10	10	1
245922001	07-FEB-2010 14:31:00	10	10	1
245934001	07-FEB-2010 14:31:00	10	10	1
245934004	07-FEB-2010 14:31:00	10	10	1
245939001	07-FEB-2010 14:31:00	10	10	1
245939002	07-FEB-2010 14:31:00	10	10	1
245953001	07-FEB-2010 14:31:00	10	10	1
245965001	07-FEB-2010 14:31:00	10	10	1
245975001	07-FEB-2010 14:31:00	10	10	1
245981001	07-FEB-2010 14:31:00	10	10	1
246000001	07-FEB-2010 14:31:00	10	10	1
246007001	07-FEB-2010 14:31:00	10	10	1
246056001	07-FEB-2010 14:31:00	10	10	1
246056002	07-FEB-2010 14:31:00	10	10	1
246056003	07-FEB-2010 14:31:00	10	10	1
246056004	07-FEB-2010 14:31:00	10	10	1
246375001	07-FEB-2010 14:31:00	10	10	1
1202035567 MS (246375001)	07-FEB-2010 14:31:00	10	10	1
1202035568 MSD (246375001)	07-FEB-2010 14:31:00	10	10	1
1202035573 ICS	07-FEB-2010 14:31:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202035573	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	Desalting cartridges used: 100105-1-H & 091118-1-Ba
LCS	1202035566	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MS	1202035567	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MS	1202035571	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MSD	1202035568	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MSD	1202035572	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
RGNT	All	O3SI HP/PLC Grade Water	1246195	10	mL	
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Reviewed BY: *Anne*
Date: *22/10/10*
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100128-06

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

Date: 02/08/10
Extr. Injection Volume: 20ul
Sequence Number: per020810a
Initial Calibration Date: 02/08/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0208001a	IPB001	CWW	2/8/2010 13:54			1		USE	B
per0208002a	IPB001	CWW	2/8/2010 14:00			1		USE	B
per0208003a	WCLICAL-01	CWW	2/8/2010 14:07			1		USE	I
per0208004a	WCLICAL-02	CWW	2/8/2010 14:13			1		USE	I
per0208005a	WCLICAL-03	CWW	2/8/2010 14:20			1		USE	I
per0208006a	WCLICAL-04	CWW	2/8/2010 14:26			1		USE	I
per0208007a	WCLICAL-05	CWW	2/8/2010 14:33			1		USE	I
per0208008a	IPB002	CWW	2/8/2010 14:40			1		USE	B
per0208009a	WCLICV	CWW	2/8/2010 14:46			1		USE	C
per0208010a	IPB003	CWW	2/8/2010 14:53			1		USE	B
per0208011a	WCLCRI	CWW	2/8/2010 14:59			1		USE	C
per0208012a	1202035621	CWW	2/8/2010 15:06	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208013a	1202035622	CWW	2/8/2010 15:12	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208014a	1202035625	CWW	2/8/2010 15:19	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208015a	246431001	CWW	2/8/2010 15:25	950048	10-1650	1	LANL	DUSE-RE	S
per0208016a	1202035623	CWW	2/8/2010 15:32	950048	10-1650	1	LANL	DUSE-RE	S
per0208017a	1202035624	CWW	2/8/2010 15:39	950048	10-1650	1	LANL	DUSE-RE	S
per0208018a	246431002	CWW	2/8/2010 15:45	950048	10-1650	1	LANL	DUSE-RE	S
per0208019a	246431003	CWW	2/8/2010 15:52	950048	10-1650	1	LANL	DUSE-RE	S
per0208020a	246431004	CWW	2/8/2010 15:58	950048	10-1650	1	LANL	DUSE-RE	S
per0208021a	WCLCCV	CWW	2/8/2010 16:05			1		USE	C
per0208022a	IPB004	CWW	2/8/2010 16:11			1		USE	B
per0208023a	WCLCRI	CWW	2/8/2010 16:18			1		USE	C
per0208024a	246472001	CWW	2/8/2010 16:24	950048	10-1640	1	LANL	DUSE-RE	S
per0208025a	246472002	CWW	2/8/2010 16:31	950048	10-1640	1	LANL	DUSE-RE	S
per0208026a	IPB005	CWW	2/8/2010 16:37			1		USE	B
per0208027a	1202029082	CWW	2/8/2010 16:44	947249	VARIOUS	1	LANL	USE	S
per0208028a	1202029083	CWW	2/8/2010 16:51	947249	VARIOUS	1	LANL	USE	S
per0208029a	1202029088	CWW	2/8/2010 16:57	947249	VARIOUS	1	LANL	USE	S

per0208030a	245605003	CWW	2/8/2010 17:04	947249	10-1413	200	LANL	USE	S
per0208031a	245608002	CWW	2/8/2010 17:10	947249	10-1415	1	LANL	USE	S
per0208032a	245673001	CWW	2/8/2010 17:17	947249	10-1442	100	LANL	USE	S
per0208033a	245673003	CWW	2/8/2010 17:23	947249	10-1442	200	LANL	USE	S
per0208034a	WCLCCV	CWW	2/8/2010 17:30			1		USE	C
per0208035a	IPB006	CWW	2/8/2010 17:36			1		USE	B
per0208036a	WCLCRI	CWW	2/8/2010 17:43			1		USE	C
per0208037a	245673006	CWW	2/8/2010 17:49	947249	10-1442	200	LANL	USE	S
per0208038a	245676001	CWW	2/8/2010 17:56	947249	10-1446	1	LANL	USE	S
per0208039a	1202029086	CWW	2/8/2010 18:03	947249	10-1446	1	LANL	USE	S
per0208040a	1202029087	CWW	2/8/2010 18:09	947249	10-1446	1	LANL	USE	S
per0208041a	245791001	CWW	2/8/2010 18:16	947249	10-1467	1	LANL	USE	S
per0208042a	1202029084	CWW	2/8/2010 18:22	947249	10-1467	1	LANL	USE	S
per0208043a	1202029085	CWW	2/8/2010 18:29	947249	10-1467	1	LANL	USE	S
per0208044a	245791003	CWW	2/8/2010 18:35	947249	10-1467	1	LANL	USE	S
per0208045a	245791006	CWW	2/8/2010 18:42	947249	10-1467	1	LANL	USE	S
per0208046a	245791007	CWW	2/8/2010 18:48	947249	10-1467	1	LANL	USE	S
per0208047a	WCLCCV	CWW	2/8/2010 18:55			1		USE	C
per0208048a	IPB007	CWW	2/8/2010 19:01			1		USE	B
per0208049a	WCLCRI	CWW	2/8/2010 19:08			1		USE	C
per0208050a	1202035565	CWW	2/8/2010 19:15	950028	VARIOUS	1	LANL	USE	S
per0208051a	1202035566	CWW	2/8/2010 19:21	950028	VARIOUS	1	LANL	USE	S
per0208052a	1202035573	CWW	2/8/2010 19:28	950028	VARIOUS	1	LANL	USE	S
per0208053a	245911001	CWW	2/8/2010 19:34	950028	10-1487-1	1	LANL	USE	S
per0208054a	1202035571	CWW	2/8/2010 19:41	950028	10-1487-1	1	LANL	USE	S
per0208055a	1202035572	CWW	2/8/2010 19:47	950028	10-1487-1	1	LANL	USE	S
per0208056a	245922001	CWW	2/8/2010 19:54	950028	10-1493-1	1	LANL	USE	S
per0208057a	245934001	CWW	2/8/2010 20:00	950028	10-1502	1	LANL	USE	S
per0208058a	245934004	CWW	2/8/2010 20:07	950028	10-1502	1	LANL	DUSE-DL	S
per0208059a	245939001	CWW	2/8/2010 20:14	950028	10-1506-1	1	LANL	DUSE-RA	S
per0208060a	WCLCCV	CWW	2/8/2010 20:20			1		USE	S
per0208061a	IPB008	CWW	2/8/2010 20:27			1		USE	C
per0208062a	WCLCRI	CWW	2/8/2010 20:33			1		USE	B
per0208063a	245939002	CWW	2/8/2010 20:40	950028	10-1506-1	1	LANL	USE	C
per0208064a	245953001	CWW	2/8/2010 20:47	950028	10-1508-1	1	LANL	USE	S
per0208065a	245965001	CWW	2/8/2010 20:53	950028	10-1511-1	1	LANL	USE	S
per0208066a	245975001	CWW	2/8/2010 21:00	950028	10-1512-1	1	LANL	USE	S

per0208067a	245981001	CWW	2/8/2010 21:06	950028	10-1514-1	1	LANL	USE	S
per0208068a	246000001	CWW	2/8/2010 21:13	950028	10-1517-1	1	LANL	USE	S
per0208069a	246007001	CWW	2/8/2010 21:19	950028	10-1520-1	1	LANL	USE	S
per0208070a	246056001	CWW	2/8/2010 21:26	950028	10-1545-1	1	LANL	USE	S
per0208071a	246056002	CWW	2/8/2010 21:32	950028	10-1545-1	1	LANL	USE	S
per0208072a	246056003	CWW	2/8/2010 21:39	950028	10-1545-1	1	LANL	USE	S
per0208073a	WCLCCV	CWW	2/8/2010 21:45			1		USE	C
per0208074a	IPB009	CWW	2/8/2010 21:52			1		USE	B
per0208075a	WCLCRI	CWW	2/8/2010 21:59			1		USE	C
per0208076a	246056004	CWW	2/8/2010 22:05	950028	10-1545-1	1	LANL	USE	S
per0208077a	246375001	CWW	2/8/2010 22:12	950028	10-1609	1	LANL	USE	S
per0208078a	1202035567	CWW	2/8/2010 22:19	950028	10-1609	1	LANL	USE	S
per0208079a	1202035568	CWW	2/8/2010 22:25	950028	10-1609	1	LANL	USE	S
per0208080a	IPB010	CWW	2/8/2010 22:32			1		USE	B
per0208081a	1262643 Supp	CWW	2/8/2010 22:38	Screen	Inhouse	1	GEL	DUSE	S
per0208082a	1202035625	CWW	2/8/2010 22:45	950048	VARIOUS	1	LANL	DUSE	S
per0208083a	WCLCCV	CWW	2/8/2010 22:52			1		USE	C
per0208084a	IPB011	CWW	2/8/2010 22:58			1		USE	B
per0208085a	WCLCRI	CWW	2/8/2010 23:05			1		USE	C

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208054a

Date: 08-Feb-2010

Time: 19:41:23

ID: 1202035571

Vial: 2:1,E

02-09-10

1202035571 | 1202035571 | MS | 1 |

Perchlorate

MRM of 3 channels, ES-

99 > 83

3.884e+004

1.91

11409.813

1.14e4

bb

0.192 ng/mL

2.996 -0.139%

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

Perchlorate-101

MRM of 3 channels, ES-

101 > 85

1.311e+004

1.89

3808.559

3.81e3

bb

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

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

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035571	Perchlorate	99 > 83	1.91	11409.813	11409.813	bb			0.1917	95.83	-4.17	2471.6...	3.00
1202035571	Perchlorate-101	101 > 85	1.89	3808.559	3808.559	bb			0.2029	101.45	1.45	676.220	
1202035571	Perchlorate-O(18)	107 > 89	1.89	22745.916	22745.916	bb			0.4676	93.53	-6.47	4602.2...	

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

7.812e+004

1.89

3808.559

3.81e3

bb

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

min

1.00

2.00

3.00

02-09-10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
 Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208055a

Date: 08-Feb-2010

Time: 19:47:53

ID: 1202035572

Vial: 2:1,F

02-09-10

1202035572 | 1202035572 | 1202035572

Perchlorate

MRM of 3 channels, ES-

99 > 83

4.019e+004

1.91

11802.944

1.18e4

bb

0.198 ng/mL

3.015 0.490%

Perchlorate

MRM of 3 channels, ES-

101 > 85

1.328e+004

1.89

3915.143

3.92e3

bb

Perchlorate-101

MRM of 3 channels, ES-

101 > 85

1.328e+004

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

7.620e+004

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035572	Perchlorate	99 > 83	1.91	11802.944	11802.944	bb			0.1983	99.13	-0.87	5921.1...	3.01
1202035572	Perchlorate-101	101 > 85	1.89	3915.143	3915.143	bb			0.2086	104.29	4.29	847.965	
1202035572	Perchlorate-O(18)	107 > 89	1.89	22449.852	22449.852	bb			0.4616	92.31	-7.69	7045.6...	

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 10-1517**

Sample Analysis

Sample ID	Client ID
245998001	RE15-10-8122
245998002	RE15-10-8112
245998003	RE15-10-8113
245998004	RE15-10-8116
245998005	RE15-10-8119
245998006	RE15-10-8114
245998007	RE15-10-8115
245998008	RE15-10-8117
245998009	RE15-10-8118
1202032633	Method Blank (MB) ICP
1202032638	Laboratory Control Sample (LCS)
1202032635	245998001(RE15-10-8122L) Serial Dilution (SD)
1202032634	245998001(RE15-10-8122D) Sample Duplicate (DUP)
1202032636	245998001(RE15-10-8122S) Matrix Spike (MS)
1202032637	245998001(RE15-10-8122SD) Matrix Spike Duplicate (MSD)
1202032646	Method Blank (MB) ICP-MS
1202032651	Laboratory Control Sample (LCS)
1202032648	245998001(RE15-10-8122L) Serial Dilution (SD)
1202032647	245998001(RE15-10-8122D) Sample Duplicate (DUP)
1202032649	245998001(RE15-10-8122S) Matrix Spike (MS)

1202032650	245998001(RE15-10-8122SD) Matrix Spike Duplicate (MSD)
1202039216	Method Blank (MB) CVAA
1202039217	Laboratory Control Sample (LCS)
1202039220	246012001(RE46-10-12033L) Serial Dilution (SD)
1202039218	246012001(RE46-10-12033D) Sample Duplicate (DUP)
1202039219	246012001(RE46-10-12033S) Matrix Spike (MS)
1202039221	246012001(RE46-10-12033SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	948776, 948782 and 951523
Prep Batch :	948773, 948780 and 951522
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 standards met the advisory control limits with the exception of uranium, 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: 245998001 (RE15-10-8122) and 246012001 (RE46-10-12033).

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, potassium, 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, 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 manganese, as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement

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

Serial Dilution % Difference Statement

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

Technical Information**Holding Time Specifications**

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

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The sample 245998008 (RE15-10-8117) required a dilution for uranium in order to bring over range concentrations within the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information

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

Miscellaneous Information

Electronic Packaging Comment

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

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

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 793598 and 796836. 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: 3/1/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998001

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8122

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13600000	ug/Kg	*	7780	22900	22900	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-36-0	Antimony	1360	ug/Kg	N	377	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-38-2	Arsenic	3.05	mg/kg		0.229	1.14	1.14	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-39-3	Barium	252000	ug/Kg		114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-41-7	Beryllium	1.42	mg/kg		0.0229	0.114	0.114	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-70-2	Calcium	5870000	ug/Kg		9150	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-47-3	Chromium	20500	ug/Kg		172	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-48-4	Cobalt	4480	ug/Kg	*	172	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-50-8	Copper	7570	ug/Kg		343	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-89-6	Iron	13700000	ug/Kg	*	9150	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-92-1	Lead	12200	ug/Kg	*	286	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-95-4	Magnesium	2660000	ug/Kg		9720	34300	34300	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-96-5	Manganese	246000	ug/Kg	*	229	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7439-97-6	Mercury	20.7	ug/kg		4.47	13.2	13.2	1	AV	JXLJ	02/18/10 14:56	021810S1-7	951523
7440-02-0	Nickel	11.8	mg/kg	N	0.114	0.457	0.457	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-09-7	Potassium	1360000	ug/Kg	N	7320	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7782-49-2	Selenium	1.14	mg/kg	UN	0.572	1.14	1.14	2	MS	RMJ	02/27/10 10:21	100226-4	948782
7440-22-4	Silver	572	ug/Kg	U	114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-23-5	Sodium	112000	ug/Kg		8000	28600	28600	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-28-0	Thallium	0.303	mg/kg		0.0686	0.229	0.229	2	MS	RMJ	02/26/10 12:08	100225-2	948782
7440-61-1	Uranium	1.11	mg/kg		0.0151	0.0457	0.0457	2	MS	RMJ	02/27/10 07:55	100226-3	948782
7440-62-2	Vanadium	24700	ug/Kg	*	114	572	572	1	P	JWJ	02/20/10 01:10	021910A-1	948776
7440-66-6	Zinc	25300	ug/Kg	*	377	1140	1140	1	P	JWJ	02/20/10 01:10	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.514	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.514	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.536	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998002

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8112

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 67

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9620000	ug/Kg	*	10100	29800	29800	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-36-0	Antimony	678	ug/Kg	JN	492	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-38-2	Arsenic	2.28	mg/kg		0.298	1.49	1.49	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-39-3	Barium	175000	ug/Kg		149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-41-7	Beryllium	1.26	mg/kg		0.0298	0.149	0.149	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-43-9	Cadmium	746	ug/Kg	U	149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-70-2	Calcium	2370000	ug/Kg		11900	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-47-3	Chromium	9600	ug/Kg		224	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-48-4	Cobalt	5070	ug/Kg	*	224	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-50-8	Copper	8460	ug/Kg		447	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-89-6	Iron	11900000	ug/Kg	*	11900	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-92-1	Lead	13600	ug/Kg	*	373	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-95-4	Magnesium	1840000	ug/Kg		12700	44700	44700	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-96-5	Manganese	337000	ug/Kg	*	298	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7439-97-6	Mercury	16	ug/kg	U	5.44	16	16	1	AV	JXL1	02/18/10 14:58	021810S1-7	951523
7440-02-0	Nickel	10.7	mg/kg	N	0.149	0.597	0.597	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-09-7	Potassium	1800000	ug/Kg	N	9550	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7782-49-2	Selenium	1.49	mg/kg	UN	0.746	1.49	1.49	2	MS	RMJ	02/27/10 10:41	100226-4	948782
7440-22-4	Silver	746	ug/Kg	U	149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-23-5	Sodium	44700	ug/Kg		10400	37300	37300	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-28-0	Thallium	0.259	mg/kg	J	0.0895	0.298	0.298	2	MS	RMJ	02/26/10 12:38	100225-2	948782
7440-61-1	Uranium	10.4	mg/kg		0.0197	0.0597	0.0597	2	MS	RMJ	02/27/10 08:10	100226-3	948782
7440-62-2	Vanadium	24500	ug/Kg	*	149	746	746	1	P	JWJ	02/20/10 01:27	021910A-1	948776
7440-66-6	Zinc	25300	ug/Kg	*	492	1490	1490	1	P	JWJ	02/20/10 01:27	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.5	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.5	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.559	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998003

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8113

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1720000	ug/Kg	*	7470	22000	22000	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-36-0	Antimony	560	ug/Kg	JN	363	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-38-2	Arsenic	1.84	mg/kg		0.223	1.12	1.12	2	MS	RMJ	02/27/10 10:52	100226-4	948782
7440-39-3	Barium	237000	ug/Kg		110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-41-7	Beryllium	1.23	mg/kg		0.0223	0.112	0.112	2	MS	RMJ	02/27/10 10:52	100226-4	948782
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-70-2	Calcium	3910000	ug/Kg		8790	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-47-3	Chromium	12800	ug/Kg		165	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-48-4	Cobalt	5090	ug/Kg	*	165	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-50-8	Copper	6630	ug/Kg		330	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-89-6	Iron	14900000	ug/Kg	*	8790	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-92-1	Lead	13000	ug/Kg	*	275	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-95-4	Magnesium	2330000	ug/Kg		9340	33000	33000	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-96-5	Manganese	324000	ug/Kg	*	220	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7439-97-6	Mercury	13.4	ug/kg		4.43	13	13	1	AV	JXL1	02/18/10 15:00	021810S1-7	951523
7440-02-0	Nickel	8.87	mg/kg	N	0.112	0.447	0.447	2	MS	RMJ	02/27/10 10:52	100226-4	948782
7440-09-7	Potassium	1760000	ug/Kg	N	7030	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7782-49-2	Selenium	1.12	mg/kg	UN	0.558	1.12	1.12	2	MS	RMJ	02/28/10 02:33	100227-6	948782
7440-22-4	Silver	550	ug/Kg	U	110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-23-5	Sodium	121000	ug/Kg		7690	27500	27500	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-28-0	Thallium	0.217	mg/kg	J	0.067	0.223	0.223	2	MS	RMJ	02/26/10 12:44	100225-2	948782
7440-61-1	Uranium	1.03	mg/kg		0.0147	0.0447	0.0447	2	MS	RMJ	02/27/10 08:13	100226-3	948782
7440-62-2	Vanadium	29100	ug/Kg	*	110	550	550	1	P	JWJ	02/20/10 01:31	021910A-1	948776
7440-66-6	Zinc	27300	ug/Kg	*	363	1100	1100	1	P	JWJ	02/20/10 01:31	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wL/vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.51	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.502	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.516	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998004

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8116

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 71

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8570000	ug/Kg	*	8880	26100	26100	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-36-0	Antimony	674	ug/Kg	JN	431	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-38-2	Arsenic	1.66	mg/kg		0.264	1.32	1.32	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-39-3	Barium	142000	ug/Kg		131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-41-7	Beryllium	1.04	mg/kg		0.0264	0.132	0.132	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-43-9	Cadmium	653	ug/Kg	U	131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-70-2	Calcium	1660000	ug/Kg		10400	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-47-3	Chromium	9650	ug/Kg		196	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-48-4	Cobalt	4160	ug/Kg	*	196	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-50-8	Copper	7660	ug/Kg		392	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-89-6	Iron	11600000	ug/Kg	*	10400	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-92-1	Lead	12900	ug/Kg	*	326	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-95-4	Magnesium	1580000	ug/Kg		11100	39200	39200	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-96-5	Manganese	325000	ug/Kg	*	261	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7439-97-6	Mercury	11	ug/kg	J	5.64	16.6	16.6	1	AV	JXL1	02/18/10 15:02	021810S1-7	951523
7440-02-0	Nickel	8.14	mg/kg	N	0.132	0.528	0.528	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-09-7	Potassium	1490000	ug/Kg	N	8360	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7782-49-2	Selenium	1.32	mg/kg	UN	0.66	1.32	1.32	2	MS	RMJ	02/27/10 10:56	100226-4	948782
7440-22-4	Silver	653	ug/Kg	U	131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-23-5	Sodium	55400	ug/Kg		9140	32600	32600	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-28-0	Thallium	0.230	mg/kg	J	0.0792	0.264	0.264	2	MS	RMJ	02/26/10 12:49	100225-2	948782
7440-61-1	Uranium	11.8	mg/kg		0.0174	0.0528	0.0528	2	MS	RMJ	02/27/10 08:23	100226-3	948782
7440-62-2	Vanadium	22000	ug/Kg	*	131	653	653	1	P	JWJ	02/20/10 01:42	021910A-1	948776
7440-66-6	Zinc	28500	ug/Kg	*	431	1310	1310	1	P	JWJ	02/20/10 01:42	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.536	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.53	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.506	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998005

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8119

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16900000	ug/Kg	*	7630	22500	22500	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-36-0	Antimony	1020	ug/Kg	JN	371	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-38-2	Arsenic	2.48	mg/kg		0.224	1.12	1.12	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-39-3	Barium	405000	ug/Kg		112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-41-7	Beryllium	1.53	mg/kg		0.0224	0.112	0.112	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-43-9	Cadmium	561	ug/Kg	U	112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-70-2	Calcium	12100000	ug/Kg		8980	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-47-3	Chromium	16200	ug/Kg		168	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-48-4	Cobalt	4620	ug/Kg	*	168	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-50-8	Copper	7380	ug/Kg		337	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-89-6	Iron	15100000	ug/Kg	*	8980	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-92-1	Lead	13800	ug/Kg	*	281	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-95-4	Magnesium	2910000	ug/Kg		9540	33700	33700	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-96-5	Manganese	269000	ug/Kg	*	225	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7439-97-6	Mercury	10.3	ug/kg	J	4.33	12.7	12.7	1	AV	JXL1	02/18/10 15:03	021810S1-7	951523
7440-02-0	Nickel	11.2	mg/kg	N	0.112	0.448	0.448	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-09-7	Potassium	1890000	ug/Kg	N	7190	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7782-49-2	Selenium	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	RMJ	02/27/10 11:00	100226-4	948782
7440-22-4	Silver	561	ug/Kg	U	112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-23-5	Sodium	307000	ug/Kg		7860	28100	28100	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-28-0	Thallium	0.246	mg/kg		0.0672	0.224	0.224	2	MS	RMJ	02/26/10 13:07	100225-2	948782
7440-61-1	Uranium	0.898	mg/kg		0.0148	0.0448	0.0448	2	MS	RMJ	02/27/10 08:26	100226-3	948782
7440-62-2	Vanadium	31200	ug/Kg	*	112	561	561	1	P	JWJ	02/20/10 01:46	021910A-1	948776
7440-66-6	Zinc	27200	ug/Kg	*	371	1120	1120	1	P	JWJ	02/20/10 01:46	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.502	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.503	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.531	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998006

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8114

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 56

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8940000	ug/Kg	*	12000	35300	35300	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-36-0	Antimony	1770	ug/Kg	UN	582	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-38-2	Arsenic	3.36	mg/kg		0.356	1.78	1.78	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-39-3	Barium	229000	ug/Kg		177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-41-7	Beryllium	1.26	mg/kg		0.0356	0.178	0.178	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-43-9	Cadmium	883	ug/Kg	U	177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-70-2	Calcium	5520000	ug/Kg		14100	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-47-3	Chromium	10900	ug/Kg		265	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-48-4	Cobalt	5570	ug/Kg	*	265	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-50-8	Copper	29900	ug/Kg		530	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-89-6	Iron	11800000	ug/Kg	*	14100	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-92-1	Lead	35800	ug/Kg	*	441	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-95-4	Magnesium	2030000	ug/Kg		15000	53000	53000	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-96-5	Manganese	797000	ug/Kg	*	353	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7439-97-6	Mercury	42.8	ug/kg		7.12	20.9	20.9	1	AV	JXL1	02/18/10 15:05	021810S1-7	951523
7440-02-0	Nickel	10.6	mg/kg	N	0.178	0.712	0.712	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-09-7	Potassium	2040000	ug/Kg	N	11300	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7782-49-2	Selenium	1.78	mg/kg	UN	0.89	1.78	1.78	2	MS	RMJ	02/27/10 11:04	100226-4	948782
7440-22-4	Silver	883	ug/Kg	U	177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-23-5	Sodium	50300	ug/Kg		12400	44100	44100	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-28-0	Thallium	0.226	mg/kg	J	0.107	0.356	0.356	2	MS	RMJ	02/26/10 13:13	100225-2	948782
7440-61-1	Uranium	23.8	mg/kg		0.0235	0.0712	0.0712	2	MS	RMJ	02/27/10 08:29	100226-3	948782
7440-62-2	Vanadium	23800	ug/Kg	*	177	883	883	1	P	JWJ	02/20/10 01:49	021910A-1	948776
7440-66-6	Zinc	43400	ug/Kg	*	582	1770	1770	1	P	JWJ	02/20/10 01:49	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.505	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.501	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.511	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998007

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8115

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13700000	ug/Kg	*	7950	23400	23400	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-36-0	Antimony	1510	ug/Kg	N	386	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-38-2	Arsenic	2.05	mg/kg		0.227	1.14	1.14	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-39-3	Barium	236000	ug/Kg		117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-41-7	Beryllium	1.25	mg/kg		0.0227	0.114	0.114	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-43-9	Cadmium	584	ug/Kg	U	117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-70-2	Calcium	5250000	ug/Kg		9350	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-47-3	Chromium	21300	ug/Kg		175	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-48-4	Cobalt	5830	ug/Kg	*	175	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-50-8	Copper	8040	ug/Kg		351	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-89-6	Iron	14700000	ug/Kg	*	9350	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-92-1	Lead	14600	ug/Kg	*	292	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-95-4	Magnesium	2790000	ug/Kg		9940	35100	35100	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-96-5	Manganese	359000	ug/Kg	*	234	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7439-97-6	Mercury	22.3	ug/kg		4.12	12.1	12.1	1	AV	JXL1	02/18/10 15:07	021810S1-7	951523
7440-02-0	Nickel	10.9	mg/kg	N	0.114	0.454	0.454	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-09-7	Potassium	1410000	ug/Kg	N	7480	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7782-49-2	Selenium	1.14	mg/kg	UN	0.568	1.14	1.14	2	MS	RMJ	02/27/10 11:08	100226-4	948782
7440-22-4	Silver	584	ug/Kg	U	117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-23-5	Sodium	114000	ug/Kg		8180	29200	29200	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-28-0	Thallium	0.249	mg/kg		0.0681	0.227	0.227	2	MS	RMJ	02/26/10 13:19	100225-2	948782
7440-61-1	Uranium	1.17	mg/kg		0.015	0.0454	0.0454	2	MS	RMJ	02/27/10 08:32	100226-3	948782
7440-62-2	Vanadium	28100	ug/Kg	*	117	584	584	1	P	JWJ	02/20/10 01:53	021910A-1	948776
7440-66-6	Zinc	26000	ug/Kg	*	386	1170	1170	1	P	JWJ	02/20/10 01:53	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.502	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.517	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.581	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998008

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8117

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 92.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12500000	ug/Kg	*	7230	21300	21300	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-36-0	Antimony	437	ug/Kg	JN	351	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-38-2	Arsenic	2.16	mg/kg		0.206	1.03	1.03	2	MS	RMJ	02/27/10 11:12	100226-4	948782
7440-39-3	Barium	208000	ug/Kg		106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-41-7	Beryllium	1.23	mg/kg		0.0206	0.103	0.103	2	MS	RMJ	02/27/10 11:12	100226-4	948782
7440-43-9	Cadmium	531	ug/Kg	U	106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-70-2	Calcium	2490000	ug/Kg		8500	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-47-3	Chromium	12900	ug/Kg		159	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-48-4	Cobalt	6310	ug/Kg	*	159	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-50-8	Copper	9500	ug/Kg		319	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-89-6	Iron	14800000	ug/Kg	*	8500	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-92-1	Lead	18000	ug/Kg	*	266	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-95-4	Magnesium	2110000	ug/Kg		9030	31900	31900	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-96-5	Manganese	441000	ug/Kg	*	213	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7439-97-6	Mercury	14	ug/kg		4.05	11.9	11.9	1	AV	JXL1	02/18/10 15:09	021810S1-7	951523
7440-02-0	Nickel	9.87	mg/kg	N	0.103	0.413	0.413	2	MS	RMJ	02/27/10 11:12	100226-4	948782
7440-09-7	Potassium	1940000	ug/Kg	N	6800	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7782-49-2	Selenium	1.03	mg/kg	UN	0.516	1.03	1.03	2	MS	RMJ	02/28/10 02:47	100227-6	948782
7440-22-4	Silver	531	ug/Kg	U	106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-23-5	Sodium	67600	ug/Kg		7440	26600	26600	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-28-0	Thallium	0.242	mg/kg		0.0619	0.206	0.206	2	MS	RMJ	02/26/10 13:25	100225-2	948782
7440-61-1	Uranium	29.5	mg/kg		0.0273	0.0826	0.0826	4	MS	RMJ	02/28/10 01:53	100227-5	948782
7440-62-2	Vanadium	30800	ug/Kg	*	106	531	531	1	P	JWJ	02/20/10 01:57	021910A-1	948776
7440-66-6	Zinc	34500	ug/Kg	*	351	1060	1060	1	P	JWJ	02/20/10 01:57	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.507	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.522	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.543	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245998009

BASIS: Dry Weight

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8118

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 72

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11200000	ug/Kg	*	9160	26900	26900	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-36-0	Antimony	556	ug/Kg	JN	445	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-38-2	Arsenic	1.62	mg/kg		0.263	1.31	1.31	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-39-3	Barium	189000	ug/Kg		135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-41-7	Beryllium	0.927	mg/kg		0.0263	0.131	0.131	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-43-9	Cadmium	674	ug/Kg	U	135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-70-2	Calcium	2380000	ug/Kg		10800	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-47-3	Chromium	17600	ug/Kg		202	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-48-4	Cobalt	6850	ug/Kg	*	202	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-50-8	Copper	14200	ug/Kg		404	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-89-6	Iron	14700000	ug/Kg	*	10800	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-92-1	Lead	16800	ug/Kg	*	337	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-95-4	Magnesium	2010000	ug/Kg		11500	40400	40400	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-96-5	Manganese	458000	ug/Kg	*	269	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7439-97-6	Mercury	11.4	ug/kg	J	5.32	15.6	15.6	1	AV	JXL1	02/18/10 15:15	021810S1-7	951523
7440-02-0	Nickel	8.21	mg/kg	N	0.131	0.526	0.526	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-09-7	Potassium	1990000	ug/Kg	N	8620	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7782-49-2	Selenium	1.31	mg/kg	UN	0.657	1.31	1.31	2	MS	RMJ	02/27/10 11:16	100226-4	948782
7440-22-4	Silver	674	ug/Kg	U	135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-23-5	Sodium	68200	ug/Kg		9430	33700	33700	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-28-0	Thallium	0.183	mg/kg	J	0.0788	0.263	0.263	2	MS	RMJ	02/26/10 13:31	100225-2	948782
7440-61-1	Uranium	18.9	mg/kg		0.0173	0.0526	0.0526	2	MS	RMJ	02/27/10 08:38	100226-3	948782
7440-62-2	Vanadium	30500	ug/Kg	*	135	674	674	1	P	JWJ	02/20/10 02:00	021910A-1	948776
7440-66-6	Zinc	30200	ug/Kg	*	445	1350	1350	1	P	JWJ	02/20/10 02:00	021910A-1	948776

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948776	948773	SW846 3050B	0.512	g	50	mL	02/10/10	FGA
948782	948780	SW846 3050B	0.525	g	50	mL	02/10/10	FGA
951523	951522	SW846 7471A Prep	0.529	g	30	mL	02/17/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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	5.13	ug/L	5	ug/L	102.6	90.0 – 110.0	AV	18-FEB-10 09:57	021810S1-7
	Aluminum	5190	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Antimony	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Barium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Calcium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Cobalt	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Copper	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Magnesium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Manganese	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Potassium	2560	ug/L	2500	ug/L	102.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Silver	262	ug/L	250	ug/L	104.9	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Sodium	2570	ug/L	2500	ug/L	102.8	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Zinc	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Thallium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	26-FEB-10 10:45	100225-2
	Uranium	53.2	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	27-FEB-10 07:21	100226-3
	Arsenic	47	ug/L	50	ug/L	94	90.0 – 110.0	MS	27-FEB-10 09:49	100226-4
	Beryllium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	27-FEB-10 09:49	100226-4
	Nickel	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	27-FEB-10 09:49	100226-4
	Selenium	51.9	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	27-FEB-10 09:49	100226-4
	Uranium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	28-FEB-10 00:42	100227-5
	Selenium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	28-FEB-10 02:13	100227-6
CCV01										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	18-FEB-10 10:03	021810S1-7
	Aluminum	5300	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Antimony	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Barium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Cadmium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Lead	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Magnesium	5420	ug/L	5000	ug/L	108.5	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Manganese	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Potassium	5360	ug/L	5000	ug/L	107.2	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Sodium	10700	ug/L	10000	ug/L	106.9	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Vanadium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Zinc	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Thallium	47.8	ug/L	50	ug/L	95.6	90.0 – 110.0	MS	26-FEB-10 11:15	100225-2
	Uranium	53.1	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	27-FEB-10 07:36	100226-3
	Arsenic	47.4	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	27-FEB-10 10:07	100226-4
	Beryllium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	27-FEB-10 10:07	100226-4
	Nickel	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	27-FEB-10 10:07	100226-4
	Selenium	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	27-FEB-10 10:07	100226-4
	Uranium	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	28-FEB-10 00:58	100227-5
	Selenium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	28-FEB-10 02:27	100227-6
CCV02	Mercury	5.07	ug/L	5	ug/L	101.4	80.0 – 120.0	AV	18-FEB-10 10:27	021810S1-7
	Aluminum	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Cadmium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Calcium	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Iron	5390	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Lead	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Manganese	515	ug/L	500	ug/L	103	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Potassium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Silver	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Sodium	10700	ug/L	10000	ug/L	106.9	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Zinc	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Thallium	49	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	26-FEB-10 11:32	100225-2
	Uranium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	27-FEB-10 07:48	100226-3
	Arsenic	47.2	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	27-FEB-10 10:45	100226-4
	Beryllium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	27-FEB-10 10:45	100226-4
	Nickel	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	27-FEB-10 10:45	100226-4
	Selenium	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	27-FEB-10 10:45	100226-4
	Uranium	48.4	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	28-FEB-10 01:10	100227-5
	Selenium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	28-FEB-10 02:39	100227-6
CCV03	Mercury	5.22	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	18-FEB-10 10:51	021810S1-7
	Aluminum	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Antimony	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Cadmium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Calcium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Copper	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Iron	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Lead	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Magnesium	5340	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Manganese	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Potassium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Sodium	10500	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Vanadium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Thallium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	26-FEB-10 11:56	100225-2
	Uranium	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	27-FEB-10 08:16	100226-3
	Arsenic	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	27-FEB-10 11:20	100226-4
	Beryllium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	27-FEB-10 11:20	100226-4
	Nickel	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	27-FEB-10 11:20	100226-4
	Selenium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	27-FEB-10 11:20	100226-4
	Uranium	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	28-FEB-10 01:44	100227-5
	Selenium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	28-FEB-10 02:50	100227-6
CCV04	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	18-FEB-10 11:15	021810S1-7
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Antimony	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Barium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Cadmium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Copper	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Lead	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Potassium	4920	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Silver	490	ug/L	500	ug/L	98	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Sodium	9990	ug/L	10000	ug/L	99.9	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Thallium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	26-FEB-10 12:55	100225-2
	Uranium	54.8	ug/L	50	ug/L	109.6	90.0 – 110.0	MS	27-FEB-10 08:41	100226-3
	Uranium	48.2	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	28-FEB-10 01:56	100227-5
CCV05										
	Mercury	5.01	ug/L	5	ug/L	100.2	80.0 – 120.0	AV	18-FEB-10 11:39	021810S1-7
	Aluminum	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Antimony	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Barium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Cadmium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Calcium	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Cobalt	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Iron	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Lead	475	ug/L	500	ug/L	95	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Magnesium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Silver	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Vanadium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Zinc	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	26-FEB-10 13:49	100225-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
CCV06										
	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	18-FEB-10 12:03	021810S1-7
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Antimony	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Barium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Cadmium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Manganese	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Potassium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Silver	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Zinc	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
CCV07										
	Mercury	5.07	ug/L	5	ug/L	101.3	80.0 – 120.0	AV	18-FEB-10 12:26	021810S1-7
	Aluminum	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Antimony	468	ug/L	500	ug/L	93.7	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Barium	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Cadmium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Calcium	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Chromium	476	ug/L	500	ug/L	95.1	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Cobalt	480	ug/L	500	ug/L	96	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Copper	471	ug/L	500	ug/L	94.2	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Iron	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Lead	472	ug/L	500	ug/L	94.4	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1

METALS
--2a--
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Magnesium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Manganese	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Potassium	4790	ug/L	5000	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Silver	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Vanadium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
	Zinc	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	19-FEB-10 19:59	021910A-1
CCV08										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	18-FEB-10 12:50	021810S1-7
	Aluminum	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Antimony	480	ug/L	500	ug/L	96	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Barium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Calcium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Chromium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Cobalt	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Copper	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Lead	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Magnesium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Manganese	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Silver	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Sodium	9960	ug/L	10000	ug/L	99.6	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Vanadium	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
	Zinc	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	19-FEB-10 20:35	021910A-1
CCV09										
	Mercury	4.93	ug/L	5	ug/L	98.6	80.0 – 120.0	AV	18-FEB-10 13:07	021810S1-7
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Antimony	468	ug/L	500	ug/L	93.7	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Barium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Cadmium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Chromium	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Cobalt	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Copper	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Lead	472	ug/L	500	ug/L	94.5	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Magnesium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Manganese	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Potassium	4800	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Silver	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Sodium	9700	ug/L	10000	ug/L	97	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Vanadium	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Zinc	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
CCV10	Mercury	4.88	ug/L	5	ug/L	97.6	80.0 – 120.0	AV	18-FEB-10 13:31	021810S1-7
	Aluminum	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Antimony	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Barium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Calcium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Chromium	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Copper	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Lead	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Magnesium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Potassium	4800	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Silver	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
CCV11										
	Mercury	2.33	ug/L	5	ug/L	46.5	80.0 – 120.0	AV	18-FEB-10 13:54	021810S1-7
	Aluminum	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Antimony	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Cadmium	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Calcium	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Chromium	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Cobalt	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Copper	473	ug/L	500	ug/L	94.7	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Lead	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Magnesium	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Manganese	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Potassium	4820	ug/L	5000	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Sodium	9730	ug/L	10000	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Vanadium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Zinc	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
CCV12										
	Mercury	5.32	ug/L	5	ug/L	106.5	80.0 – 120.0	AV	18-FEB-10 14:05	021810S1-7
	Aluminum	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Antimony	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Cadmium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Chromium	477	ug/L	500	ug/L	95.3	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Cobalt	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Copper	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Lead	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Potassium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Silver	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Vanadium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Zinc	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
CCV13	Mercury	5.09	ug/L	5	ug/L	101.9	80.0 – 120.0	AV	18-FEB-10 14:29	021810S1-7
	Aluminum	4790	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Antimony	466	ug/L	500	ug/L	93.1	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Barium	473	ug/L	500	ug/L	94.7	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Cadmium	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Calcium	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Chromium	470	ug/L	500	ug/L	94	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Cobalt	473	ug/L	500	ug/L	94.7	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Copper	467	ug/L	500	ug/L	93.4	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Iron	4920	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Lead	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Magnesium	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Manganese	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Potassium	4760	ug/L	5000	ug/L	95.2	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Silver	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Sodium	9590	ug/L	10000	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1
	Vanadium	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
CCV14	Zinc	472	ug/L	500	ug/L	94.5	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Mercury	4.97	ug/L	5	ug/L	99.4	80.0 - 120.0	AV	18-FEB-10 14:47	021810S1-7
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Antimony	474	ug/L	500	ug/L	94.8	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Cadmium	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Calcium	4860	ug/L	5000	ug/L	97.2	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Chromium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Cobalt	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Copper	475	ug/L	500	ug/L	95	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Iron	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Lead	475	ug/L	500	ug/L	95	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Magnesium	4950	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Manganese	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Potassium	4840	ug/L	5000	ug/L	96.8	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Silver	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Vanadium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Zinc	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
CCV15	Mercury	5.08	ug/L	5	ug/L	101.5	80.0 - 120.0	AV	18-FEB-10 15:11	021810S1-7
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Antimony	470	ug/L	500	ug/L	94	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Barium	473	ug/L	500	ug/L	94.6	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Cadmium	474	ug/L	500	ug/L	94.9	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Calcium	4790	ug/L	5000	ug/L	95.7	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Chromium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Cobalt	473	ug/L	500	ug/L	94.6	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Copper	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Lead	470	ug/L	500	ug/L	94	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Magnesium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Manganese	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Potassium	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Silver	478	ug/L	500	ug/L	95.5	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Vanadium	474	ug/L	500	ug/L	94.8	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
	Zinc	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	20-FEB-10 00:47	021910A-1
CCV16	Mercury	5.12	ug/L	5	ug/L	102.4	80.0 - 120.0	AV	18-FEB-10 15:35	021810S1-7
	Aluminum	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Antimony	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Barium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Cadmium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Chromium	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Copper	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Iron	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Lead	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Manganese	495	ug/L	500	ug/L	99	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Potassium	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Vanadium	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
CCV17	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: 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>
	Antimony	476	ug/L	500	ug/L	95.1	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Barium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Cadmium	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Calcium	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Chromium	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Cobalt	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Copper	473	ug/L	500	ug/L	94.7	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Lead	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Magnesium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Potassium	4840	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Silver	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Sodium	9830	ug/L	10000	ug/L	98.3	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Vanadium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Zinc	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1517

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: 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	.218	ug/L	.2	ug/L	109	70.0 - 130.0	AV	18-FEB-10 10:01	021810S1-7
	Thallium	1.1	ug/L	1	ug/L	109.8	70.0 - 130.0	MS	26-FEB-10 10:57	100225-2
	Uranium	.265	ug/L	.2	ug/L	132.5	70.0 - 130.0	MS	27-FEB-10 07:27	100226-3
	Nickel	2.21	ug/L	2	ug/L	110.7	70.0 - 130.0	MS	27-FEB-10 09:56	100226-4
	Arsenic	5.4	ug/L	5	ug/L	108	70.0 - 130.0	MS	27-FEB-10 09:56	100226-4
	Beryllium	.589	ug/L	.5	ug/L	117.8	70.0 - 130.0	MS	27-FEB-10 09:56	100226-4
	Selenium	5.31	ug/L	5	ug/L	106.3	70.0 - 130.0	MS	27-FEB-10 09:56	100226-4
	Uranium	.254	ug/L	.2	ug/L	127	70.0 - 130.0	MS	28-FEB-10 00:49	100227-5
	Selenium	5.98	ug/L	5	ug/L	119.7	70.0 - 130.0	MS	28-FEB-10 02:19	100227-6
PQL01										
	Aluminum	198	ug/L	200	ug/L	98.8	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Iron	101	ug/L	100	ug/L	100.9	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Lead	10.5	ug/L	10	ug/L	105.2	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Magnesium	305	ug/L	300	ug/L	101.7	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Manganese	10.3	ug/L	10	ug/L	102.7	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Potassium	157	ug/L	150	ug/L	104.4	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Silver	4.8	ug/L	5	ug/L	96.1	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Sodium	312	ug/L	300	ug/L	104	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Antimony	10.8	ug/L	10	ug/L	108.3	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Barium	4.87	ug/L	5	ug/L	97.4	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Cadmium	5	ug/L	5	ug/L	99.9	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Chromium	5.48	ug/L	5	ug/L	109.5	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Cobalt	4.54	ug/L	5	ug/L	90.9	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Copper	10.1	ug/L	10	ug/L	100.7	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Vanadium	5.03	ug/L	5	ug/L	100.5	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Zinc	9.76	ug/L	10	ug/L	97.6	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1
	Calcium	188	ug/L	200	ug/L	94.2	70.0 - 130.0	P	19-FEB-10 16:47	021910A-1

Metals
--3a--
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01	Mercury	-0.129	+/- .2	J	0.068	0.2	SOL	AV	18-FEB-10 09:59	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 16:44	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 16:44	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 10:51	100225-2
	Uranium	0.066	+/- .2	U	0.066	0.2	SOL	MS	27-FEB-10 07:24	100226-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	27-FEB-10 09:53	100226-4
	Beryllium	0.1	+/- .5	U	0.1	0.5	SOL	MS	27-FEB-10 09:53	100226-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	27-FEB-10 09:53	100226-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	27-FEB-10 09:53	100226-4
	Uranium	0.066	+/- .2	U	0.066	0.2	SOL	MS	28-FEB-10 00:45	100227-5
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	28-FEB-10 02:16	100227-6
CCB01	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	18-FEB-10 10:05	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 17:07	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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	19-FEB-10 17:07	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Lead	5.21	+/-10	J	2.5	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 17:07	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Potassium	80.96	+/-250	J	64.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Sodium	72.13	+/-250	J	70.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 11:21	100225-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	27-FEB-10 07:39	100226-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	27-FEB-10 10:10	100226-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	27-FEB-10 10:10	100226-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	27-FEB-10 10:10	100226-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	27-FEB-10 10:10	100226-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-FEB-10 01:01	100227-5
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	28-FEB-10 02:30	100227-6
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 10:29	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 17:25	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:25	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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>
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 17:25	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 11:38	100225-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	27-FEB-10 07:51	100226-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	27-FEB-10 10:49	100226-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	27-FEB-10 10:49	100226-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	27-FEB-10 10:49	100226-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	27-FEB-10 10:49	100226-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-FEB-10 01:13	100227-5
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	28-FEB-10 02:41	100227-6
CCB03	Mercury	-0.08	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 10:53	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 17:55	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 17:55	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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	19-FEB-10 17:55	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 12:02	100225-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	27-FEB-10 08:19	100226-3
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	27-FEB-10 11:23	100226-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	27-FEB-10 11:23	100226-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	27-FEB-10 11:23	100226-4
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	27-FEB-10 11:23	100226-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-FEB-10 01:47	100227-5
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	28-FEB-10 02:53	100227-6
CCB04	Mercury	-0.106	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 11:17	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 18:28	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 18:28	021910A-1
	Manganese	2.04	+/-10	J	2.0	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 18:28	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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>
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 13:01	100225-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	27-FEB-10 08:44	100226-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-FEB-10 01:59	100227-5
CCB05	Mercury	-0.154	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 11:41	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 19:01	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 19:01	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 13:55	100225-2
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 12:05	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 19:30	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 19:30	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:30	021910A-1
CCB07										
	Mercury	0.068	+/-0.2	U	0.068	0.2	SOL	AV	18-FEB-10 12:28	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 20:02	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 20:02	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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>
CCB08	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 12:52	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 20:39	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 20:39	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:39	021910A-1
CCB09	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 13:09	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 21:12	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:12	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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>
CCB10	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 21:12	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:12	021910A-1
CCB10	Mercury	-0.083	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 13:33	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 21:55	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 21:55	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:55	021910A-1
CCB11	Mercury	-0.241	+/-2		0.068	0.2	SOL	AV	18-FEB-10 13:56	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 22:32	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 22:32	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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>
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Lead	-3.7	+/-10	J	2.5	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 22:32	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 22:32	021910A-1
CCB12	Mercury	-0.094	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 14:08	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 23:09	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 23:09	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:09	021910A-1
CCB13	Mercury	-0.091	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 14:31	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 23:41	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 23:41	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:41	021910A-1
CCB14	Mercury	-0.111	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 14:49	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 00:15	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:15	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 00:15	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 00:15	021910A-1
CCB15	Mercury	-0.115	+/- .2	J	0.068	0.2	SOL	AV	18-FEB-10 15:13	021810S1-7
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 00:51	021910A-1
	Antimony	-4.24	+/-10	J	3.3	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 00:51	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 00:51	021910A-1
CCB16	Mercury	-0.122	+/- .2	J	0.068	0.2	SOL	AV	18-FEB-10 15:37	021810S1-7

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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>
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 01:38	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 01:38	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 01:38	021910A-1
CCB17	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 02:19	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 02:19	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 02:19	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517

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	20-FEB-10 02:19	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 02:19	021910A-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1517
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>
1202032633	Aluminum	6760	ug/Kg	+/-19900	U	P	6760	19900
	Antimony	328	ug/Kg	+/-994	U	P	328	994
	Barium	99.4	ug/Kg	+/-497	U	P	99.4	497
	Cadmium	99.4	ug/Kg	+/-497	U	P	99.4	497
	Calcium	7950	ug/Kg	+/-24900	U	P	7950	24900
	Chromium	149	ug/Kg	+/-497	U	P	149	497
	Cobalt	149	ug/Kg	+/-497	U	P	149	497
	Copper	298	ug/Kg	+/-994	U	P	298	994
	Iron	8320	ug/Kg	+/-24900	J	P	7950	24900
	Lead	-276	ug/Kg	+/-994	J	P	249	994
	Magnesium	8450	ug/Kg	+/-29800	U	P	8450	29800
	Manganese	199	ug/Kg	+/-994	U	P	199	994
	Potassium	6360	ug/Kg	+/-24900	U	P	6360	24900
	Silver	99.4	ug/Kg	+/-497	U	P	99.4	497
	Sodium	6960	ug/Kg	+/-24900	U	P	6960	24900
	Vanadium	99.4	ug/Kg	+/-497	U	P	99.4	497
	Zinc	328	ug/Kg	+/-994	U	P	328	994
1202032646	Arsenic	0.197	mg/kg	+/-0.984	U	MS	0.197	0.984
	Beryllium	0.0197	mg/kg	+/-0.0984	U	MS	0.0197	0.0984
	Nickel	0.0984	mg/kg	+/-0.394	U	MS	0.0984	0.394
	Selenium	0.492	mg/kg	+/-0.984	U	MS	0.492	0.984
	Thallium	0.0591	mg/kg	+/-0.197	U	MS	0.0591	0.197
	Uranium	0.013	mg/kg	+/-0.0394	U	MS	0.013	0.0394
1202039216	Mercury	3.65	ug/kg	+/-10.7	U	AV	3.65	10.7

METALS
-4-
Interference Check Sample

SDG No: 10-1517

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	515000	ug/L	500000	ug/L	103	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Antimony	-14.6	ug/L					19-FEB-10 16:51	021910A-1
	Barium	7.73	ug/L					19-FEB-10 16:51	021910A-1
	Cadmium	-6.35	ug/L					19-FEB-10 16:51	021910A-1
	Calcium	489000	ug/L	500000	ug/L	97.8	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Chromium	-0.312	ug/L					19-FEB-10 16:51	021910A-1
	Cobalt	2.17	ug/L					19-FEB-10 16:51	021910A-1
	Copper	-2.01	ug/L					19-FEB-10 16:51	021910A-1
	Iron	191000	ug/L	200000	ug/L	95.7	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Lead	7.77	ug/L					19-FEB-10 16:51	021910A-1
	Magnesium	494000	ug/L	500000	ug/L	98.8	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Manganese	8.98	ug/L					19-FEB-10 16:51	021910A-1
	Potassium	-20.1	ug/L					19-FEB-10 16:51	021910A-1
	Silver	-6.6	ug/L					19-FEB-10 16:51	021910A-1
	Sodium	30.3	ug/L					19-FEB-10 16:51	021910A-1
	Vanadium	-3.3	ug/L					19-FEB-10 16:51	021910A-1
	Zinc	-9.41	ug/L					19-FEB-10 16:51	021910A-1
ICSAB01									
	Aluminum	510000	ug/L	500000	ug/L	102	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Antimony	505	ug/L	500	ug/L	101	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Barium	503	ug/L	500	ug/L	101	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Cadmium	459	ug/L	500	ug/L	91.9	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Calcium	485000	ug/L	500000	ug/L	97	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Chromium	489	ug/L	500	ug/L	97.8	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Cobalt	435	ug/L	500	ug/L	87.1	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Copper	543	ug/L	500	ug/L	109	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Iron	189000	ug/L	200000	ug/L	94.4	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Lead	484	ug/L	500	ug/L	96.8	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Magnesium	489000	ug/L	500000	ug/L	97.8	80.0 – 120.0	19-FEB-10 16:54	021910A-1

METALS

-4-

Interference Check Sample

SDG No: 10-1517

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	489	ug/L	500	ug/L	97.8	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Potassium	5060	ug/L	5000	ug/L	101	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Silver	257	ug/L	250	ug/L	103	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Sodium	5160	ug/L	5000	ug/L	103	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Vanadium	520	ug/L	500	ug/L	104	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Zinc	466	ug/L	500	ug/L	93.3	80.0 - 120.0	19-FEB-10 16:54	021910A-1

METALS

-4-

Interference Check Sample

SDG No: 10-1517

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	Thallium	0.009	ug/L					26-FEB-10 11:03	100225-2
ICSAB01	Thallium	18.9	ug/L	20	ug/L	94.4	80.0 - 120.0	26-FEB-10 11:09	100225-2

METALS
-4-
Interference Check Sample

SDG No: 10-1517

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	Uranium	-0.003	ug/L					27-FEB-10 07:30	100226-3
ICSAB01	Uranium	21.8	ug/L	20	ug/L	109	80.0 - 120.0	27-FEB-10 07:33	100226-3

METALS
-4-
Interference Check Sample

SDG No: 10-1517**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	0.174	ug/L					27-FEB-10 10:00	100226-4
	Beryllium	0.115	ug/L					27-FEB-10 10:00	100226-4
	Nickel	4.51	ug/L					27-FEB-10 10:00	100226-4
	Selenium	-2.67	ug/L					27-FEB-10 10:00	100226-4
ICSAB01									
	Arsenic	20.0	ug/L	20	ug/L	100	80.0 - 120.0	27-FEB-10 10:03	100226-4
	Beryllium	19.9	ug/L	20	ug/L	99.2	80.0 - 120.0	27-FEB-10 10:03	100226-4
	Nickel	23.9	ug/L	23.31	ug/L	102	80.0 - 120.0	27-FEB-10 10:03	100226-4
	Selenium	18.0	ug/L	20	ug/L	90	80.0 - 120.0	27-FEB-10 10:03	100226-4

METALS
-4-
Interference Check Sample

SDG No: 10-1517

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	Uranium	0.002	ug/L					28-FEB-10 00:52	100227-5
ICSAB01	Uranium	21.3	ug/L	20	ug/L	106	80.0 - 120.0	28-FEB-10 00:55	100227-5

METALS

-4-

Interference Check Sample

SDG No: 10-1517

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	Selenium	-2.07	ug/L					28-FEB-10 02:22	100227-6
ICSAB01	Selenium	20.2	ug/L	20	ug/L	101	80.0 - 120.0	28-FEB-10 02:25	100227-6

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1517 Client ID RE15-10-8122S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 85

Sample ID: 245998001 Spike ID: 1202032636

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		23600000		13600000		574000	1730	N/A	P
Antimony	ug/Kg	75-125	35600		1360		57400	59.7	N	P
Barium	ug/Kg		344000		252000		57400	161	N/A	P
Cadmium	ug/Kg	75-125	52800		114	U	57400	92		P
Calcium	ug/Kg		6890000		5870000		574000	178	N/A	P
Chromium	ug/Kg	75-125	76800		20500		57400	98.1		P
Cobalt	ug/Kg	75-125	56900		4480		57400	91.3		P
Copper	ug/Kg	75-125	65600		7570		57400	101		P
Iron	ug/Kg		18300000		13700000		574000	807	N/A	P
Lead	ug/Kg	75-125	67500		12200		57400	96.3		P
Magnesium	ug/Kg		4000000		2660000		574000	233	N/A	P
Manganese	ug/Kg		370000		246000		57400	215	N/A	P
Potassium	ug/Kg	75-125	2400000		1360000		574000	180	N	P
Silver	ug/Kg	75-125	54700		114	U	57400	95.3		P
Sodium	ug/Kg	75-125	684000		112000		574000	99.6		P
Vanadium	ug/Kg	75-125	84900		24700		57400	105		P
Zinc	ug/Kg	75-125	86600		25300		57400	107		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1517 Client ID RE15-10-8122SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 85

Sample ID: 245998001 Spike ID: 1202032637

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		24600000		13600000		566000	1940	N/A	P
Antimony	ug/Kg	75-125	38300		1360		56600	65.3	N	P
Barium	ug/Kg		321000		252000		56600	123	N/A	P
Cadmium	ug/Kg	75-125	52500		114	U	56600	92.7		P
Calcium	ug/Kg		6020000		5870000		566000	26.5	N/A	P
Chromium	ug/Kg	75-125	77800		20500		56600	101		P
Cobalt	ug/Kg	75-125	58800		4480		56600	95.9		P
Copper	ug/Kg	75-125	66500		7570		56600	104		P
Iron	ug/Kg		20700000		13700000		566000	1230	N/A	P
Lead	ug/Kg	75-125	72200		12200		56600	106		P
Magnesium	ug/Kg		4260000		2660000		566000	282	N/A	P
Manganese	ug/Kg		495000		246000		56600	439	N/A	P
Potassium	ug/Kg	75-125	2460000		1360000		566000	194	N	P
Silver	ug/Kg	75-125	54200		114	U	56600	95.7		P
Sodium	ug/Kg	75-125	689000		112000		566000	102		P
Vanadium	ug/Kg	75-125	92500		24700		56600	120		P
Zinc	ug/Kg	75-125	88600		25300		56600	112		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1517 **Client ID** RE15-10-8122S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 85

Sample ID: 245998001 **Spike ID:** 1202032649

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	mg/kg	75-125	12.4		3.05		9.22	101		MS
Beryllium	mg/kg	75-125	7.56		1.42		5.76	107		MS
Nickel	mg/kg	75-125	22.2		11.8		5.76	181	N	MS
Selenium	mg/kg	75-125	.576	U	0.572	U	2.3	0	N	MS
Thallium	mg/kg	75-125	11.3		0.303		11.5	95.8		MS
Uranium	mg/kg	75-125	8.29		1.11		5.76	125		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1517 Client ID RE15-10-8122SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 85

Sample ID: 245998001 Spike ID: 1202032650

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	11.2		3.05		9.17	88.4		MS
Beryllium	mg/kg	75-125	7.03		1.42		5.73	97.8		MS
Nickel	mg/kg	75-125	21.4		11.8		5.73	168	N	MS
Selenium	mg/kg	75-125	.573	U	0.572	U	2.29	0	N	MS
Thallium	mg/kg	75-125	10.8		0.303		11.5	91.6		MS
Uranium	mg/kg	75-125	8.21		1.11		5.73	124		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1517 **Client ID** RE46-10-12033S**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 81**Sample ID:** 246012001 **Spike ID:** 1202039219

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	171		15.4		141	110		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1517 Client ID RE46-10-12033SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 81

Sample ID: 246012001 Spike ID: 1202039221

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	176		15.4		142	113		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8122D

Sample ID: 245998001

Duplicate ID: 1202032634

Percent Solids for Dup: 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	13600000		16700000		20.5	*	P
Antimony	ug/Kg	+/-1140	1360		892 J		41.7		P
Barium	ug/Kg	+/-20%	252000		270000		7.04		P
Cadmium	ug/Kg		114 U		114 U				P
Calcium	ug/Kg	+/-20%	5870000		5790000		1.24		P
Chromium	ug/Kg	+/-20%	20500		22900		11.1		P
Cobalt	ug/Kg	+/-20%	4480		7060		44.7	*	P
Copper	ug/Kg	+/-20%	7570		9040		17.8		P
Iron	ug/Kg	+/-20%	13700000		17500000		24.5	*	P
Lead	ug/Kg	+/-20%	12200		17300		34.3	*	P
Magnesium	ug/Kg	+/-20%	2660000		3240000		19.6		P
Manganese	ug/Kg	+/-20%	246000		467000		61.8	*	P
Potassium	ug/Kg	+/-20%	1360000		1660000		19.9		P
Silver	ug/Kg		114 U		114 U				P
Sodium	ug/Kg	+/-28600	112000		134000		18		P
Vanadium	ug/Kg	+/-20%	24700		32200		26.4	*	P
Zinc	ug/Kg	+/-20%	25300		31600		22.2	*	P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8122SD

Sample ID: 1202032636

Duplicate ID: 1202032637

Percent Solids for Dup: 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	23600000		24600000		4.32		P
Antimony	ug/Kg	+/-20	35600		38300		7.29		P
Barium	ug/Kg	+/-20	344000		321000		6.82		P
Cadmium	ug/Kg	+/-20	52800		52500		.645		P
Calcium	ug/Kg	+/-20	6890000		6020000		13.5		P
Chromium	ug/Kg	+/-20	76800		77800		1.25		P
Cobalt	ug/Kg	+/-20	56900		58800		3.31		P
Copper	ug/Kg	+/-20	65600		66500		1.4		P
Iron	ug/Kg	+/-20	18300000		20700000		12		P
Lead	ug/Kg	+/-20	67500		72200		6.62		P
Magnesium	ug/Kg	+/-20	4000000		4260000		6.33		P
Manganese	ug/Kg	+/-20	370000		495000		29	*	P
Potassium	ug/Kg	+/-20	2400000		2460000		2.71		P
Silver	ug/Kg	+/-20	54700		54200		.88		P
Sodium	ug/Kg	+/-20	684000		689000		.787		P
Vanadium	ug/Kg	+/-20	84900		92500		8.6		P
Zinc	ug/Kg	+/-20	86600		88600		2.33		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8122D

Sample ID: 245998001

Duplicate ID: 1202032647

Percent Solids for Dup: 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.13	3.05		1.97		43.1		MS
Beryllium	mg/kg	+/-20%	1.42		1.17		19.6		MS
Nickel	mg/kg	+/-20%	11.8		10.3		13.9		MS
Selenium	mg/kg		0.572 U		0.565 U				MS
Thallium	mg/kg	+/-226	0.303		0.256		16.6		MS
Uranium	mg/kg	+/-20%	1.11		1.02		8.91		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8122SD

Sample ID: 1202032649

Duplicate ID: 1202032650

Percent Solids for Dup: 85

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	12.4		11.2		10.4		MS
Beryllium	mg/kg	+/-20	7.56		7.03		7.36		MS
Nickel	mg/kg	+/-20	22.2		21.4		3.68		MS
Selenium	mg/kg		0.576 U		0.573 U				MS
Thallium	mg/kg	+/-20	11.3		10.8		4.98		MS
Uranium	mg/kg	+/-20	8.29		8.21		.91		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-12033D

Sample ID: 246012001

Duplicate ID: 1202039218

Percent Solids for Dup: 81

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/- 14.9	15.4		10.8 J		35		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-12033SD

Sample ID: 1202039219

Duplicate ID: 1202039221

Percent Solids for Dup: 81

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	171		176		2.95		AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1517

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>
1202032638								
	Aluminum	ug/Kg	10500000	9030000		86	56-144	P
	Antimony	ug/Kg	173000	136000		78.8	71-130	P
	Barium	ug/Kg	198000	195000		98.3	80-120	P
	Cadmium	ug/Kg	60700	61200		101	81-120	P
	Calcium	ug/Kg	9870000	10400000		106	83-117	P
	Chromium	ug/Kg	236000	247000		104	80-120	P
	Cobalt	ug/Kg	91200	95600		105	81-120	P
	Copper	ug/Kg	174000	189000		109	81-118	P
	Iron	ug/Kg	18000000	19500000		108	51-149	P
	Lead	ug/Kg	86000	85500		99.5	79-121	P
	Magnesium	ug/Kg	4000000	3880000		97.1	79-122	P
	Manganese	ug/Kg	558000	563000		101	81-119	P
	Potassium	ug/Kg	4300000	4050000		94.3	74-127	P
	Silver	ug/Kg	30100	31600		105	66-134	P
	Sodium	ug/Kg	1020000	1020000		100	74-127	P
	Vanadium	ug/Kg	115000	126000		110	79-121	P
	Zinc	ug/Kg	594000	599000		101	80-121	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1517

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>
1202032651								
	Arsenic	mg/kg	104	107		103	78-123	MS
	Beryllium	mg/kg	77.6	77.9		100	84-116	MS
	Nickel	mg/kg	134	142		106	78-123	MS
	Selenium	mg/kg	286	299		104	77-123	MS
	Thallium	mg/kg	121	121		100	78-122	MS
	Uranium	mg/kg	2.13	2.05		96.4	73-127	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1517

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>
1202039217	Mercury	ug/kg	5150	5980		116	71.6-128.3	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1517 Client ID RE15-10-8122L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245998001 Serial Dilution ID: 1202032635

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	119000		121000		1.68		10	P
Antimony	11.9		16.5	U	100			P
Barium	2200		2220		.682		10	P
Cadmium	1	U	5	U				P
Calcium	51300		51000		.585		10	P
Chromium	179		180		.559		10	P
Cobalt	39.2		39.9		1.66			P
Copper	66.2		62		6.34			P
Iron	120000		124000		2.92		10	P
Lead	107		98.5		7.94			P
Magnesium	23300		23700		1.5		10	P
Manganese	2160		2180		.694		10	P
Potassium	11900		12200		2.1		10	P
Silver	1	U	5	U				P
Sodium	979		935	J	4.49			P
Vanadium	216		213		1.39		10	P
Zinc	221		212		4.3		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1517 Client ID RE15-10-8122L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245998001 Serial Dilution ID: 1202032648

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	13.3		13.5	J	1.5			MS
Beryllium	6.23		6.3		1.12			MS
Nickel	51.6		53		2.71		10	MS
Selenium	2.5	U	12.5	U				MS
Thallium	1.32		1.94	J	46.6			MS
Uranium	4.86		4.75		2.26			MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1517 Client ID RE46-10-12033L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246012001 Serial Dilution ID: 1202039220

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.207		.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1517

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 948773							
1202032633	MB for batch 948773	MB	S	10-FEB-10	.503g	50mL	
1202032638	LCS for batch 948773	LCS	S	10-FEB-10	.51g	50mL	
1202032636	RE15-10-8122S	MS	S	10-FEB-10	.512g	50mL	
1202032637	RE15-10-8122SD	MSD	S	10-FEB-10	.519g	50mL	
1202032634	RE15-10-8122D	DUP	S	10-FEB-10	.514g	50mL	
245998001	RE15-10-8122	SAMPLE	S	10-FEB-10	.514g	50mL	
245998002	RE15-10-8112	SAMPLE	S	10-FEB-10	.5g	50mL	
245998003	RE15-10-8113	SAMPLE	S	10-FEB-10	.51g	50mL	
245998004	RE15-10-8116	SAMPLE	S	10-FEB-10	.536g	50mL	
245998005	RE15-10-8119	SAMPLE	S	10-FEB-10	.502g	50mL	
245998006	RE15-10-8114	SAMPLE	S	10-FEB-10	.505g	50mL	
245998007	RE15-10-8115	SAMPLE	S	10-FEB-10	.502g	50mL	
245998008	RE15-10-8117	SAMPLE	S	10-FEB-10	.507g	50mL	
245998009	RE15-10-8118	SAMPLE	S	10-FEB-10	.512g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1517

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 948780							
1202032646	MB for batch 948780	MB	S	10-FEB-10	.508g	50mL	
1202032651	LCS for batch 948780	LCS	S	10-FEB-10	.52g	50mL	
1202032649	RE15-10-8122S	MS	S	10-FEB-10	.51g	50mL	
1202032650	RE15-10-8122SD	MSD	S	10-FEB-10	.513g	50mL	
1202032647	RE15-10-8122D	DUP	S	10-FEB-10	.52g	50mL	
245998001	RE15-10-8122	SAMPLE	S	10-FEB-10	.514g	50mL	
245998002	RE15-10-8112	SAMPLE	S	10-FEB-10	.5g	50mL	
245998003	RE15-10-8113	SAMPLE	S	10-FEB-10	.502g	50mL	
245998004	RE15-10-8116	SAMPLE	S	10-FEB-10	.53g	50mL	
245998005	RE15-10-8119	SAMPLE	S	10-FEB-10	.503g	50mL	
245998006	RE15-10-8114	SAMPLE	S	10-FEB-10	.501g	50mL	
245998007	RE15-10-8115	SAMPLE	S	10-FEB-10	.517g	50mL	
245998008	RE15-10-8117	SAMPLE	S	10-FEB-10	.522g	50mL	
245998009	RE15-10-8118	SAMPLE	S	10-FEB-10	.525g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1517

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	951522						
1202039216	MB for batch 951522	MB	S	17-FEB-10	.559g	30mL	
1202039217	LCS for batch 951522	LCS	S	17-FEB-10	.205g	30mL	
1202039219	RE46-10-12033S	MS	S	17-FEB-10	.528g	30mL	
1202039221	RE46-10-12033SD	MSD	S	17-FEB-10	.523g	30mL	
1202039218	RE46-10-12033D	DUP	S	17-FEB-10	.5g	30mL	
245998001	RE15-10-8122	SAMPLE	S	17-FEB-10	.536g	30mL	
245998002	RE15-10-8112	SAMPLE	S	17-FEB-10	.559g	30mL	
245998003	RE15-10-8113	SAMPLE	S	17-FEB-10	.516g	30mL	
245998004	RE15-10-8116	SAMPLE	S	17-FEB-10	.506g	30mL	
245998005	RE15-10-8119	SAMPLE	S	17-FEB-10	.531g	30mL	
245998006	RE15-10-8114	SAMPLE	S	17-FEB-10	.511g	30mL	
245998007	RE15-10-8115	SAMPLE	S	17-FEB-10	.581g	30mL	
245998008	RE15-10-8117	SAMPLE	S	17-FEB-10	.543g	30mL	
245998009	RE15-10-8118	SAMPLE	S	17-FEB-10	.529g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS6**Start Date:** 26-FEB-10**End Date:** 26-FEB-10**Client Sdg:** 10-1517**Method:** MS**Data File:** 100225-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	10:27																					X			
S10	1	10:33																					X			
S100	1	10:39																					X			
ICV01	1	10:45																					X			
ICB01	1	10:51																					X			
CRDL01	1	10:57																					X			
ICSA01	1	11:03																					X			
ICSAB01	1	11:09																					X			
CCV01	1	11:15																					X			
CCB01	1	11:21																					X			
LR01	1	11:26																					X			
CCV02	1	11:32																					X			
CCB02	1	11:38																					X			
1202032646	2	11:44																					X			
1202032651	40	11:50																					X			
CCV03	1	11:56																					X			
CCB03	1	12:02																					X			
245998001	2	12:08																					X			
1202032647	2	12:14																					X			
1202032649	2	12:20																					X			
1202032650	2	12:26																					X			
1202032648	10	12:32																					X			
245998002	2	12:38																					X			
245998003	2	12:44																					X			
245998004	2	12:49																					X			
CCV04	1	12:55																					X			
CCB04	1	13:01																					X			
245998005	2	13:07																					X			
245998006	2	13:13																					X			
245998007	2	13:19																					X			
245998008	2	13:25																					X			
245998009	2	13:31																					X			
ZZZZZZ	2	13:37																								
ZZZZZZ	2	13:43																								
CCV05	1	13:49																					X			
CCB05	1	13:55																					X			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 27-FEB-10

End Date: 27-FEB-10

Client Sdg: 10-1517

Method MS

Data File: 100226-3

Sample No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	07:11																						X		
S10	1	07:15																						X		
S100	1	07:18																						X		
ICV01	1	07:21																						X		
ICB01	1	07:24																						X		
CRDL01	1	07:27																						X		
JCSA01	1	07:30																						X		
JCSAB01	1	07:33																						X		
CCV01	1	07:36																						X		
CCB01	1	07:39																						X		
1202032646	2	07:42																						X		
1202032651	40	07:45																						X		
CCV02	1	07:48																						X		
CCB02	1	07:51																						X		
245998001	2	07:55																						X		
1202032647	2	07:58																						X		
1202032649	2	08:01																						X		
1202032650	2	08:04																						X		
1202032648	10	08:07																						X		
245998002	2	08:10																						X		
245998003	2	08:13																						X		
CCV03	1	08:16																						X		
CCB03	1	08:19																						X		
245998004	2	08:23																						X		
245998005	2	08:26																						X		
245998006	2	08:29																						X		
245998007	2	08:32																						X		
ZZZZZZ	2	08:35																								
245998009	2	08:38																						X		
CCV04	1	08:41																						X		
CCB04	1	08:44																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 27-FEB-10

End Date: 27-FEB-10

Client Sdg: 10-1517

Method: MS

Data File: 100226-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:39			X		X											X	X							
S10	1	09:43			X		X											X	X							
S100	1	09:46			X		X											X	X							
ICV01	1	09:49			X		X											X	X							
ICB01	1	09:53			X		X											X	X							
CRDL01	1	09:56			X		X											X	X							
ICSA01	1	10:00			X		X											X	X							
ICSAB01	1	10:03			X		X											X	X							
CCV01	1	10:07			X		X											X	X							
CCB01	1	10:10			X		X											X	X							
1202032646	2	10:14			X		X											X	X							
1202032651	40	10:18			X		X											X	X							
245998001	2	10:21			X		X											X	X							
1202032647	2	10:25			X		X											X	X							
1202032649	2	10:29			X		X											X	X							
1202032650	2	10:33			X		X											X	X							
1202032648	10	10:37			X		X											X	X							
245998002	2	10:41			X		X											X	X							
CCV02	1	10:45			X		X											X	X							
CCB02	1	10:49			X		X											X	X							
245998003	2	10:52			X		X											X								
245998004	2	10:56			X		X											X	X							
245998005	2	11:00			X		X											X	X							
245998006	2	11:04			X		X											X	X							
245998007	2	11:08			X		X											X	X							
245998008	2	11:12			X		X											X								
245998009	2	11:16			X		X											X	X							
CCV03	1	11:20			X		X											X	X							
CCB03	1	11:23			X		X											X	X							

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 28-FEB-10

End Date: 28-FEB-10

Client Sdg: 10-1517

Method MS

Data File: 100227-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	00:33																						X		
S10	1	00:36																						X		
S100	1	00:39																						X		
ICV01	1	00:42																						X		
ICB01	1	00:45																						X		
CRDL01	1	00:49																						X		
ICSA01	1	00:52																						X		
ICSAB01	1	00:55																						X		
CCV01	1	00:58																						X		
CCB01	1	01:01																						X		
ZZZZZZ	1	01:04																								
ZZZZZZ	1	01:07																								
CCV02	1	01:10																						X		
CCB02	1	01:13																						X		
ZZZZZZ	5	01:16																								
ZZZZZZ	5	01:19																								
ZZZZZZ	1	01:22																								
ZZZZZZ	10	01:25																								
ZZZZZZ	10	01:28																								
ZZZZZZ	10	01:31																								
ZZZZZZ	50	01:35																								
ZZZZZZ	2	01:38																								
ZZZZZZ	10	01:41																								
CCV03	1	01:44																						X		
CCB03	1	01:47																						X		
245998008	4	01:53																						X		
CCV04	1	01:56																						X		
CCB04	1	01:59																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 28-FEB-10

Client Sdg: 10-1517

Method MS

Data File: 100227-6

End Date: 28-FEB-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	02:05																		X						
S10	1	02:08																		X						
S100	1	02:11																		X						
ICV01	1	02:13																		X						
ICB01	1	02:16																		X						
CRDL01	1	02:19																		X						
ICSA01	1	02:22																		X						
ICSAB01	1	02:25																		X						
CCV01	1	02:27																		X						
CCB01	1	02:30																		X						
245998003	2	02:33																		X						
ZZZZZZ	4	02:36																								
CCV02	1	02:39																		X						
CCB02	1	02:41																		X						
245998008	2	02:47																		X						
CCV03	1	02:50																		X						
CCB03	1	02:53																		X						

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 18-FEB-10

End Date: 18-FEB-10

Client Sdg: 10-1517

Method AV

Data File: 021810S1-7

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	U	V	Zn
S0.0	1	09:45															X									
S0.2	1	09:47															X									
S0.5	1	09:49															X									
S2.0	1	09:51															X									
S5.0	1	09:53															X									
S10	1	09:55															X									
ICV01	1	09:57															X									
ICB01	1	09:59															X									
CRDL01	1	10:01															X									
CCV01	1	10:03															X									
CCB01	1	10:05															X									
ZZZZZZ	1	10:07																								
ZZZZZZ	10	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
ZZZZZZ	1	10:15																								
ZZZZZZ	1	10:17																								
ZZZZZZ	5	10:19																								
ZZZZZZ	1	10:21																								
ZZZZZZ	1	10:23																								
ZZZZZZ	1	10:25																								
CCV02	1	10:27															X									
CCB02	1	10:29															X									
ZZZZZZ	1	10:31																								
ZZZZZZ	1	10:33																								
ZZZZZZ	1	10:35																								
ZZZZZZ	1	10:37																								
ZZZZZZ	1	10:39																								
ZZZZZZ	1	10:41																								
ZZZZZZ	1	10:43																								
ZZZZZZ	1	10:45																								
ZZZZZZ	1	10:47																								
ZZZZZZ	1	10:49																								
CCV03	1	10:51															X									
CCB03	1	10:53															X									
ZZZZZZ	1	10:55																								
ZZZZZZ	1	10:57																								
ZZZZZZ	10	10:59																								
ZZZZZZ	1	11:01																								
ZZZZZZ	1	11:03																								

Samp No.	D/F	Run Time
ZZZZZZ	1	11:05
ZZZZZZ	1	11:07
ZZZZZZ	5	11:09
ZZZZZZ	1	11:11
ZZZZZZ	1	11:13
CCV04	1	11:15
CCB04	1	11:17
ZZZZZZ	1	11:19
ZZZZZZ	1	11:21
ZZZZZZ	1	11:23
ZZZZZZ	1	11:25
ZZZZZZ	1	11:27
ZZZZZZ	1	11:29
ZZZZZZ	1	11:31
ZZZZZZ	1	11:33
ZZZZZZ	1	11:35
ZZZZZZ	1	11:37
CCV05	1	11:39
CCB05	1	11:41
ZZZZZZ	1	11:43
ZZZZZZ	1	11:45
ZZZZZZ	1	11:47
ZZZZZZ	1	11:49
ZZZZZZ	1	11:51
ZZZZZZ	1	11:53
ZZZZZZ	1	11:55
ZZZZZZ	1	11:57
ZZZZZZ	10	11:59
ZZZZZZ	1	12:01
CCV06	1	12:03
CCB06	1	12:05
ZZZZZZ	1	12:07
ZZZZZZ	1	12:09
ZZZZZZ	1	12:11
ZZZZZZ	1	12:12
ZZZZZZ	1	12:14
ZZZZZZ	1	12:16
ZZZZZZ	1	12:18
ZZZZZZ	1	12:20
ZZZZZZ	1	12:22

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	12:24																								
CCV07	1	12:26															X									
CCB07	1	12:28															X									
ZZZZZZ	1	12:30																								
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:34																								
ZZZZZZ	1	12:36																								
ZZZZZZ	5	12:38																								
ZZZZZZ	1	12:40																								
ZZZZZZ	1	12:42																								
ZZZZZZ	1	12:44																								
ZZZZZZ	1	12:46																								
ZZZZZZ	1	12:48																								
CCV08	1	12:50															X									
CCB08	1	12:52															X									
ZZZZZZ	1	12:54																								
ZZZZZZ	1	12:56																								
ZZZZZZ	1	12:58																								
CCV09	1	13:07															X									
CCB09	1	13:09															X									
ZZZZZZ	50	13:11																								
ZZZZZZ	10	13:13																								
ZZZZZZ	200	13:15																								
ZZZZZZ	1	13:17																								
ZZZZZZ	200	13:19																								
ZZZZZZ	1	13:21																								
ZZZZZZ	10	13:23																								
ZZZZZZ	1	13:25																								
ZZZZZZ	1	13:27																								
ZZZZZZ	1	13:29																								
CCV10	1	13:31															X									
CCB10	1	13:33															X									
ZZZZZZ	1	13:35																								
ZZZZZZ	5	13:37																								
ZZZZZZ	1	13:39																								
ZZZZZZ	1	13:41																								
ZZZZZZ	1	13:43																								
ZZZZZZ	1	13:45																								
ZZZZZZ	1	13:47																								
ZZZZZZ	1	13:49																								

Samp No.	D/F	Run Time
ZZZZZZ	1	13:50
ZZZZZZ	1	13:52
CCV11	1	13:54
CCB11	1	13:56
CCV12	1	14:05
CCB12	1	14:08
ZZZZZZ	400	14:09
ZZZZZZ	1	14:11
ZZZZZZ	5	14:13
ZZZZZZ	1	14:15
ZZZZZZ	1	14:17
ZZZZZZ	1	14:19
ZZZZZZ	1	14:21
ZZZZZZ	1	14:23
ZZZZZZ	1	14:25
ZZZZZZ	1	14:27
CCV13	1	14:29
CCB13	1	14:31
ZZZZZZ	1	14:33
ZZZZZZ	1	14:35
ZZZZZZ	1	14:37
ZZZZZZ	1	14:39
ZZZZZZ	1	14:41
ZZZZZZ	1	14:43
ZZZZZZ	1	14:45
CCV14	1	14:47
CCB14	1	14:49
1202039216	1	14:52
1202039217	10	14:54
245998001	1	14:56
245998002	1	14:58
245998003	1	15:00
245998004	1	15:02
245998005	1	15:03
245998006	1	15:05
245998007	1	15:07
245998008	1	15:09
CCV15	1	15:11
CCB15	1	15:13
245998009	1	15:15

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	15:17																								
1202039218	1	15:19															X									
1202039219	1	15:21															X									
1202039221	1	15:23															X									
1202039220	5	15:25															X									
ZZZZZZ	1	15:27																								
ZZZZZZ	1	15:29																								
ZZZZZZ	1	15:31																								
ZZZZZZ	1	15:33																								
CCV16	1	15:35															X									
CCB16	1	15:37															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 19-FEB-10

End Date: 20-FEB-10

Client Sdg: 10-1517

Method P

Data File: 021910A-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	16:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	16:28		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	16:30	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	16:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	16:38	X					X					X		X							X				
ICV01	1	16:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	16:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	16:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	16:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	16:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	16:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	16:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	17:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	17:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	17:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	17:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	17:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	17:30																								
ZZZZZZ	1	17:34																								
ZZZZZZ	1	17:37																								
ZZZZZZ	1	17:41																								
ZZZZZZ	1	17:44																								
ZZZZZZ	1	17:48																								
CCV03	1	17:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	17:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	17:59																								
ZZZZZZ	1	18:03																								
ZZZZZZ	1	18:06																								
ZZZZZZ	1	18:09																								
ZZZZZZ	1	18:13																								
ZZZZZZ	1	18:17																								
ZZZZZZ	5	18:20																								
CCV04	1	18:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	18:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	18:31																								
ZZZZZZ	1	18:35																								
ZZZZZZ	1	18:39																								
ZZZZZZ	1	18:42																								
ZZZZZZ	1	18:46																								
ZZZZZZ	1	18:50																								

SW846

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	21:23																								
ZZZZZZ	1	21:26																								
ZZZZZZ	1	21:30																								
ZZZZZZ	1	21:33																								
ZZZZZZ	1	21:37																								
ZZZZZZ	5	21:41																								
ZZZZZZ	1	21:44																								
ZZZZZZ	1	21:48																								
CCV10	1	21:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	21:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	21:59																								
ZZZZZZ	1	22:03																								
ZZZZZZ	1	22:06																								
ZZZZZZ	1	22:10																								
ZZZZZZ	1	22:14																								
ZZZZZZ	1	22:17																								
ZZZZZZ	1	22:21																								
ZZZZZZ	1	22:25																								
CCV11	1	22:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	22:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	22:36																								
ZZZZZZ	1	22:39																								
ZZZZZZ	1	22:43																								
ZZZZZZ	1	22:47																								
ZZZZZZ	1	22:50																								
ZZZZZZ	1	22:54																								
ZZZZZZ	1	22:58																								
ZZZZZZ	1	23:01																								
CCV12	1	23:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	23:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	23:12																								
ZZZZZZ	1	23:16																								
ZZZZZZ	1	23:19																								
ZZZZZZ	1	23:23																								
ZZZZZZ	1	23:26																								
ZZZZZZ	1	23:30																								
ZZZZZZ	5	23:34																								
CCV13	1	23:38	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	23:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	23:45																								

SW846

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1517

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
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1517

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. 10-1517

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1517

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: **10-1517**

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: GELGEL Job No: **10-1517**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Iron	Lead	Magnesium	Manganese	Molybdenum
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	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: **10-1517**

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: GELGEL Job No: **10-1517**Contract: LANL01004Instrument: OPTIMA1Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1517

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. 10-1517

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
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1517

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
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

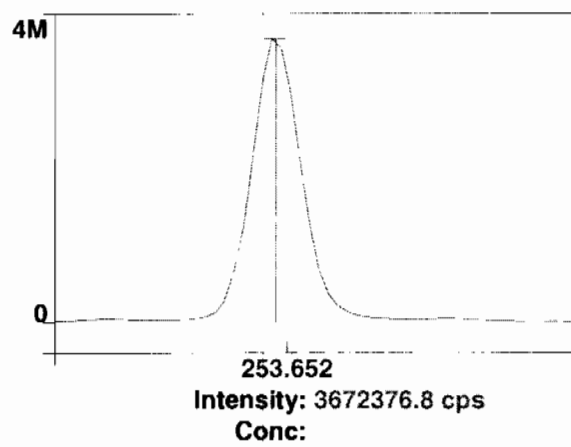
Raw Data

Method: Hg_ReAlign
Result: 022710B

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

=====
Analysis Begun

Start Time: 2/19/2010 16:24:40

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021910E.sif

Batch ID:

Results Data Set: 021910A

Results Library: c:\pe\optimal\Results\Results.mdb
=====

Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/19/2010 15:19:26

IEC File: 011510.iec

MSF File:

Method Description:

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

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/19/2010 16:24:43

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	56379.0	56379.0	99.8 %	16:25:17
1	Al 396.153Radial†	16.2	16.2	[0.00] µg/L	16:25:17
1	Ca 317.933Radial†	214.7	215.2	[0.00] µg/L	16:25:38
1	Fe 238.204 Radial†	18.4	18.4	[0.00] µg/L	16:25:38

1	K 766.490 Radial†	170.1	170.5	[0.00]	µg/L	16:25:17
1	Mg 279.077 IEC†	12.4	12.5	[0.00]	µg/L	16:25:38
1	Na 589.592 Radial†	471.3	472.3	[0.00]	µg/L	16:25:17
1	Sr 421.552†	12.0	12.0	[0.00]	µg/L	16:25:17
1	Sc 361.383	1972868.2	1972868.2	100.50	%	16:26:40
1	Y 371.029	1358545.8	1358545.8	100.43	%	16:26:40
1	Ag 328.068†	-377.9	-376.0	[0.00]	µg/L	16:26:45
1	As 188.979†	2.0	2.0	[0.00]	µg/L	16:27:06
1	B 249.677†	379.3	377.5	[0.00]	µg/L	16:27:06
1	Ba 233.527†	-13.3	-13.3	[0.00]	µg/L	16:27:06
1	Be 313.107†	-2914.6	-2900.2	[0.00]	µg/L	16:26:45
1	Cd 226.502†	-140.3	-139.6	[0.00]	µg/L	16:27:06
1	Co 228.616†	-4.5	-4.5	[0.00]	µg/L	16:27:06
1	Cr 267.716†	-50.8	-50.6	[0.00]	µg/L	16:26:45
1	Cu 324.752†	2545.0	2532.4	[0.00]	µg/L	16:26:45
1	Mn 257.610†	-255.0	-253.7	[0.00]	µg/L	16:27:06
1	Mo 202.031†	-2.4	-2.3	[0.00]	µg/L	16:27:06
1	Ni 231.604†	320.7	319.1	[0.00]	µg/L	16:27:06
1	P 214.914†	15.8	15.8	[0.00]	µg/L	16:27:06
1	Pb 220.353†	88.6	88.2	[0.00]	µg/L	16:27:06
1	S 181.975 Axial†	19.1	19.1	[0.00]	µg/L	16:27:06
1	Sb 206.836†	17.4	17.3	[0.00]	µg/L	16:27:06
1	Se 196.026†	20.3	20.2	[0.00]	µg/L	16:27:06
1	SiO2†	1396.5	1389.6	[0.00]	µg/L	16:26:45
1	Si 251.611†	308.1	306.6	[0.00]	µg/L	16:27:06
1	Sn 189.927†	0.6	0.6	[0.00]	µg/L	16:27:06
1	Ti 334.940†	185.3	184.3	[0.00]	µg/L	16:26:45
1	Tl 190.801†	-23.5	-23.3	[0.00]	µg/L	16:27:06
1	U 409.014†	-92.6	-92.1	[0.00]	µg/L	16:26:45
1	V 292.402†	-67.1	-66.8	[0.00]	µg/L	16:26:45
1	Zn 213.857†	537.3	534.6	[0.00]	µg/L	16:27:06
2	Sc RADIAL	56755.6	56755.6	100	%	16:25:43
2	Al 396.153Radial†	-1.8	-1.8	[0.00]	µg/L	16:25:43
2	Ca 317.933Radial†	215.5	214.5	[0.00]	µg/L	16:26:04
2	Fe 238.204 Radial†	16.5	16.4	[0.00]	µg/L	16:26:04
2	K 766.490 Radial†	182.5	181.6	[0.00]	µg/L	16:25:43
2	Mg 279.077 IEC†	11.4	11.3	[0.00]	µg/L	16:26:04
2	Na 589.592 Radial†	457.5	455.4	[0.00]	µg/L	16:25:43
2	Sr 421.552†	48.2	48.0	[0.00]	µg/L	16:25:43
2	Sc 361.383	1966863.7	1966863.7	100.19	%	16:27:12
2	Y 371.029	1355430.0	1355430.0	100.20	%	16:27:12
2	Ag 328.068†	-456.1	-455.2	[0.00]	µg/L	16:27:17
2	As 188.979†	1.0	0.9	[0.00]	µg/L	16:27:38
2	B 249.677†	393.1	392.3	[0.00]	µg/L	16:27:38
2	Ba 233.527†	-22.9	-22.8	[0.00]	µg/L	16:27:38
2	Be 313.107†	-2829.8	-2824.4	[0.00]	µg/L	16:27:17
2	Cd 226.502†	-143.7	-143.4	[0.00]	µg/L	16:27:38
2	Co 228.616†	5.2	5.2	[0.00]	µg/L	16:27:38
2	Cr 267.716†	-56.7	-56.6	[0.00]	µg/L	16:27:17
2	Cu 324.752†	2525.9	2521.0	[0.00]	µg/L	16:27:17
2	Mn 257.610†	-246.3	-245.8	[0.00]	µg/L	16:27:38
2	Mo 202.031†	-7.2	-7.2	[0.00]	µg/L	16:27:38
2	Ni 231.604†	311.9	311.3	[0.00]	µg/L	16:27:38
2	P 214.914†	14.8	14.8	[0.00]	µg/L	16:27:38
2	Pb 220.353†	93.7	93.5	[0.00]	µg/L	16:27:38
2	S 181.975 Axial†	14.7	14.7	[0.00]	µg/L	16:27:38
2	Sb 206.836†	27.4	27.4	[0.00]	µg/L	16:27:38
2	Se 196.026†	17.0	16.9	[0.00]	µg/L	16:27:38
2	SiO2†	1365.2	1362.6	[0.00]	µg/L	16:27:17
2	Si 251.611†	311.7	311.1	[0.00]	µg/L	16:27:38
2	Sn 189.927†	0.1	0.1	[0.00]	µg/L	16:27:38
2	Ti 334.940†	147.4	147.1	[0.00]	µg/L	16:27:17
2	Tl 190.801†	-23.8	-23.8	[0.00]	µg/L	16:27:38
2	U 409.014†	-39.1	-39.0	[0.00]	µg/L	16:27:17
2	V 292.402†	-66.7	-66.6	[0.00]	µg/L	16:27:17
2	Zn 213.857†	535.6	534.6	[0.00]	µg/L	16:27:38
3	Sc RADIAL	56352.2	56352.2	99.7	%	16:26:09
3	Al 396.153Radial†	7.7	7.7	[0.00]	µg/L	16:26:09
3	Ca 317.933Radial†	203.6	204.1	[0.00]	µg/L	16:26:29
3	Fe 238.204 Radial†	14.9	14.9	[0.00]	µg/L	16:26:29
3	K 766.490 Radial†	142.5	142.8	[0.00]	µg/L	16:26:09

3	Mg 279.077 IEC†	14.6	14.7	[0.00]	µg/L	16:26:29
3	Na 589.592 Radial†	487.6	488.9	[0.00]	µg/L	16:26:09
3	Sr 421.552†	26.3	26.4	[0.00]	µg/L	16:26:09
3	Sc 361.383	1949627.5	1949627.5	99.313	%	16:27:44
3	Y 371.029	1344291.5	1344291.5	99.374	%	16:27:44
3	Ag 328.068†	-371.1	-373.6	[0.00]	µg/L	16:27:50
3	As 188.979†	-4.3	-4.4	[0.00]	µg/L	16:28:10
3	B 249.677†	380.0	382.6	[0.00]	µg/L	16:28:10
3	Ba 233.527†	-15.0	-15.1	[0.00]	µg/L	16:28:10
3	Be 313.107†	-2823.0	-2842.5	[0.00]	µg/L	16:27:50
3	Cd 226.502†	-141.0	-142.0	[0.00]	µg/L	16:28:10
3	Co 228.616†	5.0	5.1	[0.00]	µg/L	16:28:10
3	Cr 267.716†	-43.6	-43.9	[0.00]	µg/L	16:27:50
3	Cu 324.752†	2560.1	2577.8	[0.00]	µg/L	16:27:50
3	Mn 257.610†	-266.7	-268.5	[0.00]	µg/L	16:28:10
3	Mo 202.031†	-6.5	-6.5	[0.00]	µg/L	16:28:10
3	Ni 231.604†	304.5	306.6	[0.00]	µg/L	16:28:10
3	P 214.914†	15.4	15.5	[0.00]	µg/L	16:28:10
3	Pb 220.353†	90.5	91.1	[0.00]	µg/L	16:28:10
3	S 181.975 Axial†	22.9	23.0	[0.00]	µg/L	16:28:10
3	Sb 206.836†	22.7	22.8	[0.00]	µg/L	16:28:10
3	Se 196.026†	20.7	20.8	[0.00]	µg/L	16:28:10
3	SiO2†	1412.7	1422.5	[0.00]	µg/L	16:27:50
3	Si 251.611†	312.1	314.3	[0.00]	µg/L	16:28:10
3	Sn 189.927†	0.4	0.4	[0.00]	µg/L	16:28:10
3	Ti 334.940†	192.3	193.6	[0.00]	µg/L	16:27:50
3	Tl 190.801†	-19.9	-20.0	[0.00]	µg/L	16:28:10
3	U 409.014†	-99.5	-100.1	[0.00]	µg/L	16:27:50
3	V 292.402†	-0.9	-0.9	[0.00]	µg/L	16:27:50
3	Zn 213.857†	530.3	534.0	[0.00]	µg/L	16:28:10

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1963119.8	12064.22	0.61%	100.00 %
Sc RADIAL	56495.6	225.58	0.40%	100 %
Y 371.029	1352755.8	7494.01	0.55%	100.00 %
Ag 328.068†	-401.6	46.42	11.56%	[0.00] µg/L
Al 396.153Radial†	7.4	9.00	122.22%	[0.00] µg/L
As 188.979†	-0.5	3.42	746.44%	[0.00] µg/L
B 249.677†	384.1	7.56	1.97%	[0.00] µg/L
Ba 233.527†	-17.1	5.08	29.78%	[0.00] µg/L
Be 313.107†	-2855.7	39.56	1.39%	[0.00] µg/L
Ca 317.933Radial†	211.3	6.18	2.93%	[0.00] µg/L
Cd 226.502†	-141.7	1.91	1.35%	[0.00] µg/L
Co 228.616†	1.9	5.56	287.58%	[0.00] µg/L
Cr 267.716†	-50.4	6.37	12.65%	[0.00] µg/L
Cu 324.752†	2543.7	30.02	1.18%	[0.00] µg/L
Fe 238.204 Radial†	16.6	1.77	10.70%	[0.00] µg/L
K 766.490 Radial†	165.0	19.97	12.10%	[0.00] µg/L
Mg 279.077 IEC†	12.8	1.69	13.22%	[0.00] µg/L
Mn 257.610†	-256.0	11.55	4.51%	[0.00] µg/L
Mo 202.031†	-5.3	2.62	48.99%	[0.00] µg/L
Na 589.592 Radial†	472.2	16.73	3.54%	[0.00] µg/L
Ni 231.604†	312.3	6.29	2.01%	[0.00] µg/L
P 214.914†	15.3	0.52	3.38%	[0.00] µg/L
Pb 220.353†	90.9	2.66	2.92%	[0.00] µg/L
S 181.975 Axial†	18.9	4.16	21.98%	[0.00] µg/L
Sb 206.836†	22.5	5.03	22.34%	[0.00] µg/L
Se 196.026†	19.3	2.09	10.80%	[0.00] µg/L
SiO2†	1391.6	29.99	2.16%	[0.00] µg/L
Si 251.611†	310.6	3.86	1.24%	[0.00] µg/L
Sn 189.927†	0.4	0.26	71.28%	[0.00] µg/L
Sr 421.552†	28.8	18.10	62.83%	[0.00] µg/L
Ti 334.940†	175.0	24.62	14.06%	[0.00] µg/L
Tl 190.801†	-22.4	2.06	9.20%	[0.00] µg/L
U 409.014†	-77.1	33.23	43.11%	[0.00] µg/L
V 292.402†	-44.8	37.98	84.87%	[0.00] µg/L
Zn 213.857†	534.4	0.37	0.07%	[0.00] µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/19/2010 16:28:19

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	56547.7	56547.7	100 %	16:28:54
1	K 766.490 Radial†	1729.4	1562.9	[1000] µg/L	16:28:54
1	Sr 421.552†	10915.2	10876.4	[100] µg/L	16:28:54
1	Sc 361.383	1958657.5	1958657.5	99.773 %	16:29:16
1	Y 371.029	1350548.9	1350548.9	99.837 %	16:29:16
1	Ag 328.068†	13553.9	13986.4	[100] µg/L	16:29:22
1	As 188.979†	59.6	60.2	[100] µg/L	16:29:42
1	B 249.677†	2836.9	2459.2	[100] µg/L	16:29:22
1	Ba 233.527†	4355.0	4382.0	[100] µg/L	16:29:22
1	Be 313.107†	171130.8	174376.3	[100] µg/L	16:29:16
1	Cd 226.502†	4124.2	4275.2	[100] µg/L	16:29:22
1	Co 228.616†	2298.0	2301.3	[100] µg/L	16:29:42
1	Cr 267.716†	5258.9	5321.2	[100] µg/L	16:29:22
1	Cu 324.752†	18781.5	16280.6	[100] µg/L	16:29:22
1	Mn 257.610†	33738.0	34070.9	[100] µg/L	16:29:22
1	Mo 202.031†	1103.1	1111.0	[100] µg/L	16:29:42
1	Ni 231.604†	2464.7	2158.0	[100] µg/L	16:29:22
1	P 214.914†	279.5	264.8	[500] µg/L	16:29:42
1	Pb 220.353†	532.5	442.7	[100] µg/L	16:29:42
1	S 181.975 Axial†	65.4	46.6	[200] µg/L	16:29:42
1	Sb 206.836†	134.3	112.1	[100] µg/L	16:29:42
1	Se 196.026†	91.1	72.0	[100] µg/L	16:29:42
1	SiO2†	6958.0	5582.3	[1069.5] µg/L	16:29:22
1	Si 251.611†	7026.5	6731.9	[500] µg/L	16:29:22
1	Sn 189.927†	255.8	256.0	[100] µg/L	16:29:42
1	Ti 334.940†	46558.0	46489.0	[100] µg/L	16:29:22
1	Tl 190.801†	54.5	77.1	[100] µg/L	16:29:42
1	U 409.014†	1252.7	1332.6	[100] µg/L	16:29:22
1	V 292.402†	10759.4	10828.7	[100] µg/L	16:29:22
1	Zn 213.857†	5084.1	4561.2	[100] µg/L	16:29:22
2	Sc RADIAL	56202.9	56202.9	99.5 %	16:29:00
2	K 766.490 Radial†	1727.4	1571.4	[1000] µg/L	16:29:00
2	Sr 421.552†	10846.6	10874.3	[100] µg/L	16:29:00
2	Sc 361.383	1969774.0	1969774.0	100.34 %	16:29:48
2	Y 371.029	1358589.1	1358589.1	100.43 %	16:29:48
2	Ag 328.068†	13626.3	13981.9	[100] µg/L	16:29:54
2	As 188.979†	59.0	59.2	[100] µg/L	16:30:15
2	B 249.677†	2870.2	2476.3	[100] µg/L	16:29:54
2	Ba 233.527†	4352.8	4355.2	[100] µg/L	16:29:54
2	Be 313.107†	172207.8	174481.8	[100] µg/L	16:29:48
2	Cd 226.502†	4144.1	4271.8	[100] µg/L	16:29:54
2	Co 228.616†	2299.6	2289.9	[100] µg/L	16:30:15
2	Cr 267.716†	5267.7	5300.2	[100] µg/L	16:29:54
2	Cu 324.752†	18798.4	16191.1	[100] µg/L	16:29:54
2	Mn 257.610†	33750.8	33892.8	[100] µg/L	16:29:54
2	Mo 202.031†	1093.5	1095.1	[100] µg/L	16:30:15
2	Ni 231.604†	2441.8	2121.3	[100] µg/L	16:29:54
2	P 214.914†	278.5	262.2	[500] µg/L	16:30:15
2	Pb 220.353†	534.1	441.4	[100] µg/L	16:30:15
2	S 181.975 Axial†	68.1	49.0	[200] µg/L	16:30:15
2	Sb 206.836†	141.3	118.3	[100] µg/L	16:30:15
2	Se 196.026†	84.6	65.0	[100] µg/L	16:30:15
2	SiO2†	6950.3	5535.3	[1069.5] µg/L	16:29:54
2	Si 251.611†	7046.5	6712.0	[500] µg/L	16:29:54
2	Sn 189.927†	257.8	256.5	[100] µg/L	16:30:15
2	Ti 334.940†	46408.5	46076.6	[100] µg/L	16:29:54
2	Tl 190.801†	53.9	76.1	[100] µg/L	16:30:15
2	U 409.014†	1326.1	1398.7	[100] µg/L	16:29:54
2	V 292.402†	10708.8	10717.4	[100] µg/L	16:29:54

2	Zn 213.857†	5067.8	4516.3	[100]	µg/L	16:29:54
3	Sc RADIAL	55976.7	55976.7	99.1	%	16:29:05
3	K 766.490 Radial†	1714.6	1565.5	[1000]	µg/L	16:29:05
3	Sr 421.552†	10778.8	10849.9	[100]	µg/L	16:29:05
3	Sc 361.383	1959694.8	1959694.8	99.826	%	16:30:21
3	Y 371.029	1350466.2	1350466.2	99.831	%	16:30:21
3	Ag 328.068†	13514.1	13939.3	[100]	µg/L	16:30:27
3	As 188.979†	60.6	61.1	[100]	µg/L	16:30:47
3	B 249.677†	2823.5	2444.3	[100]	µg/L	16:30:27
3	Ba 233.527†	4346.0	4370.6	[100]	µg/L	16:30:27
3	Be 313.107†	170786.2	173940.4	[100]	µg/L	16:30:21
3	Cd 226.502†	4105.4	4254.3	[100]	µg/L	16:30:27
3	Co 228.616†	2321.1	2323.2	[100]	µg/L	16:30:47
3	Cr 267.716†	5182.0	5241.4	[100]	µg/L	16:30:27
3	Cu 324.752†	18775.8	16264.9	[100]	µg/L	16:30:27
3	Mn 257.610†	33438.9	33753.4	[100]	µg/L	16:30:27
3	Mo 202.031†	1103.0	1110.3	[100]	µg/L	16:30:47
3	Ni 231.604†	2473.4	2165.4	[100]	µg/L	16:30:27
3	P 214.914†	282.4	267.5	[500]	µg/L	16:30:47
3	Pb 220.353†	529.2	439.2	[100]	µg/L	16:30:47
3	S 181.975 Axial†	72.1	53.3	[200]	µg/L	16:30:47
3	Sb 206.836†	136.5	114.2	[100]	µg/L	16:30:47
3	Se 196.026†	86.4	67.3	[100]	µg/L	16:30:47
3	SiO2†	6918.8	5539.3	[1069.5]	µg/L	16:30:27
3	Si 251.611†	6976.1	6677.7	[500]	µg/L	16:30:27
3	Sn 189.927†	259.9	260.0	[100]	µg/L	16:30:47
3	Ti 334.940†	46135.2	46040.8	[100]	µg/L	16:30:27
3	Tl 190.801†	63.1	85.5	[100]	µg/L	16:30:47
3	U 409.014†	1279.4	1358.7	[100]	µg/L	16:30:27
3	V 292.402†	10662.6	10726.0	[100]	µg/L	16:30:27
3	Zn 213.857†	5060.1	4534.5	[100]	µg/L	16:30:27

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1962708.8	6140.62	0.31%	99.979	%
Sc RADIAL	56242.4	287.56	0.51%	99.6	%
Y 371.029	1353201.4	4666.07	0.34%	100.03	%
Ag 328.068†	13969.2	25.98	0.19%	[100]	µg/L
As 188.979†	60.2	0.95	1.58%	[100]	µg/L
B 249.677†	2459.9	16.02	0.65%	[100]	µg/L
Ba 233.527†	4369.3	13.48	0.31%	[100]	µg/L
Be 313.107†	174266.2	287.04	0.16%	[100]	µg/L
Cd 226.502†	4267.1	11.24	0.26%	[100]	µg/L
Co 228.616†	2304.8	16.95	0.74%	[100]	µg/L
Cr 267.716†	5287.6	41.38	0.78%	[100]	µg/L
Cu 324.752†	16245.5	47.76	0.29%	[100]	µg/L
K 766.490 Radial†	1566.6	4.37	0.28%	[1000]	µg/L
Mn 257.610†	33905.7	159.14	0.47%	[100]	µg/L
Mo 202.031†	1105.5	8.97	0.81%	[100]	µg/L
Ni 231.604†	2148.2	23.63	1.10%	[100]	µg/L
P 214.914†	264.9	2.64	1.00%	[500]	µg/L
Pb 220.353†	441.1	1.78	0.40%	[100]	µg/L
S 181.975 Axial†	49.6	3.39	6.83%	[200]	µg/L
Sb 206.836†	114.9	3.15	2.74%	[100]	µg/L
Se 196.026†	68.1	3.58	5.25%	[100]	µg/L
SiO2†	5552.3	26.07	0.47%	[1069.5]	µg/L
Si 251.611†	6707.2	27.43	0.41%	[500]	µg/L
Sn 189.927†	257.5	2.17	0.84%	[100]	µg/L
Sr 421.552†	10866.8	14.72	0.14%	[100]	µg/L
Ti 334.940†	46202.1	249.08	0.54%	[100]	µg/L
Tl 190.801†	79.6	5.19	6.52%	[100]	µg/L
U 409.014†	1363.3	33.25	2.44%	[100]	µg/L
V 292.402†	10757.4	61.94	0.58%	[100]	µg/L
Zn 213.857†	4537.3	22.62	0.50%	[100]	µg/L

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

Autosampler Location: 3
 Date Collected: 2/19/2010 16:30:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	56525.4	56525.4	100 %	16:31:29
1	Al 396.153Radial†	7453.5	7442.2	[5000] µg/L	16:31:29
1	Ca 317.933Radial†	6221.9	6007.4	[5000] µg/L	16:31:49
1	K 766.490 Radial†	7933.1	7763.9	[5000] µg/L	16:31:29
1	Mg 279.077 IEC†	599.2	586.0	[5000] µg/L	16:31:49
1	Sr 421.552†	54754.2	54696.6	[500] µg/L	16:31:29
1	Sc 361.383	1991566.8	1991566.8	101.45 %	16:32:53
1	Y 371.029	1367918.2	1367918.2	101.12 %	16:32:53
1	Ag 328.068†	68503.2	67926.3	[500] µg/L	16:32:58
1	As 188.979†	299.0	295.2	[500] µg/L	16:33:19
1	B 249.677†	12863.6	12295.7	[500] µg/L	16:32:58
1	Ba 233.527†	21495.8	21205.8	[500] µg/L	16:32:58
1	Be 313.107†	866518.5	856997.1	[500] µg/L	16:32:53
1	Cd 226.502†	20677.7	20524.0	[500] µg/L	16:32:58
1	Co 228.616†	11538.9	11372.2	[500] µg/L	16:32:58
1	Cr 267.716†	25928.5	25608.5	[500] µg/L	16:32:58
1	Cu 324.752†	81773.4	78061.6	[500] µg/L	16:32:58
1	Mn 257.610†	167098.7	164967.9	[500] µg/L	16:32:53
1	Mo 202.031†	5532.6	5459.0	[500] µg/L	16:33:19
1	Ni 231.604†	10768.1	10301.9	[500] µg/L	16:32:58
1	P 214.914†	1359.0	1324.3	[2500] µg/L	16:33:19
1	Pb 220.353†	2302.4	2178.6	[500] µg/L	16:33:19
1	S 181.975 Axial†	272.4	249.5	[1000] µg/L	16:33:19
1	Sb 206.836†	599.4	568.4	[500] µg/L	16:33:19
1	Se 196.026†	396.8	371.8	[500] µg/L	16:33:19
1	SiO2†	29409.8	27598.2	[5347.5] µg/L	16:32:58
1	Si 251.611†	34329.7	33528.7	[2500] µg/L	16:32:58
1	Sn 189.927†	1299.8	1280.9	[500] µg/L	16:33:19
1	Ti 334.940†	233565.9	230054.7	[500] µg/L	16:32:53
1	Tl 190.801†	385.4	402.3	[500] µg/L	16:33:19
1	U 409.014†	6215.4	6203.7	[500] µg/L	16:32:58
1	V 292.402†	53048.0	52335.0	[500] µg/L	16:32:58
1	Zn 213.857†	22866.4	22005.3	[500] µg/L	16:32:58
2	Sc RADIAL	57277.6	57277.6	101 %	16:31:55
2	Al 396.153Radial†	7395.5	7287.2	[5000] µg/L	16:31:55
2	Ca 317.933Radial†	6211.2	5915.2	[5000] µg/L	16:32:15
2	K 766.490 Radial†	7980.6	7706.7	[5000] µg/L	16:31:55
2	Mg 279.077 IEC†	604.0	583.0	[5000] µg/L	16:32:15
2	Sr 421.552†	54765.5	53989.0	[500] µg/L	16:31:55
2	Sc 361.383	1976796.7	1976796.7	100.70 %	16:33:26
2	Y 371.029	1357513.2	1357513.2	100.35 %	16:33:26
2	Ag 328.068†	68789.6	68715.3	[500] µg/L	16:33:31
2	As 188.979†	285.8	284.2	[500] µg/L	16:33:52
2	B 249.677†	12976.0	12502.1	[500] µg/L	16:33:31
2	Ba 233.527†	21626.4	21493.9	[500] µg/L	16:33:31
2	Be 313.107†	874707.4	871511.2	[500] µg/L	16:33:26
2	Cd 226.502†	20785.1	20783.0	[500] µg/L	16:33:31
2	Co 228.616†	11579.6	11497.5	[500] µg/L	16:33:31
2	Cr 267.716†	26128.8	25998.4	[500] µg/L	16:33:31
2	Cu 324.752†	82210.9	79098.3	[500] µg/L	16:33:31
2	Mn 257.610†	168624.9	167714.3	[500] µg/L	16:33:26
2	Mo 202.031†	5307.9	5276.5	[500] µg/L	16:33:52
2	Ni 231.604†	10841.5	10454.2	[500] µg/L	16:33:31
2	P 214.914†	1330.2	1305.6	[2500] µg/L	16:33:52
2	Pb 220.353†	2234.1	2127.7	[500] µg/L	16:33:52
2	S 181.975 Axial†	262.6	241.9	[1000] µg/L	16:33:52
2	Sb 206.836†	590.7	564.1	[500] µg/L	16:33:52
2	Se 196.026†	389.5	367.5	[500] µg/L	16:33:52
2	SiO2†	29539.9	27943.9	[5347.5] µg/L	16:33:31

2	Si 251.611†	34501.4	33952.0	[2500]	µg/L	16:33:31
2	Sn 189.927†	1233.2	1224.3	[500]	µg/L	16:33:52
2	Ti 334.940†	235746.0	233939.9	[500]	µg/L	16:33:26
2	Tl 190.801†	379.0	398.8	[500]	µg/L	16:33:52
2	U 409.014†	6274.1	6307.8	[500]	µg/L	16:33:31
2	V 292.402†	53430.8	53105.9	[500]	µg/L	16:33:31
2	Zn 213.857†	22993.9	22300.4	[500]	µg/L	16:33:31
3	Sc RADIAL	57058.8	57058.8	101	%	16:32:20
3	Al 396.153Radial†	7492.8	7411.5	[5000]	µg/L	16:32:20
3	Ca 317.933Radial†	6205.9	5933.4	[5000]	µg/L	16:32:41
3	K 766.490 Radial†	8033.0	7788.8	[5000]	µg/L	16:32:20
3	Mg 279.077 IEC†	601.3	582.5	[5000]	µg/L	16:32:41
3	Sr 421.552†	55478.9	54902.6	[500]	µg/L	16:32:20
3	Sc 361.383	1973452.3	1973452.3	100.53	%	16:33:59
3	Y 371.029	1355765.1	1355765.1	100.22	%	16:33:59
3	Ag 328.068†	62917.4	62989.6	[500]	µg/L	16:34:05
3	As 188.979†	237.6	236.8	[500]	µg/L	16:34:25
3	B 249.677†	11812.4	11366.4	[500]	µg/L	16:34:05
3	Ba 233.527†	19002.6	18920.2	[500]	µg/L	16:34:05
3	Be 313.107†	778040.5	776822.6	[500]	µg/L	16:33:59
3	Cd 226.502†	18161.8	18208.4	[500]	µg/L	16:34:05
3	Co 228.616†	9999.7	9945.4	[500]	µg/L	16:34:05
3	Cr 267.716†	21799.1	21735.4	[500]	µg/L	16:34:05
3	Cu 324.752†	71681.4	68762.3	[500]	µg/L	16:34:05
3	Mn 257.610†	150744.1	150210.9	[500]	µg/L	16:33:59
3	Mo 202.031†	4242.5	4225.7	[500]	µg/L	16:34:25
3	Ni 231.604†	9432.3	9070.6	[500]	µg/L	16:34:05
3	P 214.914†	1083.7	1062.7	[2500]	µg/L	16:34:25
3	Pb 220.353†	1851.4	1750.7	[500]	µg/L	16:34:25
3	S 181.975 Axial†	228.1	208.0	[1000]	µg/L	16:34:25
3	Sb 206.836†	487.0	461.9	[500]	µg/L	16:34:25
3	Se 196.026†	331.3	310.2	[500]	µg/L	16:34:25
3	SiO2†	26534.1	25003.6	[5347.5]	µg/L	16:34:05
3	Si 251.611†	30910.4	30437.9	[2500]	µg/L	16:34:05
3	Sn 189.927†	970.3	964.9	[500]	µg/L	16:34:25
3	Ti 334.940†	207765.1	206502.3	[500]	µg/L	16:33:59
3	Tl 190.801†	318.1	338.8	[500]	µg/L	16:34:25
3	U 409.014†	5271.8	5321.3	[500]	µg/L	16:34:05
3	V 292.402†	45729.0	45534.4	[500]	µg/L	16:34:05
3	Zn 213.857†	20028.6	19389.3	[500]	µg/L	16:34:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1980605.3	9639.15	0.49%	100.89	%
Sc RADIAL	56953.9	386.91	0.68%	101	%
Y 371.029	1360398.8	6570.38	0.48%	100.57	%
Ag 328.068†	66543.7	3103.16	4.66%	[500]	µg/L
Al 396.153Radial†	7380.3	82.09	1.11%	[5000]	µg/L
As 188.979†	272.1	31.03	11.41%	[500]	µg/L
B 249.677†	12054.7	604.97	5.02%	[500]	µg/L
Ba 233.527†	20540.0	1410.14	6.87%	[500]	µg/L
Be 313.107†	835110.3	50997.60	6.11%	[500]	µg/L
Ca 317.933Radial†	5952.0	48.84	0.82%	[5000]	µg/L
Cd 226.502†	19838.5	1417.61	7.15%	[500]	µg/L
Co 228.616†	10938.4	862.20	7.88%	[500]	µg/L
Cr 267.716†	24447.5	2356.79	9.64%	[500]	µg/L
Cu 324.752†	75307.4	5691.88	7.56%	[500]	µg/L
K 766.490 Radial†	7753.1	42.12	0.54%	[5000]	µg/L
Mg 279.077 IEC†	583.8	1.92	0.33%	[5000]	µg/L
Mn 257.610†	160964.4	9413.47	5.85%	[500]	µg/L
Mo 202.031†	4987.0	665.66	13.35%	[500]	µg/L
Ni 231.604†	9942.2	758.69	7.63%	[500]	µg/L
P 214.914†	1230.9	145.94	11.86%	[2500]	µg/L
Pb 220.353†	2019.0	233.71	11.58%	[500]	µg/L
S 181.975 Axial†	233.1	22.09	9.48%	[1000]	µg/L
Sb 206.836†	531.5	60.25	11.34%	[500]	µg/L
Se 196.026†	349.9	34.37	9.82%	[500]	µg/L
SiO2†	26848.6	1607.13	5.99%	[5347.5]	µg/L
Si 251.611†	32639.5	1918.39	5.88%	[2500]	µg/L

Sn 189.927†	1156.7	168.51	14.57%	[500] µg/L
Sr 421.552†	54529.4	479.17	0.88%	[500] µg/L
Ti 334.940†	223499.0	14847.21	6.64%	[500] µg/L
Tl 190.801†	380.0	35.70	9.40%	[500] µg/L
U 409.014†	5944.2	542.02	9.12%	[500] µg/L
V 292.402†	50325.1	4166.77	8.28%	[500] µg/L
Zn 213.857†	21231.7	1602.33	7.55%	[500] µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/19/2010 16:34:34

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	57422.3	57422.3	102 %	16:35:07
1	Al 396.153Radial†	14869.0	14621.7	[10000] µg/L	16:35:07
1	Ca 317.933Radial†	12244.2	11835.4	[10000] µg/L	16:35:27
1	Fe 238.204 Radial†	1337.9	1299.7	[10000] µg/L	16:35:27
1	K 766.490 Radial†	15761.0	15341.7	[10000] µg/L	16:35:07
1	Mg 279.077 IEC†	1192.0	1159.9	[10000] µg/L	16:35:27
1	Na 589.592 Radial†	34164.4	33140.9	[10000] µg/L	16:35:07
1	Sr 421.552†	110392.2	108581.9	[1000] µg/L	16:35:07
1	Sc 361.383	1976099.1	1976099.1	100.66 %	16:36:31
1	Y 371.029	1355904.7	1355904.7	100.23 %	16:36:31
1	Ag 328.068†	139743.4	139227.2	[1000] µg/L	16:36:37
1	As 188.979†	605.1	601.6	[1000] µg/L	16:36:57
1	B 249.677†	26002.4	25447.4	[1000] µg/L	16:36:37
1	Ba 233.527†	43710.4	43440.4	[1000] µg/L	16:36:37
1	Be 313.107†	1745428.1	1736819.7	[1000] µg/L	16:36:31
1	Cd 226.502†	41933.9	41800.2	[1000] µg/L	16:36:37
1	Co 228.616†	23253.7	23099.0	[1000] µg/L	16:36:37
1	Cr 267.716†	53002.6	52704.8	[1000] µg/L	16:36:37
1	Cu 324.752†	163999.7	160378.8	[1000] µg/L	16:36:37
1	Mn 257.610†	334533.8	332592.5	[1000] µg/L	16:36:37
1	Mo 202.031†	11127.7	11059.9	[1000] µg/L	16:36:57
1	Ni 231.604†	21437.9	20984.7	[1000] µg/L	16:36:37
1	P 214.914†	2747.0	2713.6	[5000] µg/L	16:36:57
1	Pb 220.353†	4519.4	4398.7	[1000] µg/L	16:36:57
1	S 181.975 Axial†	537.0	514.5	[2000] µg/L	16:36:57
1	Sb 206.836†	1201.1	1170.7	[1000] µg/L	16:36:57
1	Se 196.026†	778.4	754.0	[1000] µg/L	16:36:57
1	SiO2†	57839.1	56067.6	[10695] µg/L	16:36:37
1	Si 251.611†	68811.8	68049.2	[5000] µg/L	16:36:37
1	Sn 189.927†	2603.2	2585.7	[1000] µg/L	16:36:57
1	Ti 334.940†	470528.6	467263.1	[1000] µg/L	16:36:31
1	Tl 190.801†	793.2	810.4	[1000] µg/L	16:36:57
1	U 409.014†	12617.6	12611.8	[1000] µg/L	16:36:37
1	V 292.402†	108523.0	107854.9	[1000] µg/L	16:36:37
1	Zn 213.857†	45321.2	44489.2	[1000] µg/L	16:36:37
2	Sc RADIAL	58102.6	58102.6	103 %	16:35:33
2	Al 396.153Radial†	14960.9	14539.8	[10000] µg/L	16:35:33
2	Ca 317.933Radial†	12189.3	11640.9	[10000] µg/L	16:35:53
2	Fe 238.204 Radial†	1332.7	1279.3	[10000] µg/L	16:35:53
2	K 766.490 Radial†	15805.1	15203.0	[10000] µg/L	16:35:33
2	Mg 279.077 IEC†	1183.6	1138.1	[10000] µg/L	16:35:53
2	Na 589.592 Radial†	34301.4	32880.5	[10000] µg/L	16:35:33
2	Sr 421.552†	111111.1	108009.2	[1000] µg/L	16:35:33
2	Sc 361.383	1983646.2	1983646.2	101.05 %	16:37:04
2	Y 371.029	1360206.5	1360206.5	100.55 %	16:37:04
2	Ag 328.068†	139094.6	138056.9	[1000] µg/L	16:37:10
2	As 188.979†	587.5	581.9	[1000] µg/L	16:37:30
2	B 249.677†	25898.4	25246.3	[1000] µg/L	16:37:10
2	Ba 233.527†	43616.3	43182.0	[1000] µg/L	16:37:10
2	Be 313.107†	1746219.5	1731005.6	[1000] µg/L	16:37:04
2	Cd 226.502†	41774.2	41483.6	[1000] µg/L	16:37:10
2	Co 228.616†	23185.1	22943.2	[1000] µg/L	16:37:10
2	Cr 267.716†	52660.4	52165.9	[1000] µg/L	16:37:10
2	Cu 324.752†	163246.9	159013.9	[1000] µg/L	16:37:10
2	Mn 257.610†	333323.0	330129.8	[1000] µg/L	16:37:10
2	Mo 202.031†	10856.0	10749.0	[1000] µg/L	16:37:30
2	Ni 231.604†	21396.9	20863.1	[1000] µg/L	16:37:10
2	P 214.914†	2695.8	2652.5	[5000] µg/L	16:37:30
2	Pb 220.353†	4439.8	4303.0	[1000] µg/L	16:37:30

2	S 181.975 Axial†	528.4	504.0	[2000]	µg/L	16:37:30
2	Sb 206.836†	1179.2	1144.5	[1000]	µg/L	16:37:30
2	Se 196.026†	773.9	746.5	[1000]	µg/L	16:37:30
2	SiO2†	57827.3	55837.4	[10695]	µg/L	16:37:10
2	Si 251.611†	68760.8	67738.7	[5000]	µg/L	16:37:10
2	Sn 189.927†	2530.7	2504.2	[1000]	µg/L	16:37:30
2	Ti 334.940†	470622.3	465577.3	[1000]	µg/L	16:37:04
2	Tl 190.801†	781.8	796.1	[1000]	µg/L	16:37:30
2	U 409.014†	12629.7	12576.1	[1000]	µg/L	16:37:10
2	V 292.402†	108044.3	106971.0	[1000]	µg/L	16:37:10
2	Zn 213.857†	45147.6	44146.0	[1000]	µg/L	16:37:10
3	Sc RADIAL	57759.7	57759.7	102	%	16:35:59
3	Al 396.153Radial†	14873.5	14540.6	[10000]	µg/L	16:35:59
3	Ca 317.933Radial†	12176.6	11698.9	[10000]	µg/L	16:36:19
3	Fe 238.204 Radial†	1332.4	1286.7	[10000]	µg/L	16:36:19
3	K 766.490 Radial†	15741.4	15231.9	[10000]	µg/L	16:35:59
3	Mg 279.077 IEC†	1190.1	1151.2	[10000]	µg/L	16:36:19
3	Na 589.592 Radial†	34189.4	32969.0	[10000]	µg/L	16:35:59
3	Sr 421.552†	110552.5	108104.4	[1000]	µg/L	16:35:59
3	Sc 361.383	1985078.6	1985078.6	101.12	%	16:37:37
3	Y 371.029	1363323.6	1363323.6	100.78	%	16:37:37
3	Ag 328.068†	130033.0	128996.2	[1000]	µg/L	16:37:43
3	As 188.979†	504.5	499.3	[1000]	µg/L	16:38:03
3	B 249.677†	23878.6	23230.3	[1000]	µg/L	16:37:43
3	Ba 233.527†	39125.7	38709.9	[1000]	µg/L	16:37:43
3	Be 313.107†	1611138.8	1596172.2	[1000]	µg/L	16:37:37
3	Cd 226.502†	37509.7	37236.5	[1000]	µg/L	16:37:43
3	Co 228.616†	20554.3	20325.0	[1000]	µg/L	16:37:43
3	Cr 267.716†	45522.8	45069.6	[1000]	µg/L	16:37:43
3	Cu 324.752†	146020.7	141861.7	[1000]	µg/L	16:37:43
3	Mn 257.610†	295756.2	292740.6	[1000]	µg/L	16:37:43
3	Mo 202.031†	9074.4	8979.3	[1000]	µg/L	16:38:03
3	Ni 231.604†	18944.4	18422.5	[1000]	µg/L	16:37:43
3	P 214.914†	2295.1	2254.3	[5000]	µg/L	16:38:03
3	Pb 220.353†	3820.6	3687.4	[1000]	µg/L	16:38:03
3	S 181.975 Axial†	464.0	439.9	[2000]	µg/L	16:38:03
3	Sb 206.836†	1004.3	970.7	[1000]	µg/L	16:38:03
3	Se 196.026†	672.5	645.8	[1000]	µg/L	16:38:03
3	SiO2†	52945.1	50967.8	[10695]	µg/L	16:37:43
3	Si 251.611†	62859.1	61853.1	[5000]	µg/L	16:37:43
3	Sn 189.927†	2084.7	2061.2	[1000]	µg/L	16:38:03
3	Ti 334.940†	431690.8	426740.5	[1000]	µg/L	16:37:37
3	Tl 190.801†	695.2	709.9	[1000]	µg/L	16:38:03
3	U 409.014†	11027.6	10982.7	[1000]	µg/L	16:37:43
3	V 292.402†	95350.9	94340.9	[1000]	µg/L	16:37:43
3	Zn 213.857†	40251.0	39271.3	[1000]	µg/L	16:37:43

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1981608.0	4824.30	0.24%	100.94 %
Sc RADIAL	57761.5	340.17	0.59%	102 %
Y 371.029	1359811.6	3725.20	0.27%	100.52 %
Ag 328.068†	135426.8	5599.70	4.13%	[1000] µg/L
Al 396.153Radial†	14567.3	47.07	0.32%	[10000] µg/L
As 188.979†	560.9	54.25	9.67%	[1000] µg/L
B 249.677†	24641.4	1226.12	4.98%	[1000] µg/L
Ba 233.527†	41777.5	2659.67	6.37%	[1000] µg/L
Be 313.107†	1687999.2	79577.59	4.71%	[1000] µg/L
Ca 317.933Radial†	11725.1	99.83	0.85%	[10000] µg/L
Cd 226.502†	40173.4	2548.40	6.34%	[1000] µg/L
Co 228.616†	22122.4	1558.58	7.05%	[1000] µg/L
Cr 267.716†	49980.1	4261.16	8.53%	[1000] µg/L
Cu 324.752†	153751.5	10319.43	6.71%	[1000] µg/L
Fe 238.204 Radial†	1288.5	10.35	0.80%	[10000] µg/L
K 766.490 Radial†	15258.9	73.17	0.48%	[10000] µg/L
Mg 279.077 IEC†	1149.7	11.01	0.96%	[10000] µg/L
Mn 257.610†	318487.6	22331.56	7.01%	[1000] µg/L
Mo 202.031†	10262.8	1122.29	10.94%	[1000] µg/L
Na 589.592 Radial†	32996.8	132.37	0.40%	[10000] µg/L

Ni 231.604†	20090.1	1445.49	7.20%	[1000] µg/L
P 214.914†	2540.1	249.38	9.82%	[5000] µg/L
Pb 220.353†	4129.7	386.03	9.35%	[1000] µg/L
S 181.975 Axial†	486.1	40.36	8.30%	[2000] µg/L
Sb 206.836†	1095.3	108.69	9.92%	[1000] µg/L
Se 196.026†	715.4	60.44	8.45%	[1000] µg/L
SiO2†	54290.9	2880.22	5.31%	[10695] µg/L
Si 251.611†	65880.3	3491.15	5.30%	[5000] µg/L
Sn 189.927†	2383.7	282.23	11.84%	[1000] µg/L
Sr 421.552†	108231.8	306.90	0.28%	[1000] µg/L
Ti 334.940†	453193.6	22924.60	5.06%	[1000] µg/L
Tl 190.801†	772.1	54.39	7.04%	[1000] µg/L
U 409.014†	12056.9	930.42	7.72%	[1000] µg/L
V 292.402†	103055.6	7560.10	7.34%	[1000] µg/L
Zn 213.857†	42635.5	2918.50	6.85%	[1000] µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/19/2010 16:38:14

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	57539.5	57539.5	102 %	16:38:46
1	Al 396.153Radial†	72990.6	71659.1	[50000] µg/L	16:38:46
1	Ca 317.933Radial†	59650.4	58357.0	[50000] µg/L	16:38:46
1	Fe 238.204 Radial†	2601.5	2537.7	[20000] µg/L	16:39:06
1	Mg 279.077 IEC†	5707.4	5591.1	[50000] µg/L	16:39:06
1	Na 589.592 Radial†	66487.5	64809.1	[20000] µg/L	16:38:46
1	Sc 361.383	1991346.9	1991346.9	101.44 %	16:40:10
1	Y 371.029	1361642.8	1361642.8	100.66 %	16:40:10
2	Sc RADIAL	57692.4	57692.4	102 %	16:39:12
2	Al 396.153Radial†	73669.2	72133.7	[50000] µg/L	16:39:12
2	Ca 317.933Radial†	60236.2	58775.4	[50000] µg/L	16:39:12
2	Fe 238.204 Radial†	2575.9	2505.9	[20000] µg/L	16:39:32
2	Mg 279.077 IEC†	5682.3	5551.6	[50000] µg/L	16:39:32
2	Na 589.592 Radial†	66913.0	65052.7	[20000] µg/L	16:39:12
2	Sc 361.383	1994513.8	1994513.8	101.60 %	16:40:18
2	Y 371.029	1362831.0	1362831.0	100.74 %	16:40:18
3	Sc RADIAL	57518.8	57518.8	102 %	16:39:38
3	Al 396.153Radial†	72963.9	71658.6	[50000] µg/L	16:39:38
3	Ca 317.933Radial†	59707.9	58434.6	[50000] µg/L	16:39:38
3	Fe 238.204 Radial†	2595.7	2533.0	[20000] µg/L	16:39:58
3	Mg 279.077 IEC†	5726.3	5611.7	[50000] µg/L	16:39:58
3	Na 589.592 Radial†	66483.6	64828.8	[20000] µg/L	16:39:38
3	Sc 361.383	1986414.7	1986414.7	101.19 %	16:40:26
3	Y 371.029	1358035.0	1358035.0	100.39 %	16:40:26

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1990758.5	4081.49	0.21%	101.41 %
Sc RADIAL	57583.6	94.84	0.16%	102 %
Y 371.029	1360836.3	2497.65	0.18%	100.60 %
Al 396.153Radial†	71817.1	274.12	0.38%	[50000] µg/L
Ca 317.933Radial†	58522.3	222.58	0.38%	[50000] µg/L
Fe 238.204 Radial†	2525.5	17.19	0.68%	[20000] µg/L
Mg 279.077 IEC†	5584.8	30.54	0.55%	[50000] µg/L
Na 589.592 Radial†	64896.9	135.34	0.21%	[20000] µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	135.0	0.00000	0.999971	
Al 396.153Radial	3	Lin Thru 0	0.0	1.437	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	0.5579	0.00000	0.999904	
B 249.677	3	Lin Thru 0	0.0	24.54	0.00000	0.999963	
Ba 233.527	3	Lin Thru 0	0.0	41.65	0.00000	0.999968	
Be 313.107	3	Lin Thru 0	0.0	1685	0.00000	0.999986	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.171	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	40.09	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	22.08	0.00000	0.999983	
Cr 267.716	3	Lin Thru 0	0.0	49.79	0.00000	0.999947	
Cu 324.752	3	Lin Thru 0	0.0	153.2	0.00000	0.999952	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1268	0.00000	0.999967	
K 766.490 Radial	3	Lin Thru 0	0.0	1.531	0.00000	0.999977	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1119	0.00000	0.999975	
Mn 257.610	3	Lin Thru 0	0.0	319.3	0.00000	0.999976	
Mo 202.031	3	Lin Thru 0	0.0	10.21	0.00000	0.999909	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.256	0.00000	0.999977	

Ni 231.604	3	Lin Thru 0	0.0	20.06	0.00000	0.999972
P 214.914	3	Lin Thru 0	0.0	0.5051	0.00000	0.999914
Pb 220.353	3	Lin Thru 0	0.0	4.114	0.00000	0.999940
S 181.975 Axial	3	Lin Thru 0	0.0	0.2411	0.00000	0.999862
Sb 206.836	3	Lin Thru 0	0.0	1.089	0.00000	0.999918
Se 196.026	3	Lin Thru 0	0.0	0.7120	0.00000	0.999954
SiO2	3	Lin Thru 0	0.0	5.066	0.00000	0.999988
Si 251.611	3	Lin Thru 0	0.0	13.15	0.00000	0.999992
Sn 189.927	3	Lin Thru 0	0.0	2.371	0.00000	0.999901
Sr 421.552	3	Lin Thru 0	0.0	108.4	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	452.0	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	0.7699	0.00000	0.999976
U 409.014	3	Lin Thru 0	0.0	12.04	0.00000	0.999914
V 292.402	3	Lin Thru 0	0.0	102.6	0.00000	0.999947
Zn 213.857	3	Lin Thru 0	0.0	42.62	0.00000	0.999982

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/19/2010 16:40:36

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	57359.3	57359.3	102 %		16:41:09
1	Al 396.153Radial†	7610.3	7488.4	5197.5 µg/L	5197.5 ppb	16:41:09
1	Ca 317.933Radial†	6222.8	5917.8	5054.9 µg/L	5054.9 ppb	16:41:29
1	Fe 238.204 Radial†	692.6	665.6	5260.8 µg/L	5260.8 ppb	16:41:29
1	K 766.490 Radial†	4130.5	3903.3	2549.3 µg/L	2549.3 ppb	16:41:09
1	Mg 279.077 IEC†	619.9	597.8	5347.7 µg/L	5347.7 ppb	16:41:29
1	Na 589.592 Radial†	9010.6	8402.7	2580.8 µg/L	2580.8 ppb	16:41:09
1	Sr 421.552†	58315.4	57408.5	529.60 µg/L	529.60 ppb	16:41:09
1	Sc 361.383	2000166.2	2000166.2	101.89 %		16:42:33
1	Y 371.029	1374985.6	1374985.6	101.64 %		16:42:33
1	Ag 328.068†	36064.6	35798.3	269.00 µg/L	269.00 ppb	16:42:38
1	As 188.979†	291.8	286.8	513.02 µg/L	513.02 ppb	16:42:59
1	B 249.677†	13712.5	13074.4	530.96 µg/L	530.96 ppb	16:42:38
1	Ba 233.527†	22228.0	21833.3	525.11 µg/L	525.11 ppb	16:42:38
1	Be 313.107†	460753.1	455074.9	269.89 µg/L	269.89 ppb	16:42:33
1	Cd 226.502†	21063.9	20815.4	519.08 µg/L	519.08 ppb	16:42:38
1	Co 228.616†	11897.3	11675.0	528.19 µg/L	528.19 ppb	16:42:38
1	Cr 267.716†	25972.0	25541.3	513.34 µg/L	513.34 ppb	16:42:38
1	Cu 324.752†	84959.1	80841.8	528.42 µg/L	528.42 ppb	16:42:38
1	Mn 257.610†	174009.6	171042.6	536.11 µg/L	536.11 ppb	16:42:33
1	Mo 202.031†	5977.0	5871.6	575.18 µg/L	575.18 ppb	16:42:59
1	Ni 231.604†	11001.5	10485.4	522.13 µg/L	522.13 ppb	16:42:38
1	P 214.914†	1396.3	1355.1	2632.9 µg/L	2632.9 ppb	16:42:59
1	Pb 220.353†	2319.9	2186.0	531.70 µg/L	531.70 ppb	16:42:59
1	S 181.975 Axial†	667.0	635.7	2636.3 µg/L	2636.3 ppb	16:42:59
1	Sb 206.836†	616.3	582.4	537.83 µg/L	537.83 ppb	16:42:59
1	Se 196.026†	1971.6	1915.8	2698.7 µg/L	2698.7 ppb	16:42:59
1	SiO2†	55895.4	53468.6	10554 µg/L	10554 ppb	16:42:38
1	Si 251.611†	66312.0	64773.2	4924.2 µg/L	4924.2 ppb	16:42:38
1	Sn 189.927†	1397.6	1371.4	578.38 µg/L	578.38 ppb	16:42:59
1	Ti 334.940†	236505.6	231950.1	512.78 µg/L	512.78 ppb	16:42:33
1	Tl 190.801†	406.2	421.1	553.15 µg/L	553.15 ppb	16:42:59
1	U 409.014†	6233.6	6195.2	513.68 µg/L	513.68 ppb	16:42:38
1	V 292.402†	55272.1	54293.1	535.87 µg/L	535.87 ppb	16:42:38
1	Zn 213.857†	23721.8	22748.1	529.99 µg/L	529.99 ppb	16:42:38
2	Sc RADIAL	57362.6	57362.6	102 %		16:41:35
2	Al 396.153Radial†	7570.2	7448.5	5170.1 µg/L	5170.1 ppb	16:41:35
2	Ca 317.933Radial†	6248.3	5942.6	5076.0 µg/L	5076.0 ppb	16:41:55
2	Fe 238.204 Radial†	687.3	660.3	5219.2 µg/L	5219.2 ppb	16:41:55
2	K 766.490 Radial†	4135.1	3907.6	2552.1 µg/L	2552.1 ppb	16:41:35
2	Mg 279.077 IEC†	628.6	606.2	5423.0 µg/L	5423.0 ppb	16:41:55
2	Na 589.592 Radial†	8905.8	8299.0	2549.0 µg/L	2549.0 ppb	16:41:35
2	Sr 421.552†	58283.1	57373.4	529.28 µg/L	529.28 ppb	16:41:35
2	Sc 361.383	1991588.3	1991588.3	101.45 %		16:43:06
2	Y 371.029	1369085.3	1369085.3	101.21 %		16:43:06
2	Ag 328.068†	36279.5	36162.5	271.74 µg/L	271.74 ppb	16:43:12
2	As 188.979†	284.2	280.6	501.89 µg/L	501.89 ppb	16:43:32
2	B 249.677†	13841.7	13259.7	538.55 µg/L	538.55 ppb	16:43:12
2	Ba 233.527†	22542.4	22237.3	534.82 µg/L	534.82 ppb	16:43:12
2	Be 313.107†	458487.5	454789.4	269.72 µg/L	269.72 ppb	16:43:06
2	Cd 226.502†	21330.8	21167.6	527.88 µg/L	527.88 ppb	16:43:12
2	Co 228.616†	12048.7	11874.5	537.21 µg/L	537.21 ppb	16:43:12
2	Cr 267.716†	26258.5	25933.5	521.22 µg/L	521.22 ppb	16:43:12
2	Cu 324.752†	85756.0	81986.4	535.89 µg/L	535.89 ppb	16:43:12
2	Mn 257.610†	173215.7	170995.8	535.95 µg/L	535.95 ppb	16:43:06
2	Mo 202.031†	5783.7	5706.4	559.00 µg/L	559.00 ppb	16:43:32
2	Ni 231.604†	11147.8	10676.1	531.63 µg/L	531.63 ppb	16:43:12
2	P 214.914†	1350.6	1315.9	2554.3 µg/L	2554.3 ppb	16:43:32
2	Pb 220.353†	2269.2	2145.8	521.87 µg/L	521.87 ppb	16:43:32

2	S 181.975 Axial†	662.1	633.7	2628.1 µg/L	2628.1 ppb	16:43:32
2	Sb 206.836†	597.3	566.3	522.67 µg/L	522.67 ppb	16:43:32
2	Se 196.026†	1939.9	1892.9	2666.3 µg/L	2666.3 ppb	16:43:32
2	SiO2†	56544.0	54344.2	10727 µg/L	10727 ppb	16:43:12
2	Si 251.611†	67028.2	65759.4	4999.2 µg/L	4999.2 ppb	16:43:12
2	Sn 189.927†	1346.2	1326.5	559.48 µg/L	559.48 ppb	16:43:32
2	Ti 334.940†	235243.5	231705.8	512.24 µg/L	512.24 ppb	16:43:06
2	Tl 190.801†	411.2	427.8	561.75 µg/L	561.75 ppb	16:43:32
2	U 409.014†	6266.1	6253.6	518.55 µg/L	518.55 ppb	16:43:12
2	V 292.402†	55774.5	55022.0	542.87 µg/L	542.87 ppb	16:43:12
2	Zn 213.857†	24005.0	23127.4	538.84 µg/L	538.84 ppb	16:43:12
3	Sc RADIAL	57314.4	57314.4	101 %		16:42:01
3	Al 396.153Radial†	7617.9	7501.8	5209.5 µg/L	5209.5 ppb	16:42:01
3	Ca 317.933Radial†	6192.6	5892.9	5033.6 µg/L	5033.6 ppb	16:42:21
3	Fe 238.204 Radial†	680.9	654.6	5172.6 µg/L	5172.6 ppb	16:42:21
3	K 766.490 Radial†	4172.6	3948.0	2578.5 µg/L	2578.5 ppb	16:42:01
3	Mg 279.077 IEC†	617.9	596.2	5331.5 µg/L	5331.5 ppb	16:42:21
3	Na 589.592 Radial†	9012.1	8411.2	2583.4 µg/L	2583.4 ppb	16:42:01
3	Sr 421.552†	58397.5	57534.4	530.76 µg/L	530.76 ppb	16:42:01
3	Sc 361.383	1985318.4	1985318.4	101.13 %		16:43:39
3	Y 371.029	1365549.9	1365549.9	100.95 %		16:43:39
3	Ag 328.068†	32686.9	32723.0	245.69 µg/L	245.69 ppb	16:43:45
3	As 188.979†	231.6	229.5	410.45 µg/L	410.45 ppb	16:44:05
3	B 249.677†	12281.0	11759.6	477.28 µg/L	477.28 ppb	16:43:45
3	Ba 233.527†	19297.0	19098.3	459.31 µg/L	459.31 ppb	16:43:45
3	Be 313.107†	404356.4	402690.8	238.83 µg/L	238.83 ppb	16:43:39
3	Cd 226.502†	18203.2	18141.4	452.33 µg/L	452.33 ppb	16:43:45
3	Co 228.616†	10166.3	10050.7	454.63 µg/L	454.63 ppb	16:43:45
3	Cr 267.716†	21411.9	21222.9	426.55 µg/L	426.55 ppb	16:43:45
3	Cu 324.752†	73007.3	69647.2	455.34 µg/L	455.34 ppb	16:43:45
3	Mn 257.610†	153334.3	151875.9	476.08 µg/L	476.08 ppb	16:43:39
3	Mo 202.031†	4566.2	4520.5	442.87 µg/L	442.87 ppb	16:44:05
3	Ni 231.604†	9424.8	9007.0	448.52 µg/L	448.52 ppb	16:43:45
3	P 214.914†	1102.1	1074.4	2083.0 µg/L	2083.0 ppb	16:44:05
3	Pb 220.353†	1863.1	1751.3	425.87 µg/L	425.87 ppb	16:44:05
3	S 181.975 Axial†	551.5	526.4	2182.8 µg/L	2182.8 ppb	16:44:05
3	Sb 206.836†	493.8	465.8	429.60 µg/L	429.60 ppb	16:44:05
3	Se 196.026†	1594.6	1557.5	2195.3 µg/L	2195.3 ppb	16:44:05
3	SiO2†	49563.2	47617.5	9399.1 µg/L	9399.1 ppb	16:43:45
3	Si 251.611†	58584.7	57619.0	4380.3 µg/L	4380.3 ppb	16:43:45
3	Sn 189.927†	1053.3	1041.2	439.13 µg/L	439.13 ppb	16:44:05
3	Ti 334.940†	205922.2	203444.7	449.72 µg/L	449.72 ppb	16:43:39
3	Tl 190.801†	337.8	356.4	468.42 µg/L	468.42 ppb	16:44:05
3	U 409.014†	5226.1	5244.7	434.73 µg/L	434.73 ppb	16:43:45
3	V 292.402†	46549.8	46074.1	454.46 µg/L	454.46 ppb	16:43:45
3	Zn 213.857†	20360.6	19598.5	456.55 µg/L	456.55 ppb	16:43:45

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992357.6	101.49 %	0.380			0.37%
Sc RADIAL	57345.5	102 %	0.0			0.05%
Y 371.029	1369873.6	101.27 %	0.352			0.35%
Ag 328.068†	34894.6	262.14 µg/L	14.318	262.14 ppb	14.318	5.46%
QC value within limits for Ag 328.068 Recovery = 104.86%						
Al 396.153Radial†	7479.5	5192.4 µg/L	20.22	5192.4 ppb	20.22	0.39%
QC value within limits for Al 396.153Radial Recovery = 103.85%						
As 188.979†	265.6	475.12 µg/L	56.284	475.12 ppb	56.284	11.85%
QC value within limits for As 188.979 Recovery = 95.02%						
B 249.677†	12697.9	515.59 µg/L	33.400	515.59 ppb	33.400	6.48%
QC value within limits for B 249.677 Recovery = 103.12%						
Ba 233.527†	21056.3	506.41 µg/L	41.083	506.41 ppb	41.083	8.11%
QC value within limits for Ba 233.527 Recovery = 101.28%						
Be 313.107†	437518.4	259.48 µg/L	17.887	259.48 ppb	17.887	6.89%
QC value within limits for Be 313.107 Recovery = 103.79%						
Ca 317.933Radial†	5917.8	5054.8 µg/L	21.22	5054.8 ppb	21.22	0.42%
QC value within limits for Ca 317.933Radial Recovery = 101.10%						
Cd 226.502†	20041.5	499.76 µg/L	41.316	499.76 ppb	41.316	8.27%
QC value within limits for Cd 226.502 Recovery = 99.95%						
Co 228.616†	11200.1	506.67 µg/L	45.295	506.67 ppb	45.295	8.94%

QC value within limits for Co 228.616	Recovery = 101.33%			
Cr 267.716†	24232.6	487.04 µg/L	52.530	487.04 ppb 52.530 10.79%
QC value within limits for Cr 267.716	Recovery = 97.41%			
Cu 324.752†	77491.8	506.55 µg/L	44.507	506.55 ppb 44.507 8.79%
QC value within limits for Cu 324.752	Recovery = 101.31%			
Fe 238.204 Radial†	660.2	5217.6 µg/L	44.12	5217.6 ppb 44.12 0.85%
QC value within limits for Fe 238.204 Radial	Recovery = 104.35%			
K 766.490 Radial†	3919.6	2560.0 µg/L	16.09	2560.0 ppb 16.09 0.63%
QC value within limits for K 766.490 Radial	Recovery = 102.40%			
Mg 279.077 IEC†	600.1	5367.4 µg/L	48.83	5367.4 ppb 48.83 0.91%
QC value within limits for Mg 279.077 IEC	Recovery = 107.35%			
Mn 257.610†	164638.1	516.05 µg/L	34.615	516.05 ppb 34.615 6.71%
QC value within limits for Mn 257.610	Recovery = 103.21%			
Mo 202.031†	5366.2	525.68 µg/L	72.174	525.68 ppb 72.174 13.73%
QC value within limits for Mo 202.031	Recovery = 105.14%			
Na 589.592 Radial†	8371.0	2571.1 µg/L	19.18	2571.1 ppb 19.18 0.75%
QC value within limits for Na 589.592 Radial	Recovery = 102.84%			
Ni 231.604†	10056.2	500.76 µg/L	45.489	500.76 ppb 45.489 9.08%
QC value within limits for Ni 231.604	Recovery = 100.15%			
P 214.914†	1248.5	2423.4 µg/L	297.40	2423.4 ppb 297.40 12.27%
QC value within limits for P 214.914	Recovery = 96.94%			
Pb 220.353†	2027.7	493.15 µg/L	58.472	493.15 ppb 58.472 11.86%
QC value within limits for Pb 220.353	Recovery = 98.63%			
S 181.975 Axial†	598.6	2482.4 µg/L	259.45	2482.4 ppb 259.45 10.45%
QC value within limits for S 181.975 Axial	Recovery = 99.30%			
Sb 206.836†	538.2	496.70 µg/L	58.600	496.70 ppb 58.600 11.80%
QC value within limits for Sb 206.836	Recovery = 99.34%			
Se 196.026†	1788.7	2520.1 µg/L	281.74	2520.1 ppb 281.74 11.18%
QC value within limits for Se 196.026	Recovery = 100.81%			
SiO2†	51810.1	10227 µg/L	721.9	10227 ppb 721.9 7.06%
QC value within limits for SiO2	Recovery = 95.62%			
Si 251.611†	62717.2	4767.9 µg/L	337.74	4767.9 ppb 337.74 7.08%
QC value within limits for Si 251.611	Recovery = 95.36%			
Sn 189.927†	1246.4	525.66 µg/L	75.534	525.66 ppb 75.534 14.37%
QC value within limits for Sn 189.927	Recovery = 105.13%			
Sr 421.552†	57438.8	529.88 µg/L	0.781	529.88 ppb 0.781 0.15%
QC value within limits for Sr 421.552	Recovery = 105.98%			
Ti 334.940†	222366.9	491.58 µg/L	36.251	491.58 ppb 36.251 7.37%
QC value within limits for Ti 334.940	Recovery = 98.32%			
Tl 190.801†	401.7	527.77 µg/L	51.582	527.77 ppb 51.582 9.77%
QC value within limits for Tl 190.801	Recovery = 105.55%			
U 409.014†	5897.8	488.99 µg/L	47.052	488.99 ppb 47.052 9.62%
QC value within limits for U 409.014	Recovery = 97.80%			
V 292.402†	51796.4	511.07 µg/L	49.146	511.07 ppb 49.146 9.62%
QC value within limits for V 292.402	Recovery = 102.21%			
Zn 213.857†	21824.7	508.46 µg/L	45.173	508.46 ppb 45.173 8.88%
QC value within limits for Zn 213.857	Recovery = 101.69%			

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/19/2010 16:44:15

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	56443.8	56443.8	99.9 %		16:44:48
1	Al 396.153Radial†	-10.1	-17.4	-12.137 µg/L	-12.137 ppb	16:44:48
1	Ca 317.933Radial†	199.6	-11.5	-9.8207 µg/L	-9.8207 ppb	16:45:08
1	Fe 238.204 Radial†	15.6	-0.9	-7.1871 µg/L	-7.1871 ppb	16:45:08
1	K 766.490 Radial†	171.4	6.6	4.2945 µg/L	4.2945 ppb	16:44:48
1	Mg 279.077 IEC†	7.6	-5.2	-46.321 µg/L	-46.321 ppb	16:45:08
1	Na 589.592 Radial†	489.1	17.3	5.3226 µg/L	5.3226 ppb	16:44:48
1	Sr 421.552†	79.0	50.3	0.4638 µg/L	0.4638 ppb	16:44:48
1	Sc 361.383	1989449.1	1989449.1	101.34 %		16:46:10
1	Y 371.029	1372109.7	1372109.7	101.43 %		16:46:10
1	Ag 328.068†	-456.4	-48.7	-0.3594 µg/L	-0.3594 ppb	16:46:15
1	As 188.979†	-5.3	-4.7	-8.4993 µg/L	-8.4993 ppb	16:46:36
1	B 249.677†	407.4	17.9	0.7343 µg/L	0.7343 ppb	16:46:36
1	Ba 233.527†	-5.2	11.9	0.2870 µg/L	0.2870 ppb	16:46:36
1	Be 313.107†	-2754.2	138.0	0.0819 µg/L	0.0819 ppb	16:46:15
1	Cd 226.502†	-144.4	-0.8	-0.0195 µg/L	-0.0195 ppb	16:46:36
1	Co 228.616†	1.0	-1.0	-0.0431 µg/L	-0.0431 ppb	16:46:36
1	Cr 267.716†	-33.7	17.2	0.3447 µg/L	0.3447 ppb	16:46:36
1	Cu 324.752†	2574.7	-3.1	-0.0214 µg/L	-0.0214 ppb	16:46:15
1	Mn 257.610†	-226.6	32.4	0.1025 µg/L	0.1025 ppb	16:46:36
1	Mo 202.031†	0.9	6.2	0.6075 µg/L	0.6075 ppb	16:46:36
1	Ni 231.604†	309.9	-6.6	-0.3281 µg/L	-0.3281 ppb	16:46:36
1	P 214.914†	11.4	-4.0	-7.9899 µg/L	-7.9899 ppb	16:46:36
1	Pb 220.353†	88.4	-3.8	-0.9074 µg/L	-0.9074 ppb	16:46:36
1	S 181.975 Axial†	15.3	-3.9	-15.967 µg/L	-15.967 ppb	16:46:36
1	Sb 206.836†	19.9	-2.9	-2.6187 µg/L	-2.6187 ppb	16:46:36
1	Se 196.026†	12.9	-6.6	-9.2715 µg/L	-9.2715 ppb	16:46:36
1	SiO2†	1429.0	18.5	3.6472 µg/L	3.6472 ppb	16:46:15
1	Si 251.611†	332.7	17.7	1.3429 µg/L	1.3429 ppb	16:46:36
1	Sn 189.927†	3.4	3.0	1.2548 µg/L	1.2548 ppb	16:46:36
1	Ti 334.940†	214.5	36.6	0.0844 µg/L	0.0844 ppb	16:46:15
1	Tl 190.801†	-23.3	-0.6	-0.8230 µg/L	-0.8230 ppb	16:46:36
1	U 409.014†	-112.1	-33.5	-2.7841 µg/L	-2.7841 ppb	16:46:15
1	V 292.402†	-13.0	31.9	0.3124 µg/L	0.3124 ppb	16:46:15
1	Zn 213.857†	555.4	13.6	0.3246 µg/L	0.3246 ppb	16:46:36
2	Sc RADIAL	56635.2	56635.2	100 %		16:45:14
2	Al 396.153Radial†	-10.1	-17.4	-12.141 µg/L	-12.141 ppb	16:45:14
2	Ca 317.933Radial†	187.9	-23.8	-20.367 µg/L	-20.367 ppb	16:45:34
2	Fe 238.204 Radial†	16.3	-0.3	-2.5827 µg/L	-2.5827 ppb	16:45:34
2	K 766.490 Radial†	218.4	52.9	34.520 µg/L	34.520 ppb	16:45:14
2	Mg 279.077 IEC†	12.4	-0.5	-4.1392 µg/L	-4.1392 ppb	16:45:34
2	Na 589.592 Radial†	513.9	40.5	12.430 µg/L	12.430 ppb	16:45:14
2	Sr 421.552†	58.4	29.4	0.2715 µg/L	0.2715 ppb	16:45:14
2	Sc 361.383	1983608.7	1983608.7	101.04 %		16:46:42
2	Y 371.029	1367482.8	1367482.8	101.09 %		16:46:42
2	Ag 328.068†	-443.4	-37.3	-0.2763 µg/L	-0.2763 ppb	16:46:47
2	As 188.979†	-2.8	-2.3	-4.1149 µg/L	-4.1149 ppb	16:47:08
2	B 249.677†	412.0	23.6	0.9621 µg/L	0.9621 ppb	16:47:08
2	Ba 233.527†	-18.2	-0.9	-0.0219 µg/L	-0.0219 ppb	16:47:08
2	Be 313.107†	-2703.5	180.2	0.1068 µg/L	0.1068 ppb	16:46:47
2	Cd 226.502†	-127.6	15.4	0.3840 µg/L	0.3840 ppb	16:47:08
2	Co 228.616†	7.3	5.3	0.2405 µg/L	0.2405 ppb	16:47:08
2	Cr 267.716†	-58.8	-7.8	-0.1569 µg/L	-0.1569 ppb	16:47:08
2	Cu 324.752†	2608.4	37.7	0.2459 µg/L	0.2459 ppb	16:46:47
2	Mn 257.610†	-227.1	31.2	0.0977 µg/L	0.0977 ppb	16:47:08
2	Mo 202.031†	0.0	5.4	0.5248 µg/L	0.5248 ppb	16:47:08
2	Ni 231.604†	305.0	-10.5	-0.5251 µg/L	-0.5251 ppb	16:47:08
2	P 214.914†	15.6	0.1	0.1534 µg/L	0.1534 ppb	16:47:08
2	Pb 220.353†	82.8	-8.9	-2.1787 µg/L	-2.1787 ppb	16:47:08

2	S 181.975 Axial†	18.3	-0.8	-3.3922 µg/L	-3.3922 ppb	16:47:08
2	Sb 206.836†	21.7	-1.0	-0.9259 µg/L	-0.9259 ppb	16:47:08
2	Se 196.026†	16.5	-3.0	-4.1629 µg/L	-4.1629 ppb	16:47:08
2	SiO2†	1450.1	43.5	8.5888 µg/L	8.5888 ppb	16:46:47
2	Si 251.611†	323.7	9.8	0.7431 µg/L	0.7431 ppb	16:47:08
2	Sn 189.927†	7.2	6.8	2.8541 µg/L	2.8541 ppb	16:47:08
2	Ti 334.940†	275.2	97.3	0.2152 µg/L	0.2152 ppb	16:46:47
2	Tl 190.801†	-21.7	1.0	1.2441 µg/L	1.2441 ppb	16:47:08
2	U 409.014†	-34.6	42.8	3.5596 µg/L	3.5596 ppb	16:46:47
2	V 292.402†	-47.6	-2.4	-0.0159 µg/L	-0.0159 ppb	16:46:47
2	Zn 213.857†	557.8	17.6	0.4155 µg/L	0.4155 ppb	16:47:08
3	Sc RADIAL	56103.5	56103.5	99.3 %		16:45:39
3	Al 396.153Radial†	-12.8	-20.2	-14.109 µg/L	-14.109 ppb	16:45:39
3	Ca 317.933Radial†	191.0	-18.9	-16.130 µg/L	-16.130 ppb	16:46:00
3	Fe 238.204 Radial†	17.4	1.0	7.6890 µg/L	7.6890 ppb	16:46:00
3	K 766.490 Radial†	173.9	10.1	6.6116 µg/L	6.6116 ppb	16:45:39
3	Mg 279.077 IEC†	10.0	-2.8	-24.916 µg/L	-24.916 ppb	16:46:00
3	Na 589.592 Radial†	509.0	40.4	12.402 µg/L	12.402 ppb	16:45:39
3	Sr 421.552†	51.1	22.6	0.2086 µg/L	0.2086 ppb	16:45:39
3	Sc 361.383	1979825.1	1979825.1	100.85 %		16:47:14
3	Y 371.029	1367032.8	1367032.8	101.06 %		16:47:14
3	Ag 328.068†	-365.2	39.5	0.2926 µg/L	0.2926 ppb	16:47:20
3	As 188.979†	6.4	6.8	12.172 µg/L	12.172 ppb	16:47:40
3	B 249.677†	398.6	11.1	0.4486 µg/L	0.4486 ppb	16:47:40
3	Ba 233.527†	-12.4	4.8	0.1152 µg/L	0.1152 ppb	16:47:40
3	Be 313.107†	-2652.0	226.1	0.1341 µg/L	0.1341 ppb	16:47:20
3	Cd 226.502†	-131.0	11.8	0.2924 µg/L	0.2924 ppb	16:47:40
3	Co 228.616†	3.8	1.9	0.0848 µg/L	0.0848 ppb	16:47:40
3	Cr 267.716†	-32.1	18.5	0.3716 µg/L	0.3716 ppb	16:47:40
3	Cu 324.752†	2543.2	-22.0	-0.1426 µg/L	-0.1426 ppb	16:47:20
3	Mn 257.610†	-230.0	28.0	0.0896 µg/L	0.0896 ppb	16:47:40
3	Mo 202.031†	7.5	12.8	1.2495 µg/L	1.2495 ppb	16:47:40
3	Ni 231.604†	307.7	-7.2	-0.3603 µg/L	-0.3603 ppb	16:47:40
3	P 214.914†	16.4	0.9	1.7842 µg/L	1.7842 ppb	16:47:40
3	Pb 220.353†	91.4	-0.3	-0.0769 µg/L	-0.0769 ppb	16:47:40
3	S 181.975 Axial†	16.1	-2.9	-12.216 µg/L	-12.216 ppb	16:47:40
3	Sb 206.836†	18.4	-4.3	-3.9156 µg/L	-3.9156 ppb	16:47:40
3	Se 196.026†	19.5	-0.0	0.0313 µg/L	0.0313 ppb	16:47:40
3	SiO2†	1408.7	5.2	1.0280 µg/L	1.0280 ppb	16:47:20
3	Si 251.611†	328.7	15.3	1.1614 µg/L	1.1614 ppb	16:47:40
3	Sn 189.927†	7.2	6.8	2.8616 µg/L	2.8616 ppb	16:47:40
3	Ti 334.940†	264.4	87.1	0.1944 µg/L	0.1944 ppb	16:47:20
3	Tl 190.801†	-17.8	4.8	6.2130 µg/L	6.2130 ppb	16:47:40
3	U 409.014†	44.4	121.1	10.062 µg/L	10.062 ppb	16:47:20
3	V 292.402†	-48.6	-3.5	-0.0118 µg/L	-0.0118 ppb	16:47:20
3	Zn 213.857†	546.8	7.8	0.1863 µg/L	0.1863 ppb	16:47:40

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1984294.3	101.08 %	0.247			0.24%
Sc RADIAL	56394.2	99.8 %	0.48			0.48%
Y 371.029	1368875.1	101.19 %	0.208			0.21%
Ag 328.068†	-15.5	-0.1144 µg/L	0.35487	-0.1144 ppb	0.35487	310.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-18.4	-12.796 µg/L	1.1373	-12.796 ppb	1.1373	8.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.1476 µg/L	10.89157	-0.1476 ppb	10.89157	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	17.5	0.7150 µg/L	0.25726	0.7150 ppb	0.25726	35.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.3	0.1268 µg/L	0.15478	0.1268 ppb	0.15478	122.10%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	181.4	0.1076 µg/L	0.02612	0.1076 ppb	0.02612	24.28%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-18.1	-15.439 µg/L	5.3071	-15.439 ppb	5.3071	34.37%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.8	0.2189 µg/L	0.21153	0.2189 ppb	0.21153	96.62%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.1	0.0941 µg/L	0.14201	0.0941 ppb	0.14201	150.94%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		9.3	0.1865 µg/L	0.29770	0.1865 ppb	0.29770 159.64%
		QC value within limits for Cr 267.716	Recovery = Not calculated			
Cu	324.752†	4.2	0.0273 µg/L	0.19878	0.0273 ppb	0.19878 728.06%
		QC value within limits for Cu 324.752	Recovery = Not calculated			
Fe	238.204 Radial†	-0.1	-0.6936 µg/L	7.61586	-0.6936 ppb	7.61586 >999.9%
		QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
K	766.490 Radial†	23.2	15.142 µg/L	16.8219	15.142 ppb	16.8219 111.09%
		QC value within limits for K 766.490 Radial	Recovery = Not calculated			
Mg	279.077 IEC†	-2.8	-25.125 µg/L	21.0915	-25.125 ppb	21.0915 83.94%
		QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
Mn	257.610†	30.6	0.0966 µg/L	0.00647	0.0966 ppb	0.00647 6.70%
		QC value within limits for Mn 257.610	Recovery = Not calculated			
Mo	202.031†	8.1	0.7939 µg/L	0.39671	0.7939 ppb	0.39671 49.97%
		QC value within limits for Mo 202.031	Recovery = Not calculated			
Na	589.592 Radial†	32.7	10.051 µg/L	4.0953	10.051 ppb	4.0953 40.74%
		QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
Ni	231.604†	-8.1	-0.4045 µg/L	0.10569	-0.4045 ppb	0.10569 26.13%
		QC value within limits for Ni 231.604	Recovery = Not calculated			
P	214.914†	-1.0	-2.0175 µg/L	5.23620	-2.0175 ppb	5.23620 259.54%
		QC value within limits for P 214.914	Recovery = Not calculated			
Pb	220.353†	-4.3	-1.0543 µg/L	1.05859	-1.0543 ppb	1.05859 100.40%
		QC value within limits for Pb 220.353	Recovery = Not calculated			
S	181.975 Axial†	-2.5	-10.525 µg/L	6.4558	-10.525 ppb	6.4558 61.34%
		QC value within limits for S 181.975 Axial	Recovery = Not calculated			
Sb	206.836†	-2.7	-2.4867 µg/L	1.49921	-2.4867 ppb	1.49921 60.29%
		QC value within limits for Sb 206.836	Recovery = Not calculated			
Se	196.026†	-3.2	-4.4677 µg/L	4.65886	-4.4677 ppb	4.65886 104.28%
		QC value within limits for Se 196.026	Recovery = Not calculated			
SiO2†		22.4	4.4213 µg/L	3.83941	4.4213 ppb	3.83941 86.84%
		QC value within limits for SiO2	Recovery = Not calculated			
Si	251.611†	14.2	1.0825 µg/L	0.30758	1.0825 ppb	0.30758 28.41%
		QC value within limits for Si 251.611	Recovery = Not calculated			
Sn	189.927†	5.5	2.3235 µg/L	0.92554	2.3235 ppb	0.92554 39.83%
		QC value within limits for Sn 189.927	Recovery = Not calculated			
Sr	421.552†	34.1	0.3146 µg/L	0.13296	0.3146 ppb	0.13296 42.26%
		QC value within limits for Sr 421.552	Recovery = Not calculated			
Ti	334.940†	73.7	0.1647 µg/L	0.07028	0.1647 ppb	0.07028 42.68%
		QC value within limits for Ti 334.940	Recovery = Not calculated			
Tl	190.801†	1.7	2.2114 µg/L	3.61632	2.2114 ppb	3.61632 163.53%
		QC value within limits for Tl 190.801	Recovery = Not calculated			
U	409.014†	43.5	3.6126 µg/L	6.42347	3.6126 ppb	6.42347 177.81%
		QC value within limits for U 409.014	Recovery = Not calculated			
V	292.402†	8.7	0.0949 µg/L	0.18839	0.0949 ppb	0.18839 198.45%
		QC value within limits for V 292.402	Recovery = Not calculated			
Zn	213.857†	13.0	0.3088 µg/L	0.11540	0.3088 ppb	0.11540 37.37%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: PQL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 101
 Date Collected: 2/19/2010 16:47:50
 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	56282.3	56282.3	99.6 %		16:48:22
1	Al 396.153Radial†	298.2	292.0	202.91 µg/L	202.91 ppb	16:48:22
1	Ca 317.933Radial†	429.4	219.7	187.68 µg/L	187.68 ppb	16:48:43
1	Fe 238.204 Radial†	29.6	13.1	103.39 µg/L	103.39 ppb	16:48:43
1	K 766.490 Radial†	342.0	178.3	116.45 µg/L	116.45 ppb	16:48:22
1	Mg 279.077 IEC†	44.3	31.6	282.85 µg/L	282.85 ppb	16:48:43
1	Na 589.592 Radial†	1474.0	1007.4	309.41 µg/L	309.41 ppb	16:48:22
1	Sr 421.552†	600.8	574.3	5.2980 µg/L	5.2980 ppb	16:48:22
1	Sc 361.383	1977761.8	1977761.8	100.75 %		16:49:45
1	Y 371.029	1365399.5	1365399.5	100.93 %		16:49:45
1	Ag 328.068†	258.4	658.1	4.9148 µg/L	4.9148 ppb	16:49:50
1	As 188.979†	15.7	16.1	28.782 µg/L	28.782 ppb	16:50:11
1	B 249.677†	1617.1	1221.0	49.720 µg/L	49.720 ppb	16:49:50
1	Ba 233.527†	202.7	218.3	5.2492 µg/L	5.2492 ppb	16:50:11
1	Be 313.107†	5999.9	8811.2	5.2276 µg/L	5.2276 ppb	16:49:50
1	Cd 226.502†	69.7	210.9	5.2540 µg/L	5.2540 ppb	16:50:11
1	Co 228.616†	98.7	96.0	4.3479 µg/L	4.3479 ppb	16:50:11
1	Cr 267.716†	241.4	290.0	5.8279 µg/L	5.8279 ppb	16:49:50
1	Cu 324.752†	4202.8	1627.9	10.640 µg/L	10.640 ppb	16:49:50
1	Mn 257.610†	3188.0	3420.5	10.714 µg/L	10.714 ppb	16:49:50
1	Mo 202.031†	99.0	103.6	10.146 µg/L	10.146 ppb	16:50:11
1	Ni 231.604†	418.0	102.5	5.1075 µg/L	5.1075 ppb	16:50:11
1	P 214.914†	98.6	82.5	162.32 µg/L	162.32 ppb	16:50:11
1	Pb 220.353†	137.2	45.3	10.965 µg/L	10.965 ppb	16:50:11
1	S 181.975 Axial†	42.3	23.0	95.542 µg/L	95.542 ppb	16:50:11
1	Sb 206.836†	37.6	14.8	13.659 µg/L	13.659 ppb	16:50:11
1	Se 196.026†	37.4	17.8	24.952 µg/L	24.952 ppb	16:50:11
1	SiO2†	2505.0	1094.9	216.12 µg/L	216.12 ppb	16:49:50
1	Si 251.611†	1649.6	1326.8	100.86 µg/L	100.86 ppb	16:50:11
1	Sn 189.927†	23.4	22.9	9.6771 µg/L	9.6771 ppb	16:50:11
1	Ti 334.940†	2480.4	2287.0	5.0399 µg/L	5.0399 ppb	16:49:50
1	Tl 190.801†	-7.5	15.0	19.606 µg/L	19.606 ppb	16:50:11
1	U 409.014†	617.0	689.5	57.259 µg/L	57.259 ppb	16:49:50
1	V 292.402†	481.6	522.7	5.2575 µg/L	5.2575 ppb	16:49:50
1	Zn 213.857†	992.7	450.9	10.519 µg/L	10.519 ppb	16:50:11
2	SC RADIAL	56210.7	56210.7	99.5 %		16:48:48
2	Al 396.153Radial†	273.4	267.4	185.81 µg/L	185.81 ppb	16:48:48
2	Ca 317.933Radial†	426.2	217.1	185.45 µg/L	185.45 ppb	16:49:08
2	Fe 238.204 Radial†	28.4	12.0	94.492 µg/L	94.492 ppb	16:49:08
2	K 766.490 Radial†	411.4	248.5	162.28 µg/L	162.28 ppb	16:48:48
2	Mg 279.077 IEC†	50.3	37.8	337.62 µg/L	337.62 ppb	16:49:08
2	Na 589.592 Radial†	1464.1	999.4	306.94 µg/L	306.94 ppb	16:48:48
2	Sr 421.552†	574.2	548.3	5.0581 µg/L	5.0581 ppb	16:48:48
2	Sc 361.383	1972692.6	1972692.6	100.49 %		16:50:17
2	Y 371.029	1361966.2	1361966.2	100.68 %		16:50:17
2	Ag 328.068†	270.6	670.9	5.0087 µg/L	5.0087 ppb	16:50:23
2	As 188.979†	17.9	18.3	32.707 µg/L	32.707 ppb	16:50:43
2	B 249.677†	1623.8	1231.8	50.165 µg/L	50.165 ppb	16:50:23
2	Ba 233.527†	197.6	213.7	5.1395 µg/L	5.1395 ppb	16:50:43
2	Be 313.107†	5881.6	8708.7	5.1667 µg/L	5.1667 ppb	16:50:23
2	Cd 226.502†	72.2	213.5	5.3190 µg/L	5.3190 ppb	16:50:43
2	Co 228.616†	112.6	110.1	4.9856 µg/L	4.9856 ppb	16:50:43
2	Cr 267.716†	212.6	261.9	5.2641 µg/L	5.2641 ppb	16:50:23
2	Cu 324.752†	4135.5	1571.7	10.273 µg/L	10.273 ppb	16:50:23
2	Mn 257.610†	3139.9	3380.7	10.586 µg/L	10.586 ppb	16:50:23
2	Mo 202.031†	100.4	105.3	10.314 µg/L	10.314 ppb	16:50:43
2	Ni 231.604†	409.7	95.3	4.7480 µg/L	4.7480 ppb	16:50:43
2	P 214.914†	98.3	82.5	162.33 µg/L	162.33 ppb	16:50:43
2	Pb 220.353†	137.5	45.9	11.123 µg/L	11.123 ppb	16:50:43

2	S 181.975 Axial†	44.4	25.2	104.52 µg/L	104.52 ppb	16:50:43
2	Sb 206.836†	32.9	10.2	9.4639 µg/L	9.4639 ppb	16:50:43
2	Se 196.026†	35.2	15.7	21.973 µg/L	21.973 ppb	16:50:43
2	SiO2†	2523.6	1119.7	221.02 µg/L	221.02 ppb	16:50:23
2	Si 251.611†	1635.2	1316.7	100.10 µg/L	100.10 ppb	16:50:43
2	Sn 189.927†	26.0	25.5	10.767 µg/L	10.767 ppb	16:50:43
2	Ti 334.940†	2526.0	2338.7	5.1499 µg/L	5.1499 ppb	16:50:23
2	Tl 190.801†	-4.6	17.8	23.319 µg/L	23.319 ppb	16:50:43
2	U 409.014†	591.4	665.6	55.280 µg/L	55.280 ppb	16:50:23
2	V 292.402†	473.1	515.6	5.1847 µg/L	5.1847 ppb	16:50:23
2	Zn 213.857†	977.2	438.1	10.216 µg/L	10.216 ppb	16:50:43
3	Sc RADIAL	56270.8	56270.8	99.6 %		16:49:14
3	Al 396.153Radial†	299.9	293.7	204.14 µg/L	204.14 ppb	16:49:14
3	Ca 317.933Radial†	434.4	224.8	192.04 µg/L	192.04 ppb	16:49:35
3	Fe 238.204 Radial†	29.7	13.3	104.87 µg/L	104.87 ppb	16:49:35
3	K 766.490 Radial†	455.9	292.7	191.16 µg/L	191.16 ppb	16:49:14
3	Mg 279.077 IEC†	45.6	33.0	295.03 µg/L	295.03 ppb	16:49:35
3	Na 589.592 Radial†	1506.5	1040.3	319.53 µg/L	319.53 ppb	16:49:14
3	Sr 421.552†	597.6	571.2	5.2696 µg/L	5.2696 ppb	16:49:14
3	Sc 361.383	1984220.0	1984220.0	101.07 %		16:50:49
3	Y 371.029	1369121.2	1369121.2	101.21 %		16:50:49
3	Ag 328.068†	201.6	601.1	4.4889 µg/L	4.4889 ppb	16:50:55
3	As 188.979†	12.2	12.5	22.435 µg/L	22.435 ppb	16:51:15
3	B 249.677†	1528.3	1127.9	45.924 µg/L	45.924 ppb	16:50:55
3	Ba 233.527†	159.9	175.2	4.2153 µg/L	4.2153 ppb	16:51:15
3	Be 313.107†	4886.5	7690.3	4.5625 µg/L	4.5625 ppb	16:50:55
3	Cd 226.502†	36.1	177.4	4.4177 µg/L	4.4177 ppb	16:51:15
3	Co 228.616†	97.9	94.9	4.2983 µg/L	4.2983 ppb	16:51:15
3	Cr 267.716†	217.3	265.4	5.3332 µg/L	5.3332 ppb	16:50:55
3	Cu 324.752†	4009.3	1423.0	9.3030 µg/L	9.3030 ppb	16:50:55
3	Mn 257.610†	2806.1	3032.2	9.4977 µg/L	9.4977 ppb	16:50:55
3	Mo 202.031†	85.5	90.0	8.8152 µg/L	8.8152 ppb	16:51:15
3	Ni 231.604†	395.2	78.7	3.9181 µg/L	3.9181 ppb	16:51:15
3	P 214.914†	81.4	65.2	128.29 µg/L	128.29 ppb	16:51:15
3	Pb 220.353†	131.5	39.1	9.4710 µg/L	9.4710 ppb	16:51:15
3	S 181.975 Axial†	39.1	19.8	81.981 µg/L	81.981 ppb	16:51:15
3	Sb 206.836†	33.0	10.1	9.3652 µg/L	9.3652 ppb	16:51:15
3	Se 196.026†	36.9	17.2	24.099 µg/L	24.099 ppb	16:51:15
3	SiO2†	2440.0	1022.5	201.82 µg/L	201.82 ppb	16:50:55
3	Si 251.611†	1427.0	1101.2	83.718 µg/L	83.718 ppb	16:51:15
3	Sn 189.927†	23.7	23.1	9.7555 µg/L	9.7555 ppb	16:51:15
3	Ti 334.940†	2205.8	2007.3	4.4203 µg/L	4.4203 ppb	16:50:55
3	Tl 190.801†	-9.0	13.5	17.705 µg/L	17.705 ppb	16:51:15
3	U 409.014†	550.5	621.7	51.630 µg/L	51.630 ppb	16:50:55
3	V 292.402†	420.4	460.6	4.6353 µg/L	4.6353 ppb	16:50:55
3	Zn 213.857†	910.8	366.7	8.5490 µg/L	8.5490 ppb	16:51:15

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1978224.8	100.77 %	0.294			0.29%
Sc RADIAL	56254.6	99.6 %	0.07			0.07%
Y 371.029	1365495.6	100.94 %	0.265			0.26%
Ag 328.068†	643.3	4.8041 µg/L	0.27699	4.8041 ppb	0.27699	5.77%
QC value within limits for Ag 328.068 Recovery = 96.08%						
Al 396.153Radial†	284.4	197.62 µg/L	10.244	197.62 ppb	10.244	5.18%
QC value within limits for Al 396.153Radial Recovery = 98.81%						
As 188.979†	15.6	27.975 µg/L	5.1834	27.975 ppb	5.1834	18.53%
QC value within limits for As 188.979 Recovery = 93.25%						
B 249.677†	1193.6	48.603 µg/L	2.3307	48.603 ppb	2.3307	4.80%
QC value within limits for B 249.677 Recovery = 97.21%						
Ba 233.527†	202.4	4.8680 µg/L	0.56789	4.8680 ppb	0.56789	11.67%
QC value within limits for Ba 233.527 Recovery = 97.36%						
Be 313.107†	8403.4	4.9856 µg/L	0.36766	4.9856 ppb	0.36766	7.37%
QC value within limits for Be 313.107 Recovery = 99.71%						
Ca 317.933Radial†	220.5	188.39 µg/L	3.356	188.39 ppb	3.356	1.78%
QC value within limits for Ca 317.933Radial Recovery = 94.19%						
Cd 226.502†	200.6	4.9969 µg/L	0.50267	4.9969 ppb	0.50267	10.06%
QC value within limits for Cd 226.502 Recovery = 99.94%						
Co 228.616†	100.4	4.5440 µg/L	0.38331	4.5440 ppb	0.38331	8.44%

Cr	267.716†	272.4	5.4751 µg/L	0.30749	5.4751 ppb	0.30749	5.62%
Cu	324.752†	1540.9	10.072 µg/L	0.6909	10.072 ppb	0.6909	6.86%
Fe	238.204 Radial†	12.8	100.92 µg/L	5.613	100.92 ppb	5.613	5.56%
K	766.490 Radial†	239.8	156.63 µg/L	37.674	156.63 ppb	37.674	24.05%
Mg	279.077 IEC†	34.1	305.17 µg/L	28.759	305.17 ppb	28.759	9.42%
Mn	257.610†	3277.8	10.266 µg/L	0.6682	10.266 ppb	0.6682	6.51%
Mo	202.031†	99.6	9.7581 µg/L	0.82093	9.7581 ppb	0.82093	8.41%
Na	589.592 Radial†	1015.7	311.96 µg/L	6.671	311.96 ppb	6.671	2.14%
Ni	231.604†	92.2	4.5912 µg/L	0.61004	4.5912 ppb	0.61004	13.29%
P	214.914†	76.7	150.98 µg/L	19.653	150.98 ppb	19.653	13.02%
Pb	220.353†	43.4	10.520 µg/L	0.9115	10.520 ppb	0.9115	8.67%
S	181.975 Axial†	22.7	94.016 µg/L	11.3485	94.016 ppb	11.3485	12.07%
Sb	206.836†	11.7	10.829 µg/L	2.4509	10.829 ppb	2.4509	22.63%
Se	196.026†	16.9	23.675 µg/L	1.5343	23.675 ppb	1.5343	6.48%
SiO2†		1079.0	212.99 µg/L	9.975	212.99 ppb	9.975	4.68%
Si	251.611†	1248.2	94.893 µg/L	9.6851	94.893 ppb	9.6851	10.21%
Sn	189.927†	23.8	10.067 µg/L	0.6079	10.067 ppb	0.6079	6.04%
Sr	421.552†	564.6	5.2086 µg/L	0.13109	5.2086 ppb	0.13109	2.52%
Ti	334.940†	2211.0	4.8701 µg/L	0.39334	4.8701 ppb	0.39334	8.08%
Tl	190.801†	15.4	20.210 µg/L	2.8552	20.210 ppb	2.8552	14.13%
U	409.014†	659.0	54.723 µg/L	2.8553	54.723 ppb	2.8553	5.22%
V	292.402†	499.7	5.0258 µg/L	0.34018	5.0258 ppb	0.34018	6.77%
Zn	213.857†	418.6	9.7614 µg/L	1.06081	9.7614 ppb	1.06081	10.87%

QC value within limits for Co 228.616 Recovery = 90.88%

QC value within limits for Cr 267.716 Recovery = 109.50%

QC value within limits for Cu 324.752 Recovery = 100.72%

QC value within limits for Fe 238.204 Radial Recovery = 100.92%

QC value within limits for K 766.490 Radial Recovery = 104.42%

QC value within limits for Mg 279.077 IEC Recovery = 101.72%

QC value within limits for Mn 257.610 Recovery = 102.66%

QC value within limits for Mo 202.031 Recovery = 97.58%

QC value within limits for Na 589.592 Radial Recovery = 103.99%

QC value within limits for Ni 231.604 Recovery = 91.82%

QC value within limits for P 214.914 Recovery = 100.65%

QC value within limits for Pb 220.353 Recovery = 105.20%

QC value within limits for S 181.975 Axial Recovery = 94.02%

QC value within limits for Sb 206.836 Recovery = 108.29%

QC value within limits for Se 196.026 Recovery = 78.92%

QC value within limits for SiO2 Recovery = 99.99%

QC value within limits for Si 251.611 Recovery = 94.89%

QC value within limits for Sn 189.927 Recovery = 100.67%

QC value within limits for Sr 421.552 Recovery = 104.17%

QC value within limits for Ti 334.940 Recovery = 97.40%

QC value within limits for Tl 190.801 Recovery = 101.05%

QC value within limits for U 409.014 Recovery = 109.45%

QC value within limits for V 292.402 Recovery = 100.52%

QC value within limits for Zn 213.857 Recovery = 97.61%

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/19/2010 16:51:24

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	55393.6	55393.6	98.0 %		16:52:06
1	Al 396.153Radial†	724194.0	738594.2	513810 µg/L	513810 ppb	16:52:00
1	Ca 317.933Radial†	560588.9	571530.4	488190 µg/L	488190 ppb	16:52:00
1	Fe 238.204 Radial†	23830.6	24288.1	191560 µg/L	191560 ppb	16:52:06
1	K 766.490 Radial†	115.1	-47.6	-31.114 µg/L	-31.114 ppb	16:52:06
1	Mg 279.077 IEC†	54305.7	55373.3	494780 µg/L	494780 ppb	16:52:06
1	Na 589.592 Radial†	579.7	119.1	36.566 µg/L	36.566 ppb	16:52:06
1	Sr 421.552†	417.7	397.2	3.6640 µg/L	3.6640 ppb	16:52:06
1	Sc 361.383	1850788.2	1850788.2	94.278 %		16:52:38
1	Y 371.029	1267800.9	1267800.9	93.720 %		16:52:38
1	Ag 328.068†	-2693.6	-2455.5	-6.2926 µg/L	-6.2926 ppb	16:52:44
1	As 188.979†	-3.5	-3.2	-20.025 µg/L	-20.025 ppb	16:53:05
1	B 249.677†	871.2	539.9	-77.949 µg/L	-77.949 ppb	16:52:44
1	Ba 233.527†	294.9	329.9	7.8736 µg/L	7.8736 ppb	16:53:05
1	Be 313.107†	-3450.2	-803.9	-0.4876 µg/L	-0.4876 ppb	16:52:44
1	Cd 226.502†	449.3	618.2	-6.2337 µg/L	-6.2337 ppb	16:53:05
1	Co 228.616†	61.1	62.9	2.7806 µg/L	2.7806 ppb	16:53:05
1	Cr 267.716†	-66.1	-19.8	-0.4132 µg/L	-0.4132 ppb	16:53:05
1	Cu 324.752†	-1734.2	-4383.2	-1.9848 µg/L	-1.9848 ppb	16:52:44
1	Mn 257.610†	821.6	1127.5	9.2085 µg/L	9.2085 ppb	16:52:44
1	Mo 202.031†	-118.4	-120.2	-4.4913 µg/L	-4.4913 ppb	16:53:05
1	Ni 231.604†	163.0	-139.5	-4.4672 µg/L	-4.4672 ppb	16:53:05
1	P 214.914†	72.2	61.2	116.25 µg/L	116.25 ppb	16:53:05
1	Pb 220.353†	39.4	-49.1	9.0511 µg/L	9.0511 ppb	16:53:05
1	S 181.975 Axial†	32.2	15.3	63.310 µg/L	63.310 ppb	16:53:05
1	Sb 206.836†	57.5	38.5	-7.3305 µg/L	-7.3305 ppb	16:53:05
1	Se 196.026†	11.6	-7.0	-62.783 µg/L	-62.783 ppb	16:53:05
1	SiO2†	1235.7	-80.9	-15.963 µg/L	-15.963 ppb	16:53:05
1	Si 251.611†	441.8	157.9	12.007 µg/L	12.007 ppb	16:53:05
1	Sn 189.927†	-66.4	-70.8	5.6696 µg/L	5.6696 ppb	16:53:05
1	Ti 334.940†	11832.7	12375.9	-3.9147 µg/L	-3.9147 ppb	16:52:44
1	Tl 190.801†	-42.3	-22.5	-8.4040 µg/L	-8.4040 ppb	16:53:05
1	U 409.014†	-59.0	14.5	-55.197 µg/L	-55.197 ppb	16:52:44
1	V 292.402†	-2553.4	-2663.6	-3.5017 µg/L	-3.5017 ppb	16:52:44
1	Zn 213.857†	1634.5	1199.3	-8.9501 µg/L	-8.9501 ppb	16:53:05
2	Sc RADIAL	55011.0	55011.0	97.4 %		16:52:17
2	Al 396.153Radial†	723719.7	743244.2	517040 µg/L	517040 ppb	16:52:11
2	Ca 317.933Radial†	561511.7	576454.6	492400 µg/L	492400 ppb	16:52:11
2	Fe 238.204 Radial†	23613.9	24234.6	191140 µg/L	191140 ppb	16:52:17
2	K 766.490 Radial†	128.3	-33.2	-21.699 µg/L	-21.699 ppb	16:52:17
2	Mg 279.077 IEC†	53736.1	55173.5	492990 µg/L	492990 ppb	16:52:17
2	Na 589.592 Radial†	541.6	84.0	25.796 µg/L	25.796 ppb	16:52:17
2	Sr 421.552†	414.5	396.8	3.6609 µg/L	3.6609 ppb	16:52:17
2	Sc 361.383	1848725.6	1848725.6	94.173 %		16:53:11
2	Y 371.029	1266302.7	1266302.7	93.609 %		16:53:11
2	Ag 328.068†	-2764.2	-2533.7	-6.8956 µg/L	-6.8956 ppb	16:53:16
2	As 188.979†	-19.7	-20.5	-51.199 µg/L	-51.199 ppb	16:53:37
2	B 249.677†	821.6	488.3	-79.833 µg/L	-79.833 ppb	16:53:16
2	Ba 233.527†	289.2	324.1	7.7351 µg/L	7.7351 ppb	16:53:37
2	Be 313.107†	-3507.9	-869.3	-0.5266 µg/L	-0.5266 ppb	16:53:16
2	Cd 226.502†	439.6	608.5	-6.4301 µg/L	-6.4301 ppb	16:53:37
2	Co 228.616†	46.3	47.3	2.0733 µg/L	2.0733 ppb	16:53:37
2	Cr 267.716†	-55.1	-8.1	-0.1798 µg/L	-0.1798 ppb	16:53:37
2	Cu 324.752†	-1747.2	-4399.1	-2.1470 µg/L	-2.1470 ppb	16:53:16
2	Mn 257.610†	693.8	992.7	8.8018 µg/L	8.8018 ppb	16:53:16
2	Mo 202.031†	-103.9	-105.0	-3.0206 µg/L	-3.0206 ppb	16:53:37
2	Ni 231.604†	140.3	-163.4	-5.6612 µg/L	-5.6612 ppb	16:53:37
2	P 214.914†	95.8	86.4	167.33 µg/L	167.33 ppb	16:53:37
2	Pb 220.353†	25.6	-63.7	5.6987 µg/L	5.6987 ppb	16:53:37

2	S 181.975 Axial†	46.7	30.7	127.27 µg/L	127.27 ppb	16:53:37
2	Sb 206.836†	44.2	24.4	-20.582 µg/L	-20.582 ppb	16:53:37
2	Se 196.026†	15.1	-3.2	-58.240 µg/L	-58.240 ppb	16:53:37
2	SiO2†	1212.8	-103.8	-20.481 µg/L	-20.481 ppb	16:53:37
2	Si 251.611†	449.3	166.5	12.657 µg/L	12.657 ppb	16:53:37
2	Sn 189.927†	-68.4	-73.0	4.5450 µg/L	4.5450 ppb	16:53:37
2	Ti 334.940†	12102.5	12676.3	-3.0417 µg/L	-3.0417 ppb	16:53:16
2	Tl 190.801†	-37.0	-17.0	-1.3751 µg/L	-1.3751 ppb	16:53:37
2	U 409.014†	-33.8	41.2	-53.185 µg/L	-53.185 ppb	16:53:16
2	V 292.402†	-2512.7	-2623.4	-3.1453 µg/L	-3.1453 ppb	16:53:16
2	Zn 213.857†	1609.3	1174.4	-9.4073 µg/L	-9.4073 ppb	16:53:37
3	Sc RADIAL	55087.9	55087.9	97.5 %		16:52:28
3	Al 396.153Radial†	720131.5	738527.0	513760 µg/L	513760 ppb	16:52:23
3	Ca 317.933Radial†	556178.1	570179.9	487040 µg/L	487040 ppb	16:52:23
3	Fe 238.204 Radial†	23691.3	24280.2	191500 µg/L	191500 ppb	16:52:28
3	K 766.490 Radial†	149.7	-11.5	-7.5099 µg/L	-7.5099 ppb	16:52:28
3	Mg 279.077 IEC†	53963.6	55329.8	494390 µg/L	494390 ppb	16:52:28
3	Na 589.592 Radial†	551.3	93.2	28.624 µg/L	28.624 ppb	16:52:28
3	Sr 421.552†	418.9	400.8	3.6974 µg/L	3.6974 ppb	16:52:28
3	Sc 361.383	1849927.7	1849927.7	94.234 %		16:53:43
3	Y 371.029	1267002.1	1267002.1	93.661 %		16:53:43
3	Ag 328.068†	-2734.1	-2499.7	-6.6223 µg/L	-6.6223 ppb	16:53:49
3	As 188.979†	-9.3	-9.4	-31.056 µg/L	-31.056 ppb	16:54:09
3	B 249.677†	848.6	516.3	-78.878 µg/L	-78.878 ppb	16:53:49
3	Ba 233.527†	283.0	317.4	7.5725 µg/L	7.5725 ppb	16:54:09
3	Be 313.107†	-3473.1	-829.9	-0.5033 µg/L	-0.5033 ppb	16:53:49
3	Cd 226.502†	443.2	612.0	-6.3822 µg/L	-6.3822 ppb	16:54:09
3	Co 228.616†	37.7	38.1	1.6569 µg/L	1.6569 ppb	16:54:09
3	Cr 267.716†	-62.9	-16.3	-0.3442 µg/L	-0.3442 ppb	16:54:09
3	Cu 324.752†	-1721.6	-4370.7	-1.9119 µg/L	-1.9119 ppb	16:53:49
3	Mn 257.610†	731.2	1032.0	8.9167 µg/L	8.9167 ppb	16:53:49
3	Mo 202.031†	-107.8	-109.1	-3.4029 µg/L	-3.4029 ppb	16:54:09
3	Ni 231.604†	145.6	-157.8	-5.3810 µg/L	-5.3810 ppb	16:54:09
3	P 214.914†	108.6	100.0	193.00 µg/L	193.00 ppb	16:54:09
3	Pb 220.353†	37.4	-51.2	8.5535 µg/L	8.5535 ppb	16:54:09
3	S 181.975 Axial†	37.1	20.4	84.584 µg/L	84.584 ppb	16:54:09
3	Sb 206.836†	48.6	29.0	-15.889 µg/L	-15.889 ppb	16:54:09
3	Se 196.026†	35.7	18.5	-26.410 µg/L	-26.410 ppb	16:54:09
3	SiO2†	1232.2	-83.9	-16.565 µg/L	-16.565 ppb	16:54:09
3	Si 251.611†	426.5	142.0	10.792 µg/L	10.792 ppb	16:54:09
3	Sn 189.927†	-55.5	-59.3	10.507 µg/L	10.507 ppb	16:54:09
3	Ti 334.940†	12184.3	12754.8	-3.0642 µg/L	-3.0642 ppb	16:53:49
3	Tl 190.801†	-36.8	-16.7	-0.7208 µg/L	-0.7208 ppb	16:54:09
3	U 409.014†	-97.2	-26.0	-58.491 µg/L	-58.491 ppb	16:53:49
3	V 292.402†	-2526.9	-2636.8	-3.2422 µg/L	-3.2422 ppb	16:53:49
3	Zn 213.857†	1595.9	1159.1	-9.8646 µg/L	-9.8646 ppb	16:54:09

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1849813.8	94.228 %	0.0528			0.06%
Sc RADIAL	55164.1	97.6 %	0.36			0.37%
Y 371.029	1267035.2	93.663 %	0.0554			0.06%
Ag 328.068†	-2496.3	-6.6035 µg/L	0.30193	-6.6035 ppb	0.30193	4.57%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	740121.8	514870 µg/L	1881.2	514870 ppb	1881.2	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%						
As 188.979†	-11.0	-34.093 µg/L	15.8073	-34.093 ppb	15.8073	46.36%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	514.9	-78.887 µg/L	0.9419	-78.887 ppb	0.9419	1.19%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	323.8	7.7271 µg/L	0.15071	7.7271 ppb	0.15071	1.95%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-834.4	-0.5058 µg/L	0.01964	-0.5058 ppb	0.01964	3.88%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	572721.6	489210 µg/L	2821.0	489210 ppb	2821.0	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.84%						
Cd 226.502†	612.9	-6.3487 µg/L	0.10242	-6.3487 ppb	0.10242	1.61%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	49.4	2.1702 µg/L	0.56812	2.1702 ppb	0.56812	26.18%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-14.7	-0.3124 µg/L	0.11992	-0.3124 ppb	0.11992	38.39%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-4384.3	-2.0146 µg/L	0.12034	-2.0146 ppb	0.12034	5.97%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	24267.6	191400 µg/L	227.6	191400 ppb	227.6	0.12%	
QC value within limits for Fe 238.204 Radial Recovery = 95.70%							
K 766.490 Radial†	-30.8	-20.107 µg/L	11.8821	-20.107 ppb	11.8821	59.09%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	55292.2	494060 µg/L	938.7	494060 ppb	938.7	0.19%	
QC value within limits for Mg 279.077 IEC Recovery = 98.81%							
Mn 257.610†	1050.7	8.9756 µg/L	0.20969	8.9756 ppb	0.20969	2.34%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-111.4	-3.6383 µg/L	0.76308	-3.6383 ppb	0.76308	20.97%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	98.7	30.329 µg/L	5.5836	30.329 ppb	5.5836	18.41%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-153.6	-5.1698 µg/L	0.62439	-5.1698 ppb	0.62439	12.08%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	82.5	158.86 µg/L	39.068	158.86 ppb	39.068	24.59%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-54.7	7.7677 µg/L	1.80905	7.7677 ppb	1.80905	23.29%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	22.1	91.723 µg/L	32.5738	91.723 ppb	32.5738	35.51%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	30.6	-14.600 µg/L	6.7191	-14.600 ppb	6.7191	46.02%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.8	-49.144 µg/L	19.8190	-49.144 ppb	19.8190	40.33%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-89.5	-17.670 µg/L	2.4533	-17.670 ppb	2.4533	13.88%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	155.5	11.818 µg/L	0.9466	11.818 ppb	0.9466	8.01%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-67.7	6.9072 µg/L	3.16787	6.9072 ppb	3.16787	45.86%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	398.3	3.6741 µg/L	0.02024	3.6741 ppb	0.02024	0.55%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	12602.3	-3.3402 µg/L	0.49765	-3.3402 ppb	0.49765	14.90%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-18.7	-3.4999 µg/L	4.25960	-3.4999 ppb	4.25960	121.70%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	9.9	-55.624 µg/L	2.6789	-55.624 ppb	2.6789	4.82%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-2641.3	-3.2964 µg/L	0.18427	-3.2964 ppb	0.18427	5.59%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	1177.6	-9.4073 µg/L	0.45728	-9.4073 ppb	0.45728	4.86%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 2/19/2010 16:54:19

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	55797.0	55797.0	98.8 %		16:54:58
1	Al 396.153Radial†	721688.4	730717.2	508320 µg/L	508320 ppb	16:54:53
1	Ca 317.933Radial†	559165.5	565955.4	483430 µg/L	483430 ppb	16:54:53
1	Fe 238.204 Radial†	23697.0	23977.1	189110 µg/L	189110 ppb	16:54:58
1	K 766.490 Radial†	7825.4	7758.4	5067.1 µg/L	5067.1 ppb	16:54:58
1	Mg 279.077 IEC†	54011.0	54674.5	488540 µg/L	488540 ppb	16:54:58
1	Na 589.592 Radial†	17079.2	16820.9	5166.4 µg/L	5166.4 ppb	16:54:58
1	Sr 421.552†	53653.0	54296.0	500.89 µg/L	500.89 ppb	16:54:58
1	Sc 361.383	1843700.1	1843700.1	93.917 %		16:55:33
1	Y 371.029	1261744.6	1261744.6	93.272 %		16:55:33
1	Ag 328.068†	30366.5	32735.0	257.65 µg/L	257.65 ppb	16:55:33
1	As 188.979†	267.3	285.0	495.71 µg/L	495.71 ppb	16:55:53
1	B 249.677†	12776.1	13219.5	440.90 µg/L	440.90 ppb	16:55:33
1	Ba 233.527†	19707.5	21001.1	505.07 µg/L	505.07 ppb	16:55:33
1	Be 313.107†	381967.5	409563.9	242.87 µg/L	242.87 ppb	16:55:33
1	Cd 226.502†	18000.5	19308.2	460.62 µg/L	460.62 ppb	16:55:33
1	Co 228.616†	9028.5	9611.4	434.60 µg/L	434.60 ppb	16:55:53
1	Cr 267.716†	22814.5	24342.6	489.24 µg/L	489.24 ppb	16:55:33
1	Cu 324.752†	76830.3	79263.0	543.67 µg/L	543.67 ppb	16:55:33
1	Mn 257.610†	145121.7	154777.5	490.29 µg/L	490.29 ppb	16:55:33
1	Mo 202.031†	4771.3	5085.6	505.20 µg/L	505.20 ppb	16:55:53
1	Ni 231.604†	8362.6	8591.9	430.24 µg/L	430.24 ppb	16:55:53
1	P 214.914†	1320.9	1391.1	2699.5 µg/L	2699.5 ppb	16:55:53
1	Pb 220.353†	1871.2	1901.4	483.01 µg/L	483.01 ppb	16:55:53
1	S 181.975 Axial†	648.6	671.7	2785.4 µg/L	2785.4 ppb	16:55:53
1	Sb 206.836†	575.1	589.8	502.04 µg/L	502.04 ppb	16:55:53
1	Se 196.026†	1623.8	1709.6	2348.3 µg/L	2348.3 ppb	16:55:53
1	SiO2†	53672.2	55757.1	11006 µg/L	11006 ppb	16:55:33
1	Si 251.611†	64106.8	67948.4	5165.6 µg/L	5165.6 ppb	16:55:33
1	Sn 189.927†	1083.9	1153.7	521.63 µg/L	521.63 ppb	16:55:53
1	Ti 334.940†	229038.7	243698.9	508.24 µg/L	508.24 ppb	16:55:33
1	Tl 190.801†	288.9	330.0	454.77 µg/L	454.77 ppb	16:55:53
1	U 409.014†	5773.2	6224.2	461.36 µg/L	461.36 ppb	16:55:33
1	V 292.402†	47456.1	50574.7	520.63 µg/L	520.63 ppb	16:55:33
1	Zn 213.857†	20837.2	21652.5	468.58 µg/L	468.58 ppb	16:55:33
2	Sc RADIAL	55348.5	55348.5	98.0 %		16:55:10
2	Al 396.153Radial†	722041.1	736998.6	512690 µg/L	512690 ppb	16:55:04
2	Ca 317.933Radial†	559699.2	571088.2	487810 µg/L	487810 ppb	16:55:04
2	Fe 238.204 Radial†	23398.1	23866.4	188240 µg/L	188240 ppb	16:55:10
2	K 766.490 Radial†	7752.4	7748.1	5060.4 µg/L	5060.4 ppb	16:55:10
2	Mg 279.077 IEC†	53665.0	54764.4	489350 µg/L	489350 ppb	16:55:10
2	Na 589.592 Radial†	16898.5	16776.6	5152.8 µg/L	5152.8 ppb	16:55:10
2	Sr 421.552†	53220.9	54295.2	500.88 µg/L	500.88 ppb	16:55:10
2	Sc 361.383	1828346.4	1828346.4	93.135 %		16:56:01
2	Y 371.029	1251250.1	1251250.1	92.496 %		16:56:01
2	Ag 328.068†	30001.6	32614.7	256.69 µg/L	256.69 ppb	16:56:01
2	As 188.979†	258.0	277.4	481.82 µg/L	481.82 ppb	16:56:21
2	B 249.677†	12695.1	13246.8	442.46 µg/L	442.46 ppb	16:56:01
2	Ba 233.527†	19356.4	20800.3	500.24 µg/L	500.24 ppb	16:56:01
2	Be 313.107†	377037.1	407685.5	241.76 µg/L	241.76 ppb	16:56:01
2	Cd 226.502†	17698.0	19144.3	456.64 µg/L	456.64 ppb	16:56:01
2	Co 228.616†	8995.7	9656.8	436.67 µg/L	436.67 ppb	16:56:21
2	Cr 267.716†	22554.0	24266.9	487.72 µg/L	487.72 ppb	16:56:01
2	Cu 324.752†	76157.1	79227.2	543.32 µg/L	543.32 ppb	16:56:01
2	Mn 257.610†	143300.8	154120.0	488.08 µg/L	488.08 ppb	16:56:01
2	Mo 202.031†	4737.2	5091.8	505.77 µg/L	505.77 ppb	16:56:21
2	Ni 231.604†	8356.6	8660.3	433.64 µg/L	433.64 ppb	16:56:21
2	P 214.914†	1314.8	1396.4	2712.1 µg/L	2712.1 ppb	16:56:21
2	Pb 220.353†	1869.4	1916.2	486.89 µg/L	486.89 ppb	16:56:21

2	S 181.975 Axial†	642.4	670.8	2782.0 µg/L	2782.0 ppb	16:56:21
2	Sb 206.836†	578.7	598.8	509.94 µg/L	509.94 ppb	16:56:21
2	Se 196.026†	1633.2	1734.3	2378.6 µg/L	2378.6 ppb	16:56:21
2	SiO2†	52972.0	55485.1	10952 µg/L	10952 ppb	16:56:01
2	Si 251.611†	63354.2	67713.7	5147.7 µg/L	5147.7 ppb	16:56:01
2	Sn 189.927†	1076.4	1155.4	522.48 µg/L	522.48 ppb	16:56:21
2	Ti 334.940†	226229.7	242730.8	506.11 µg/L	506.11 ppb	16:56:01
2	Tl 190.801†	294.9	339.0	466.26 µg/L	466.26 ppb	16:56:21
2	U 409.014†	5629.0	6121.0	452.64 µg/L	452.64 ppb	16:56:01
2	V 292.402†	46870.5	50370.2	518.52 µg/L	518.52 ppb	16:56:01
2	Zn 213.857†	20535.2	21514.5	465.32 µg/L	465.32 ppb	16:56:01
3	Sc RADIAL	55847.7	55847.7	98.9 %		16:55:21
3	Al 396.153Radial†	722897.9	731277.0	508700 µg/L	508700 ppb	16:55:15
3	Ca 317.933Radial†	559752.9	566035.4	483500 µg/L	483500 ppb	16:55:15
3	Fe 238.204 Radial†	23698.6	23957.0	188960 µg/L	188960 ppb	16:55:21
3	K 766.490 Radial†	7809.0	7734.7	5051.6 µg/L	5051.6 ppb	16:55:21
3	Mg 279.077 IEC†	54100.9	54715.7	488910 µg/L	488910 ppb	16:55:21
3	Na 589.592 Radial†	17037.2	16762.7	5148.5 µg/L	5148.5 ppb	16:55:21
3	Sr 421.552†	53557.3	54149.8	499.54 µg/L	499.54 ppb	16:55:21
3	Sc 361.383	1849513.8	1849513.8	94.213 %		16:56:29
3	Y 371.029	1265200.0	1265200.0	93.528 %		16:56:29
3	Ag 328.068†	30278.1	32539.5	256.19 µg/L	256.19 ppb	16:56:29
3	As 188.979†	249.4	265.2	460.15 µg/L	460.15 ppb	16:56:49
3	B 249.677†	12838.9	13243.4	441.96 µg/L	441.96 ppb	16:56:29
3	Ba 233.527†	19684.2	20910.3	502.89 µg/L	502.89 ppb	16:56:29
3	Be 313.107†	381877.8	408190.3	242.06 µg/L	242.06 ppb	16:56:29
3	Cd 226.502†	18049.5	19299.9	460.44 µg/L	460.44 ppb	16:56:29
3	Co 228.616†	9068.2	9623.2	435.15 µg/L	435.15 ppb	16:56:49
3	Cr 267.716†	22913.2	24371.1	489.81 µg/L	489.81 ppb	16:56:29
3	Cu 324.752†	76676.5	78842.6	540.91 µg/L	540.91 ppb	16:56:29
3	Mn 257.610†	145122.9	154293.0	488.74 µg/L	488.74 ppb	16:56:29
3	Mo 202.031†	4785.3	5084.6	505.09 µg/L	505.09 ppb	16:56:49
3	Ni 231.604†	8413.0	8617.4	431.51 µg/L	431.51 ppb	16:56:49
3	P 214.914†	1336.0	1402.7	2723.0 µg/L	2723.0 ppb	16:56:49
3	Pb 220.353†	1874.0	1898.2	482.26 µg/L	482.26 ppb	16:56:49
3	S 181.975 Axial†	650.5	671.5	2784.8 µg/L	2784.8 ppb	16:56:49
3	Sb 206.836†	579.0	592.1	504.11 µg/L	504.11 ppb	16:56:49
3	Se 196.026†	1645.5	1727.2	2372.2 µg/L	2372.2 ppb	16:56:49
3	SiO2†	53612.6	55514.2	10958 µg/L	10958 ppb	16:56:29
3	Si 251.611†	64125.9	67754.2	5150.8 µg/L	5150.8 ppb	16:56:29
3	Sn 189.927†	1079.8	1145.8	518.33 µg/L	518.33 ppb	16:56:49
3	Ti 334.940†	228839.3	242720.7	506.05 µg/L	506.05 ppb	16:56:29
3	Tl 190.801†	301.0	341.8	470.11 µg/L	470.11 ppb	16:56:49
3	U 409.014†	5634.4	6057.5	447.53 µg/L	447.53 ppb	16:56:29
3	V 292.402†	47572.3	50539.2	520.25 µg/L	520.25 ppb	16:56:29
3	Zn 213.857†	20782.8	21525.0	465.57 µg/L	465.57 ppb	16:56:29

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1840520.1	93.755 %	0.5571			0.59%
Sc RADIAL	55664.4	98.5 %	0.49			0.49%
Y 371.029	1259398.2	93.099 %	0.5370			0.58%
Ag 328.068†	32629.7	256.85 µg/L	0.742	256.85 ppb	0.742	0.29%
QC value within limits for Ag 328.068 Recovery = 102.74%						
Al 396.153Radial†	732997.6	509900 µg/L	2418.3	509900 ppb	2418.3	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.98%						
As 188.979†	275.9	479.23 µg/L	17.921	479.23 ppb	17.921	3.74%
QC value within limits for As 188.979 Recovery = 95.85%						
B 249.677†	13236.6	441.77 µg/L	0.799	441.77 ppb	0.799	0.18%
QC value within limits for B 249.677 Recovery = 88.35%						
Ba 233.527†	20903.9	502.73 µg/L	2.416	502.73 ppb	2.416	0.48%
QC value within limits for Ba 233.527 Recovery = 100.55%						
Be 313.107†	408479.9	242.23 µg/L	0.577	242.23 ppb	0.577	0.24%
QC value within limits for Be 313.107 Recovery = 96.89%						
Ca 317.933Radial†	567693.0	484910 µg/L	2511.8	484910 ppb	2511.8	0.52%
QC value within limits for Ca 317.933Radial Recovery = 96.98%						
Cd 226.502†	19250.8	459.23 µg/L	2.249	459.23 ppb	2.249	0.49%
QC value within limits for Cd 226.502 Recovery = 91.85%						
Co 228.616†	9630.5	435.47 µg/L	1.070	435.47 ppb	1.070	0.25%

QC value within limits for Co 228.616 Recovery = 87.09%							
Cr 267.716†	24326.8	488.92 µg/L	1.082	488.92 ppb	1.082	0.22%	
QC value within limits for Cr 267.716 Recovery = 97.78%							
Cu 324.752†	79110.9	542.63 µg/L	1.505	542.63 ppb	1.505	0.28%	
QC value within limits for Cu 324.752 Recovery = 108.53%							
Fe 238.204 Radial†	23933.5	188770 µg/L	465.0	188770 ppb	465.0	0.25%	
QC value within limits for Fe 238.204 Radial Recovery = 94.39%							
K 766.490 Radial†	7747.0	5059.7 µg/L	7.77	5059.7 ppb	7.77	0.15%	
QC value within limits for K 766.490 Radial Recovery = 101.19%							
Mg 279.077 IEC†	54718.2	488940 µg/L	403.0	488940 ppb	403.0	0.08%	
QC value within limits for Mg 279.077 IEC Recovery = 97.79%							
Mn 257.610†	154396.8	489.04 µg/L	1.134	489.04 ppb	1.134	0.23%	
QC value within limits for Mn 257.610 Recovery = 97.81%							
Mo 202.031†	5087.3	505.36 µg/L	0.362	505.36 ppb	0.362	0.07%	
QC value within limits for Mo 202.031 Recovery = 101.07%							
Na 589.592 Radial†	16786.7	5155.9 µg/L	9.34	5155.9 ppb	9.34	0.18%	
QC value within limits for Na 589.592 Radial Recovery = 103.12%							
Ni 231.604†	8623.2	431.80 µg/L	1.714	431.80 ppb	1.714	0.40%	
QC value within limits for Ni 231.604 Recovery = 86.36%							
P 214.914†	1396.7	2711.6 µg/L	11.77	2711.6 ppb	11.77	0.43%	
QC value within limits for P 214.914 Recovery = 108.46%							
Pb 220.353†	1905.3	484.05 µg/L	2.482	484.05 ppb	2.482	0.51%	
QC value within limits for Pb 220.353 Recovery = 96.81%							
S 181.975 Axial†	671.3	2784.0 µg/L	1.83	2784.0 ppb	1.83	0.07%	
QC value within limits for S 181.975 Axial Recovery = 111.36%							
Sb 206.836†	593.6	505.36 µg/L	4.096	505.36 ppb	4.096	0.81%	
QC value within limits for Sb 206.836 Recovery = 101.07%							
Se 196.026†	1723.7	2366.3 µg/L	15.98	2366.3 ppb	15.98	0.68%	
QC value within limits for Se 196.026 Recovery = 94.65%							
SiO2†	55585.5	10972 µg/L	29.5	10972 ppb	29.5	0.27%	
QC value within limits for SiO2 Recovery = 102.59%							
Si 251.611†	67805.4	5154.7 µg/L	9.54	5154.7 ppb	9.54	0.19%	
QC value within limits for Si 251.611 Recovery = 103.09%							
Sn 189.927†	1151.6	520.81 µg/L	2.193	520.81 ppb	2.193	0.42%	
QC value within limits for Sn 189.927 Recovery = 104.16%							
Sr 421.552†	54247.0	500.44 µg/L	0.776	500.44 ppb	0.776	0.16%	
QC value within limits for Sr 421.552 Recovery = 100.09%							
Ti 334.940†	243050.1	506.80 µg/L	1.249	506.80 ppb	1.249	0.25%	
QC value within limits for Ti 334.940 Recovery = 101.36%							
Tl 190.801†	337.0	463.71 µg/L	7.981	463.71 ppb	7.981	1.72%	
QC value within limits for Tl 190.801 Recovery = 92.74%							
U 409.014†	6134.3	453.84 µg/L	6.995	453.84 ppb	6.995	1.54%	
QC value within limits for U 409.014 Recovery = 90.77%							
V 292.402†	50494.7	519.80 µg/L	1.121	519.80 ppb	1.121	0.22%	
QC value within limits for V 292.402 Recovery = 103.96%							
Zn 213.857†	21564.0	466.49 µg/L	1.813	466.49 ppb	1.813	0.39%	
QC value within limits for Zn 213.857 Recovery = 93.30%							

All analyte(s) passed QC.

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

Autosampler Location: 105
 Date Collected: 2/19/2010 16:56:59
 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	54748.6	54748.6	96.9 %		16:57:39
1	Al 396.153Radial†	706292.1	728823.1	507010 µg/L	507010 ppb	16:57:34
1	Ca 317.933Radial†	550897.7	568266.0	485400 µg/L	485400 ppb	16:57:34
1	Fe 238.204 Radial†	56162.0	57937.6	456950 µg/L	456950 ppb	16:57:39
1	K 766.490 Radial†	115.4	-45.9	-29.969 µg/L	-29.969 ppb	16:57:39
1	Mg 279.077 IEC†	52280.8	53936.3	481650 µg/L	481650 ppb	16:57:39
1	Na 589.592 Radial†	1551701.3	1600745.1	491660 µg/L	491660 ppb	16:57:34
1	Sr 421.552†	596.5	586.7	5.4124 µg/L	5.4124 ppb	16:57:39
1	Sc 361.383	1808982.1	1808982.1	92.148 %		16:58:15
1	Y 371.029	1229275.2	1229275.2	90.872 %		16:58:15
1	Ag 328.068†	-4982.3	-5005.2	-8.7931 µg/L	-8.7931 ppb	16:58:15
1	As 188.979†	-19.3	-20.5	-35.405 µg/L	-35.405 ppb	16:58:35
1	B 249.677†	1469.8	1210.9	-189.08 µg/L	-189.08 ppb	16:58:15
1	Ba 233.527†	599.8	668.0	15.898 µg/L	15.898 ppb	16:58:35
1	Be 313.107†	-11244.2	-9346.6	-5.5617 µg/L	-5.5617 ppb	16:58:15
1	Cd 226.502†	1210.5	1455.3	-15.352 µg/L	-15.352 ppb	16:58:15
1	Co 228.616†	210.6	226.6	10.160 µg/L	10.160 ppb	16:58:35
1	Cr 267.716†	45.2	99.4	1.9489 µg/L	1.9489 ppb	16:58:35
1	Cu 324.752†	-9617.8	-12981.1	-21.218 µg/L	-21.218 ppb	16:58:15
1	Mn 257.610†	-6155.9	-6424.4	21.370 µg/L	21.370 ppb	16:58:15
1	Mo 202.031†	-225.9	-239.8	-6.1197 µg/L	-6.1197 ppb	16:58:35
1	Ni 231.604†	48.3	-259.9	-7.0295 µg/L	-7.0295 ppb	16:58:35
1	P 214.914†	306.6	317.4	411.96 µg/L	411.96 ppb	16:58:35
1	Pb 220.353†	156.6	79.1	15.477 µg/L	15.477 ppb	16:58:35
1	S 181.975 Axial†	35.4	19.5	80.955 µg/L	80.955 ppb	16:58:35
1	Sb 206.836†	57.1	39.4	-6.4292 µg/L	-6.4292 ppb	16:58:35
1	Se 196.026†	-157.5	-190.2	417.62 µg/L	417.62 ppb	16:58:35
1	SiO2†	1118.3	-178.0	-35.141 µg/L	-35.141 ppb	16:58:35
1	Si 251.611†	-300.1	-636.3	-48.374 µg/L	-48.374 ppb	16:58:35
1	Sn 189.927†	-47.4	-51.8	-16.141 µg/L	-16.141 ppb	16:58:35
1	Ti 334.940†	15981.4	17168.1	7.6569 µg/L	7.6569 ppb	16:58:15
1	Tl 190.801†	-58.7	-41.3	21.254 µg/L	21.254 ppb	16:58:35
1	U 409.014†	152808.3	165905.7	13691 µg/L	13691 ppb	16:58:15
1	V 292.402†	-7264.4	-7838.6	-8.4612 µg/L	-8.4612 ppb	16:58:15
1	Zn 213.857†	2986.9	2707.0	14.661 µg/L	14.661 ppb	16:58:35
2	Sc RADIAL	54627.5	54627.5	96.7 %		16:57:51
2	Al 396.153Radial†	705003.9	729106.1	507210 µg/L	507210 ppb	16:57:46
2	Ca 317.933Radial†	548288.5	566827.4	484170 µg/L	484170 ppb	16:57:46
2	Fe 238.204 Radial†	56104.2	58006.2	457490 µg/L	457490 ppb	16:57:51
2	K 766.490 Radial†	75.8	-86.6	-56.548 µg/L	-56.548 ppb	16:57:51
2	Mg 279.077 IEC†	52084.5	53852.8	480900 µg/L	480900 ppb	16:57:51
2	Na 589.592 Radial†	1549659.8	1602182.6	492100 µg/L	492100 ppb	16:57:46
2	Sr 421.552†	580.4	571.4	5.2714 µg/L	5.2714 ppb	16:57:51
2	Sc 361.383	1809663.3	1809663.3	92.183 %		16:58:42
2	Y 371.029	1230302.7	1230302.7	90.948 %		16:58:42
2	Ag 328.068†	-5024.4	-5048.9	-9.0852 µg/L	-9.0852 ppb	16:58:42
2	As 188.979†	-32.4	-34.7	-60.833 µg/L	-60.833 ppb	16:59:03
2	B 249.677†	1435.1	1172.6	-190.92 µg/L	-190.92 ppb	16:58:42
2	Ba 233.527†	598.4	666.2	15.855 µg/L	15.855 ppb	16:59:03
2	Be 313.107†	-11290.0	-9391.7	-5.5890 µg/L	-5.5890 ppb	16:58:42
2	Cd 226.502†	1204.3	1448.1	-15.591 µg/L	-15.591 ppb	16:58:42
2	Co 228.616†	198.7	213.6	9.5711 µg/L	9.5711 ppb	16:59:03
2	Cr 267.716†	78.1	135.1	2.6649 µg/L	2.6649 ppb	16:59:03
2	Cu 324.752†	-9599.6	-12957.4	-20.988 µg/L	-20.988 ppb	16:58:42
2	Mn 257.610†	-6316.5	-6596.2	20.934 µg/L	20.934 ppb	16:58:42
2	Mo 202.031†	-200.5	-212.1	-3.3875 µg/L	-3.3875 ppb	16:59:03
2	Ni 231.604†	53.6	-254.2	-6.7348 µg/L	-6.7348 ppb	16:59:03
2	P 214.914†	301.0	311.1	399.21 µg/L	399.21 ppb	16:59:03
2	Pb 220.353†	148.3	69.9	13.245 µg/L	13.245 ppb	16:59:03

2	S 181.975 Axial†	35.1	19.1	79.229 µg/L	79.229 ppb	16:59:03
2	Sb 206.836†	43.8	25.1	-19.483 µg/L	-19.483 ppb	16:59:03
2	Se 196.026†	-176.5	-210.8	391.20 µg/L	391.20 ppb	16:59:03
2	SiO2†	1119.0	-177.7	-35.076 µg/L	-35.076 ppb	16:59:03
2	Si 251.611†	-359.8	-700.9	-53.283 µg/L	-53.283 ppb	16:59:03
2	Sn 189.927†	-47.7	-52.1	-16.412 µg/L	-16.412 ppb	16:59:03
2	Ti 334.940†	16565.0	17794.7	9.0824 µg/L	9.0824 ppb	16:58:42
2	Tl 190.801†	-50.4	-32.3	33.191 µg/L	33.191 ppb	16:59:03
2	U 409.014†	152895.7	165938.1	13694 µg/L	13694 ppb	16:58:42
2	V 292.402†	-7309.1	-7884.1	-8.8154 µg/L	-8.8154 ppb	16:58:42
2	Zn 213.857†	2986.8	2705.7	14.646 µg/L	14.646 ppb	16:59:03
3	Sc RADIAL	54733.6	54733.6	96.9 %		16:58:03
3	Al 396.153Radial†	704918.4	727604.3	506160 µg/L	506160 ppb	16:57:58
3	Ca 317.933Radial†	547195.5	564600.0	482270 µg/L	482270 ppb	16:57:58
3	Fe 238.204 Radial†	56342.5	58139.8	458540 µg/L	458540 ppb	16:58:03
3	K 766.490 Radial†	150.9	-9.2	-6.0382 µg/L	-6.0382 ppb	16:58:03
3	Mg 279.077 IEC†	52432.2	54107.4	483180 µg/L	483180 ppb	16:58:03
3	Na 589.592 Radial†	1551864.9	1601351.6	491840 µg/L	491840 ppb	16:57:58
3	Sr 421.552†	544.2	532.9	4.9161 µg/L	4.9161 ppb	16:58:03
3	Sc 361.383	1803530.5	1803530.5	91.871 %		16:59:10
3	Y 371.029	1226225.3	1226225.3	90.646 %		16:59:10
3	Ag 328.068†	-4992.7	-5032.9	-8.8937 µg/L	-8.8937 ppb	16:59:10
3	As 188.979†	-17.9	-19.1	-32.607 µg/L	-32.607 ppb	16:59:30
3	B 249.677†	1429.0	1171.3	-191.53 µg/L	-191.53 ppb	16:59:10
3	Ba 233.527†	596.4	666.2	15.857 µg/L	15.857 ppb	16:59:30
3	Be 313.107†	-11247.7	-9387.3	-5.5855 µg/L	-5.5855 ppb	16:59:10
3	Cd 226.502†	1240.2	1491.6	-14.625 µg/L	-14.625 ppb	16:59:10
3	Co 228.616†	217.8	235.1	10.551 µg/L	10.551 ppb	16:59:30
3	Cr 267.716†	61.4	117.2	2.3057 µg/L	2.3057 ppb	16:59:30
3	Cu 324.752†	-9496.4	-12880.5	-20.340 µg/L	-20.340 ppb	16:59:10
3	Mn 257.610†	-6307.3	-6609.4	20.942 µg/L	20.942 ppb	16:59:10
3	Mo 202.031†	-204.7	-217.5	-3.8705 µg/L	-3.8705 ppb	16:59:30
3	Ni 231.604†	57.2	-250.1	-6.5186 µg/L	-6.5186 ppb	16:59:30
3	P 214.914†	280.7	290.2	356.64 µg/L	356.64 ppb	16:59:30
3	Pb 220.353†	147.7	69.8	13.118 µg/L	13.118 ppb	16:59:30
3	S 181.975 Axial†	25.1	8.4	34.818 µg/L	34.818 ppb	16:59:30
3	Sb 206.836†	38.6	19.5	-24.434 µg/L	-24.434 ppb	16:59:30
3	Se 196.026†	-161.9	-195.6	413.95 µg/L	413.95 ppb	16:59:30
3	SiO2†	1115.5	-177.4	-35.018 µg/L	-35.018 ppb	16:59:30
3	Si 251.611†	-321.2	-660.2	-50.191 µg/L	-50.191 ppb	16:59:30
3	Sn 189.927†	-41.2	-45.3	-13.350 µg/L	-13.350 ppb	16:59:30
3	Ti 334.940†	15494.0	16690.0	6.4283 µg/L	6.4283 ppb	16:59:10
3	Tl 190.801†	-51.2	-33.3	32.056 µg/L	32.056 ppb	16:59:30
3	U 409.014†	152493.7	166064.5	13704 µg/L	13704 ppb	16:59:10
3	V 292.402†	-7191.9	-7783.6	-7.7057 µg/L	-7.7057 ppb	16:59:10
3	Zn 213.857†	2972.0	2700.6	14.345 µg/L	14.345 ppb	16:59:30

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1807392.0	92.067 %	0.1712			0.19%
Sc RADIAL	54703.2	96.8 %	0.12			0.12%
Y 371.029	1228601.0	90.822 %	0.1568			0.17%
Ag 328.068†	-5029.0	-8.9240 µg/L	0.14840	-8.9240 ppb	0.14840	1.66%
Al 396.153Radial†	728511.2	506790 µg/L	555.2	506790 ppb	555.2	0.11%
QC value within limits for Al 396.153Radial Recovery = 101.36%						
As 188.979†	-24.8	-42.948 µg/L	15.5521	-42.948 ppb	15.5521	36.21%
B 249.677†	1184.9	-190.51 µg/L	1.274	-190.51 ppb	1.274	0.67%
Ba 233.527†	666.8	15.870 µg/L	0.0245	15.870 ppb	0.0245	0.15%
Be 313.107†	-9375.2	-5.5787 µg/L	0.01486	-5.5787 ppb	0.01486	0.27%
Ca 317.933Radial†	566564.5	483950 µg/L	1577.8	483950 ppb	1577.8	0.33%
QC value within limits for Ca 317.933Radial Recovery = 96.79%						
Cd 226.502†	1465.0	-15.189 µg/L	0.5033	-15.189 ppb	0.5033	3.31%
Co 228.616†	225.1	10.094 µg/L	0.4933	10.094 ppb	0.4933	4.89%
Cr 267.716†	117.2	2.3065 µg/L	0.35801	2.3065 ppb	0.35801	15.52%
Cu 324.752†	-12939.7	-20.849 µg/L	0.4554	-20.849 ppb	0.4554	2.18%
Fe 238.204 Radial†	58027.9	457660 µg/L	810.7	457660 ppb	810.7	0.18%
QC value within limits for Fe 238.204 Radial Recovery = 91.53%						
K 766.490 Radial†	-47.2	-30.852 µg/L	25.2666	-30.852 ppb	25.2666	81.90%
Mg 279.077 IEC†	53965.5	481910 µg/L	1159.2	481910 ppb	1159.2	0.24%

QC value within limits for Mg 279.077 IEC Recovery = 96.38%							
Mn 257.610†	-6543.3	21.082 µg/L	0.2497	21.082 ppb	0.2497	1.18%	
Mo 202.031†	-223.1	-4.4592 µg/L	1.45813	-4.4592 ppb	1.45813	32.70%	
Na 589.592 Radial†	1601426.4	491870 µg/L	221.6	491870 ppb	221.6	0.05%	
QC value within limits for Na 589.592 Radial Recovery = 98.37%							
Ni 231.604†	-254.7	-6.7610 µg/L	0.25647	-6.7610 ppb	0.25647	3.79%	
P 214.914†	306.2	389.27 µg/L	28.970	389.27 ppb	28.970	7.44%	
Pb 220.353†	72.9	13.947 µg/L	1.3271	13.947 ppb	1.3271	9.52%	
S 181.975 Axial†	15.7	65.000 µg/L	26.1534	65.000 ppb	26.1534	40.24%	
Sb 206.836†	28.0	-16.782 µg/L	9.3013	-16.782 ppb	9.3013	55.42%	
Se 196.026†	-198.8	407.59 µg/L	14.310	407.59 ppb	14.310	3.51%	
SiO2†	-177.7	-35.078 µg/L	0.0614	-35.078 ppb	0.0614	0.18%	
Si 251.611†	-665.8	-50.616 µg/L	2.4820	-50.616 ppb	2.4820	4.90%	
Sn 189.927†	-49.7	-15.301 µg/L	1.6952	-15.301 ppb	1.6952	11.08%	
Sr 421.552†	563.7	5.2000 µg/L	0.25572	5.2000 ppb	0.25572	4.92%	
Ti 334.940†	17217.6	7.7225 µg/L	1.32825	7.7225 ppb	1.32825	17.20%	
Tl 190.801†	-35.6	28.834 µg/L	6.5890	28.834 ppb	6.5890	22.85%	
U 409.014†	165969.4	13696 µg/L	7.0	13696 ppb	7.0	0.05%	
QC value within limits for U 409.014 Recovery = 91.31%							
V 292.402†	-7835.4	-8.3274 µg/L	0.56678	-8.3274 ppb	0.56678	6.81%	
Zn 213.857†	2704.4	14.551 µg/L	0.1785	14.551 ppb	0.1785	1.23%	
All analyte(s) passed QC.							

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/19/2010 16:59:39

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	56692.7	56692.7	100 %		17:00:22
1	Al 396.153Radial†	410.3	401.6	67.150 µg/L	67.150 ppb	17:00:22
1	Ca 317.933Radial†	313.1	100.7	86.030 µg/L	86.030 ppb	17:00:42
1	Fe 238.204 Radial†	6.3	-10.3	125.34 µg/L	125.34 ppb	17:00:42
1	K 766.490 Radial†	452848.2	451108.7	294630 µg/L	294630 ppb	17:00:16
1	Mg 279.077 IEC†	-3.5	-16.3	27.924 µg/L	27.924 ppb	17:00:42
1	Na 589.592 Radial†	1202.8	726.5	223.13 µg/L	223.13 ppb	17:00:22
1	Sr 421.552†	1055792.8	1052093.2	9705.7 µg/L	9705.7 ppb	17:00:16
1	Sc 361.383	1927950.9	1927950.9	98.209 %		17:02:14
1	Y 371.029	1317313.5	1317313.5	97.380 %		17:02:14
1	Ag 328.068†	-7740.8	-7480.4	13.019 µg/L	13.019 ppb	17:02:19
1	As 188.979†	5373.1	5471.6	9786.3 µg/L	9786.3 ppb	17:02:19
1	B 249.677†	122177.3	124021.9	5094.8 µg/L	5094.8 ppb	17:02:14
1	Ba 233.527†	611336.6	622505.5	14963 µg/L	14963 ppb	17:02:14
1	Be 313.107†	4884950.3	4976915.5	2949.9 µg/L	2949.9 ppb	17:02:03
1	Cd 226.502†	386911.9	394111.5	9839.4 µg/L	9839.4 ppb	17:02:14
1	Co 228.616†	210861.9	214706.5	9711.7 µg/L	9711.7 ppb	17:02:14
1	Cr 267.716†	1221432.5	1243763.8	24988 µg/L	24988 ppb	17:02:14
1	Cu 324.752†	3142243.6	3197019.5	20869 µg/L	20869 ppb	17:02:14
1	Mn 257.610†	3084343.0	3140862.5	9835.7 µg/L	9835.7 ppb	17:02:14
1	Mo 202.031†	103586.6	105481.5	10329 µg/L	10329 ppb	17:02:14
1	Ni 231.604†	195607.8	198863.7	9901.7 µg/L	9901.7 ppb	17:02:14
1	P 214.914†	7737.6	7863.4	13522 µg/L	13522 ppb	17:02:19
1	Pb 220.353†	104065.3	105872.7	25731 µg/L	25731 ppb	17:02:14
1	S 181.975 Axial†	12812.3	13027.1	54023 µg/L	54023 ppb	17:02:19
1	Sb 206.836†	11529.6	11717.4	10643 µg/L	10643 ppb	17:02:19
1	Se 196.026†	6981.3	7089.4	9956.3 µg/L	9956.3 ppb	17:02:19
1	SiO2†	509789.5	517697.3	102190 µg/L	102190 ppb	17:02:14
1	Si 251.611†	616246.3	627177.0	47679 µg/L	47679 ppb	17:02:14
1	Sn 189.927†	24747.6	25198.7	10627 µg/L	10627 ppb	17:02:19
1	Ti 334.940†	4520614.2	4602902.5	10183 µg/L	10183 ppb	17:02:03
1	Tl 190.801†	7250.0	7404.6	9714.3 µg/L	9714.3 ppb	17:02:19
1	U 409.014†	894.0	987.4	82.040 µg/L	82.040 ppb	17:02:14
1	V 292.402†	1045223.3	1064334.6	10510 µg/L	10510 ppb	17:02:14
1	Zn 213.857†	624777.0	635639.6	14836 µg/L	14836 ppb	17:02:14
2	Sc RADIAL	56901.4	56901.4	101 %		17:00:54
2	Al 396.153Radial†	358.9	349.0	41.120 µg/L	41.120 ppb	17:00:54
2	Ca 317.933Radial†	305.5	92.1	78.637 µg/L	78.637 ppb	17:01:14
2	Fe 238.204 Radial†	4.4	-12.2	99.290 µg/L	99.290 ppb	17:01:14
2	K 766.490 Radial†	456232.0	452813.9	295740 µg/L	295740 ppb	17:00:48
2	Mg 279.077 IEC†	1.4	-11.4	63.333 µg/L	63.333 ppb	17:01:14
2	Na 589.592 Radial†	1121.5	641.3	196.97 µg/L	196.97 ppb	17:00:54
2	Sr 421.552†	1064137.7	1056521.3	9746.6 µg/L	9746.6 ppb	17:00:48
2	Sc 361.383	1930719.4	1930719.4	98.350 %		17:02:38
2	Y 371.029	1320362.0	1320362.0	97.605 %		17:02:38
2	Ag 328.068†	-7077.0	-6794.2	14.570 µg/L	14.570 ppb	17:02:44
2	As 188.979†	5081.0	5166.8	9240.9 µg/L	9240.9 ppb	17:02:44
2	B 249.677†	118618.7	120225.2	4937.5 µg/L	4937.5 ppb	17:02:38
2	Ba 233.527†	584914.6	594747.4	14296 µg/L	14296 ppb	17:02:38
2	Be 313.107†	4840646.5	4924735.5	2919.0 µg/L	2919.0 ppb	17:02:28
2	Cd 226.502†	369934.9	376284.7	9394.3 µg/L	9394.3 ppb	17:02:38
2	Co 228.616†	200219.4	203577.5	9207.4 µg/L	9207.4 ppb	17:02:38
2	Cr 267.716†	1146054.0	1165336.9	23412 µg/L	23412 ppb	17:02:38
2	Cu 324.752†	2987260.6	3034847.6	19810 µg/L	19810 ppb	17:02:38
2	Mn 257.610†	2933156.9	2982635.7	9340.2 µg/L	9340.2 ppb	17:02:38
2	Mo 202.031†	98580.4	100240.0	9816.1 µg/L	9816.1 ppb	17:02:38
2	Ni 231.604†	185684.1	188487.9	9385.1 µg/L	9385.1 ppb	17:02:38
2	P 214.914†	7168.5	7273.5	12452 µg/L	12452 ppb	17:02:44
2	Pb 220.353†	100296.4	101888.6	24763 µg/L	24763 ppb	17:02:38

2	S 181.975 Axial†	12172.5	12357.8	51247 µg/L	51247 ppb	17:02:44
2	Sb 206.836†	10777.5	10935.8	9934.7 µg/L	9934.7 ppb	17:02:44
2	Se 196.026†	6594.7	6686.0	9389.7 µg/L	9389.7 ppb	17:02:44
2	SiO2†	493318.0	500205.0	98734 µg/L	98734 ppb	17:02:38
2	Si 251.611†	596653.2	606355.3	46096 µg/L	46096 ppb	17:02:38
2	Sn 189.927†	22590.4	22969.2	9686.4 µg/L	9686.4 ppb	17:02:44
2	Ti 334.940†	4476920.0	4551874.4	10070 µg/L	10070 ppb	17:02:28
2	Tl 190.801†	7064.0	7204.9	9453.5 µg/L	9453.5 ppb	17:02:44
2	U 409.014†	804.4	895.0	74.370 µg/L	74.370 ppb	17:02:38
2	V 292.402†	992711.5	1009415.4	9966.7 µg/L	9966.7 ppb	17:02:38
2	Zn 213.857†	595571.0	605031.1	14122 µg/L	14122 ppb	17:02:38
3	Sc RADIAL	56734.5	56734.5	100 %		17:01:26
3	Al 396.153Radial†	382.8	373.8	92.098 µg/L	92.098 ppb	17:01:26
3	Ca 317.933Radial†	337.7	125.0	106.77 µg/L	106.77 ppb	17:01:46
3	Fe 238.204 Radial†	8.1	-8.5	96.137 µg/L	96.137 ppb	17:01:46
3	K 766.490 Radial†	455344.2	453262.2	296030 µg/L	296030 ppb	17:01:20
3	Mg 279.077 IEC†	6.4	-6.4	80.021 µg/L	80.021 ppb	17:01:46
3	Na 589.592 Radial†	1058.9	582.2	178.83 µg/L	178.83 ppb	17:01:26
3	Sr 421.552†	1062613.5	1058110.9	9761.2 µg/L	9761.2 ppb	17:01:20
3	Sc 361.383	1951531.6	1951531.6	99.410 %		17:03:03
3	Y 371.029	1334759.8	1334759.8	98.670 %		17:03:03
3	Ag 328.068†	-5952.6	-5586.4	12.490 µg/L	12.490 ppb	17:03:09
3	As 188.979†	4352.3	4378.6	7831.5 µg/L	7831.5 ppb	17:03:09
3	B 249.677†	103961.3	104194.4	4277.3 µg/L	4277.3 ppb	17:03:03
3	Ba 233.527†	498513.8	501491.0	12054 µg/L	12054 ppb	17:03:03
3	Be 313.107†	4199873.9	4227668.5	2505.9 µg/L	2505.9 ppb	17:02:53
3	Cd 226.502†	314684.6	316694.9	7906.5 µg/L	7906.5 ppb	17:03:03
3	Co 228.616†	168522.5	169521.2	7666.6 µg/L	7666.6 ppb	17:03:03
3	Cr 267.716†	945201.2	950864.3	19103 µg/L	19103 ppb	17:03:03
3	Cu 324.752†	2517755.9	2530162.7	16516 µg/L	16516 ppb	17:03:03
3	Mn 257.610†	2467371.4	2482278.7	7773.3 µg/L	7773.3 ppb	17:03:03
3	Mo 202.031†	82974.3	83472.3	8174.1 µg/L	8174.1 ppb	17:03:03
3	Ni 231.604†	156258.3	156873.9	7811.0 µg/L	7811.0 ppb	17:03:03
3	P 214.914†	6005.8	6026.1	10305 µg/L	10305 ppb	17:03:09
3	Pb 220.353†	86464.2	86886.7	21117 µg/L	21117 ppb	17:03:03
3	S 181.975 Axial†	10331.9	10374.4	43022 µg/L	43022 ppb	17:03:09
3	Sb 206.836†	9128.5	9160.2	8326.6 µg/L	8326.6 ppb	17:03:09
3	Se 196.026†	5645.3	5659.5	7948.1 µg/L	7948.1 ppb	17:03:09
3	SiO2†	429530.2	430689.2	85012 µg/L	85012 ppb	17:03:03
3	Si 251.611†	519223.8	521996.3	39683 µg/L	39683 ppb	17:03:03
3	Sn 189.927†	18770.5	18881.6	7962.6 µg/L	7962.6 ppb	17:03:09
3	Ti 334.940†	3882788.8	3905669.8	8640.2 µg/L	8640.2 ppb	17:02:53
3	Tl 190.801†	6222.6	6282.0	8241.0 µg/L	8241.0 ppb	17:03:09
3	U 409.014†	704.1	785.3	65.252 µg/L	65.252 ppb	17:03:03
3	V 292.402†	832909.4	837900.0	8272.7 µg/L	8272.7 ppb	17:03:03
3	Zn 213.857†	505033.0	507497.5	11846 µg/L	11846 ppb	17:03:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1936734.0	98.656 %	0.6566			0.67%
Sc RADIAL	56776.2	100 %	0.2			0.19%
Y 371.029	1324145.1	97.885 %	0.6888			0.70%
Ag 328.068†	-6620.3	13.360 µg/L	1.0808	13.360 ppb	1.0808	8.09%
Al 396.153Radial†	374.8	66.790 µg/L	25.4910	66.790 ppb	25.4910	38.17%
As 188.979†	5005.6	8952.9 µg/L	1008.74	8952.9 ppb	1008.74	11.27%
QC value less than the lower limit for As 188.979 Recovery = 89.53%						
B 249.677†	116147.2	4769.9 µg/L	433.79	4769.9 ppb	433.79	9.09%
QC value within limits for B 249.677 Recovery = 95.40%						
Ba 233.527†	572914.6	13771 µg/L	1524.0	13771 ppb	1524.0	11.07%
QC value within limits for Ba 233.527 Recovery = 91.81%						
Be 313.107†	4709773.2	2791.6 µg/L	247.95	2791.6 ppb	247.95	8.88%
QC value within limits for Be 313.107 Recovery = 93.05%						
Ca 317.933Radial†	105.9	90.480 µg/L	14.5864	90.480 ppb	14.5864	16.12%
Cd 226.502†	362363.7	9046.7 µg/L	1012.25	9046.7 ppb	1012.25	11.19%
QC value within limits for Cd 226.502 Recovery = 90.47%						
Co 228.616†	195935.1	8861.9 µg/L	1065.42	8861.9 ppb	1065.42	12.02%
QC value less than the lower limit for Co 228.616 Recovery = 88.62%						
Cr 267.716†	1119988.3	22501 µg/L	3046.1	22501 ppb	3046.1	13.54%
QC value within limits for Cr 267.716 Recovery = 90.00%						

Cu 324.752†	2920676.6	19065 µg/L	2270.1	19065 ppb	2270.1	11.91%
QC value within limits for Cu 324.752 Recovery = 95.32%						
Fe 238.204 Radial†	-10.3	106.92 µg/L	16.029	106.92 ppb	16.029	14.99%
K 766.490 Radial†	452395.0	295470 µg/L	742.1	295470 ppb	742.1	0.25%
QC value within limits for K 766.490 Radial Recovery = 98.49%						
Mg 279.077 IEC†	-11.4	57.093 µg/L	26.6031	57.093 ppb	26.6031	46.60%
Mn 257.610†	2868592.3	8983.1 µg/L	1076.57	8983.1 ppb	1076.57	11.98%
QC value less than the lower limit for Mn 257.610 Recovery = 89.83%						
Mo 202.031†	96398.0	9439.9 µg/L	1125.82	9439.9 ppb	1125.82	11.93%
QC value within limits for Mo 202.031 Recovery = 94.40%						
Na 589.592 Radial†	650.0	199.64 µg/L	22.270	199.64 ppb	22.270	11.15%
Ni 231.604†	181408.5	9032.6 µg/L	1089.03	9032.6 ppb	1089.03	12.06%
QC value within limits for Ni 231.604 Recovery = 90.33%						
P 214.914†	7054.3	12093 µg/L	1638.4	12093 ppb	1638.4	13.55%
QC value less than the lower limit for P 214.914 Recovery = 80.62%						
Pb 220.353†	98216.0	23870 µg/L	2433.1	23870 ppb	2433.1	10.19%
QC value within limits for Pb 220.353 Recovery = 95.48%						
S 181.975 Axial†	11919.8	49431 µg/L	5721.0	49431 ppb	5721.0	11.57%
QC value within limits for S 181.975 Axial Recovery = 98.86%						
Sb 206.836†	10604.5	9634.7 µg/L	1186.86	9634.7 ppb	1186.86	12.32%
QC value within limits for Sb 206.836 Recovery = 96.35%						
Se 196.026†	6478.3	9098.0 µg/L	1035.37	9098.0 ppb	1035.37	11.38%
QC value within limits for Se 196.026 Recovery = 90.98%						
SiO2†	482863.9	95311 µg/L	9084.4	95311 ppb	9084.4	9.53%
QC value less than the lower limit for SiO2 Recovery = 89.08%						
Si 251.611†	585176.2	44486 µg/L	4234.2	44486 ppb	4234.2	9.52%
QC value less than the lower limit for Si 251.611 Recovery = 88.97%						
Sn 189.927†	22349.8	9425.3 µg/L	1351.08	9425.3 ppb	1351.08	14.33%
QC value within limits for Sn 189.927 Recovery = 94.25%						
Sr 421.552†	1055575.2	9737.8 µg/L	28.77	9737.8 ppb	28.77	0.30%
QC value within limits for Sr 421.552 Recovery = 97.38%						
Ti 334.940†	4353482.3	9630.9 µg/L	859.79	9630.9 ppb	859.79	8.93%
QC value within limits for Ti 334.940 Recovery = 96.31%						
Tl 190.801†	6963.8	9136.3 µg/L	786.19	9136.3 ppb	786.19	8.61%
QC value within limits for Tl 190.801 Recovery = 91.36%						
U 409.014†	889.2	73.887 µg/L	8.4048	73.887 ppb	8.4048	11.38%
V 292.402†	970550.0	9583.0 µg/L	1166.76	9583.0 ppb	1166.76	12.18%
QC value within limits for V 292.402 Recovery = 95.83%						
Zn 213.857†	582722.8	13601 µg/L	1561.6	13601 ppb	1561.6	11.48%
QC value within limits for Zn 213.857 Recovery = 90.67%						
QC Failed. Continue with analysis.						

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

Autosampler Location: 7
 Date Collected: 2/19/2010 17:03:18
 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	55888.6	55888.6	98.9 %		17:03:56
1	Al 396.153Radial†	7603.9	7679.1	5330.8 µg/L	5330.8 ppb	17:03:56
1	Ca 317.933Radial†	6396.5	6254.7	5342.6 µg/L	5342.6 ppb	17:04:16
1	Fe 238.204 Radial†	693.3	684.2	5407.8 µg/L	5407.8 ppb	17:04:16
1	K 766.490 Radial†	8387.1	8313.2	5429.5 µg/L	5429.5 ppb	17:03:56
1	Mg 279.077 IEC†	619.4	613.3	5485.4 µg/L	5485.4 ppb	17:04:16
1	Na 589.592 Radial†	35135.8	35045.3	10764 µg/L	10764 ppb	17:03:56
1	Sr 421.552†	55695.8	56272.0	519.12 µg/L	519.12 ppb	17:03:56
1	Sc 361.383	1985726.3	1985726.3	101.15 %		17:05:20
1	Y 371.029	1365771.7	1365771.7	100.96 %		17:05:20
1	Ag 328.068†	70288.8	69890.2	521.53 µg/L	521.53 ppb	17:05:25
1	As 188.979†	301.3	298.4	533.72 µg/L	533.72 ppb	17:05:46
1	B 249.677†	13549.7	13011.4	528.34 µg/L	528.34 ppb	17:05:25
1	Ba 233.527†	22064.2	21830.1	525.03 µg/L	525.03 ppb	17:05:25
1	Be 313.107†	895757.0	888415.0	527.08 µg/L	527.08 ppb	17:05:20
1	Cd 226.502†	21255.4	21155.1	527.55 µg/L	527.55 ppb	17:05:25
1	Co 228.616†	11817.8	11681.3	528.41 µg/L	528.41 ppb	17:05:25
1	Cr 267.716†	26786.8	26532.2	533.24 µg/L	533.24 ppb	17:05:25
1	Cu 324.752†	84423.2	80918.4	528.94 µg/L	528.94 ppb	17:05:25
1	Mn 257.610†	172694.5	170984.5	535.94 µg/L	535.94 ppb	17:05:20
1	Mo 202.031†	5634.1	5575.3	546.17 µg/L	546.17 ppb	17:05:46
1	Ni 231.604†	11061.6	10623.3	529.01 µg/L	529.01 ppb	17:05:25
1	P 214.914†	1393.6	1362.4	2646.9 µg/L	2646.9 ppb	17:05:46
1	Pb 220.353†	2366.1	2248.2	546.74 µg/L	546.74 ppb	17:05:46
1	S 181.975 Axial†	286.4	264.2	1095.6 µg/L	1095.6 ppb	17:05:46
1	Sb 206.836†	624.5	594.8	548.51 µg/L	548.51 ppb	17:05:46
1	Se 196.026†	403.3	379.4	541.16 µg/L	541.16 ppb	17:05:46
1	SiO2†	30463.6	28725.2	5670.0 µg/L	5670.0 ppb	17:05:25
1	Si 251.611†	35537.3	34822.1	2647.2 µg/L	2647.2 ppb	17:05:25
1	Sn 189.927†	1316.6	1301.2	548.79 µg/L	548.79 ppb	17:05:46
1	Ti 334.940†	242343.4	239409.4	529.28 µg/L	529.28 ppb	17:05:20
1	Tl 190.801†	396.9	414.8	545.11 µg/L	545.11 ppb	17:05:46
1	U 409.014†	6392.8	6397.1	530.42 µg/L	530.42 ppb	17:05:25
1	V 292.402†	54586.5	54009.9	532.97 µg/L	532.97 ppb	17:05:25
1	Zn 213.857†	23680.6	22876.6	532.96 µg/L	532.96 ppb	17:05:25
2	Sc RADIAL	56411.2	56411.2	99.9 %		17:04:22
2	Al 396.153Radial†	7635.5	7639.5	5303.6 µg/L	5303.6 ppb	17:04:22
2	Ca 317.933Radial†	6387.4	6185.7	5283.7 µg/L	5283.7 ppb	17:04:42
2	Fe 238.204 Radial†	694.2	678.6	5363.5 µg/L	5363.5 ppb	17:04:42
2	K 766.490 Radial†	8367.7	8215.3	5365.5 µg/L	5365.5 ppb	17:04:22
2	Mg 279.077 IEC†	620.5	608.6	5443.2 µg/L	5443.2 ppb	17:04:42
2	Na 589.592 Radial†	35309.3	34889.9	10716 µg/L	10716 ppb	17:04:22
2	Sr 421.552†	56012.6	56067.6	517.23 µg/L	517.23 ppb	17:04:22
2	Sc 361.383	1973301.2	1973301.2	100.52 %		17:05:53
2	Y 371.029	1356327.8	1356327.8	100.26 %		17:05:53
2	Ag 328.068†	69539.4	69582.3	519.23 µg/L	519.23 ppb	17:05:58
2	As 188.979†	297.6	296.5	530.36 µg/L	530.36 ppb	17:06:19
2	B 249.677†	13399.5	12946.2	525.71 µg/L	525.71 ppb	17:05:58
2	Ba 233.527†	21880.7	21784.8	523.94 µg/L	523.94 ppb	17:05:58
2	Be 313.107†	883505.0	881802.2	523.15 µg/L	523.15 ppb	17:05:53
2	Cd 226.502†	20975.5	21009.0	523.90 µg/L	523.90 ppb	17:05:58
2	Co 228.616†	11661.3	11599.2	524.68 µg/L	524.68 ppb	17:05:58
2	Cr 267.716†	26502.8	26416.4	530.91 µg/L	530.91 ppb	17:05:58
2	Cu 324.752†	83587.4	80612.4	526.94 µg/L	526.94 ppb	17:05:58
2	Mn 257.610†	170657.8	170033.3	532.96 µg/L	532.96 ppb	17:05:53
2	Mo 202.031†	5420.5	5397.9	528.80 µg/L	528.80 ppb	17:06:19
2	Ni 231.604†	10882.8	10514.3	523.58 µg/L	523.58 ppb	17:05:58
2	P 214.914†	1342.7	1320.4	2563.7 µg/L	2563.7 ppb	17:06:19
2	Pb 220.353†	2290.9	2188.1	532.08 µg/L	532.08 ppb	17:06:19

2	S 181.975 Axial†	275.7	255.3	1058.7 µg/L	1058.7 ppb	17:06:19
2	Sb 206.836†	598.1	572.5	527.76 µg/L	527.76 ppb	17:06:19
2	Se 196.026†	397.1	375.7	535.95 µg/L	535.95 ppb	17:06:19
2	SiO2†	30055.7	28509.0	5627.3 µg/L	5627.3 ppb	17:05:58
2	Si 251.611†	35203.5	34711.2	2638.8 µg/L	2638.8 ppb	17:05:58
2	Sn 189.927†	1262.7	1255.8	529.63 µg/L	529.63 ppb	17:06:19
2	Ti 334.940†	239137.9	237729.0	525.56 µg/L	525.56 ppb	17:05:53
2	Tl 190.801†	378.8	399.3	524.92 µg/L	524.92 ppb	17:06:19
2	U 409.014†	6362.6	6406.8	531.24 µg/L	531.24 ppb	17:05:58
2	V 292.402†	53891.1	53657.8	529.39 µg/L	529.39 ppb	17:05:58
2	Zn 213.857†	23377.3	22722.3	529.37 µg/L	529.37 ppb	17:05:58
3	Sc RADIAL	56975.5	56975.5	101 %		17:04:48
3	Al 396.153Radial†	7635.5	7563.8	5253.0 µg/L	5253.0 ppb	17:04:48
3	Ca 317.933Radial†	6375.4	6110.4	5219.4 µg/L	5219.4 ppb	17:05:08
3	Fe 238.204 Radial†	692.0	669.6	5290.9 µg/L	5290.9 ppb	17:05:08
3	K 766.490 Radial†	8336.4	8101.2	5291.0 µg/L	5291.0 ppb	17:04:48
3	Mg 279.077 IEC†	615.1	597.1	5339.2 µg/L	5339.2 ppb	17:05:08
3	Na 589.592 Radial†	35286.2	34516.8	10602 µg/L	10602 ppb	17:04:48
3	Sr 421.552†	56155.5	55653.7	513.41 µg/L	513.41 ppb	17:04:48
3	Sc 361.383	1965301.5	1965301.5	100.11 %		17:06:26
3	Y 371.029	1350670.0	1350670.0	99.846 %		17:06:26
3	Ag 328.068†	64381.3	64711.5	482.70 µg/L	482.70 ppb	17:06:32
3	As 188.979†	245.8	246.0	440.05 µg/L	440.05 ppb	17:06:52
3	B 249.677†	12272.2	11874.4	481.93 µg/L	481.93 ppb	17:06:32
3	Ba 233.527†	19548.8	19544.2	470.02 µg/L	470.02 ppb	17:06:32
3	Be 313.107†	784667.9	786652.6	466.70 µg/L	466.70 ppb	17:06:26
3	Cd 226.502†	18615.7	18736.7	467.18 µg/L	467.18 ppb	17:06:32
3	Co 228.616†	10218.5	10205.2	461.59 µg/L	461.59 ppb	17:06:32
3	Cr 267.716†	22418.3	22443.7	451.08 µg/L	451.08 ppb	17:06:32
3	Cu 324.752†	73939.9	71314.0	466.24 µg/L	466.24 ppb	17:06:32
3	Mn 257.610†	152452.7	152539.5	478.17 µg/L	478.17 ppb	17:06:26
3	Mo 202.031†	4381.2	4381.7	429.29 µg/L	429.29 ppb	17:06:52
3	Ni 231.604†	9646.8	9323.7	464.30 µg/L	464.30 ppb	17:06:32
3	P 214.914†	1099.4	1082.8	2098.1 µg/L	2098.1 ppb	17:06:52
3	Pb 220.353†	1951.4	1858.2	451.78 µg/L	451.78 ppb	17:06:52
3	S 181.975 Axial†	236.4	217.2	900.67 µg/L	900.67 ppb	17:06:52
3	Sb 206.836†	506.2	483.2	445.02 µg/L	445.02 ppb	17:06:52
3	Se 196.026†	341.1	321.4	459.63 µg/L	459.63 ppb	17:06:52
3	SiO2†	27392.4	25970.5	5126.2 µg/L	5126.2 ppb	17:06:32
3	Si 251.611†	31876.5	31530.5	2397.0 µg/L	2397.0 ppb	17:06:32
3	Sn 189.927†	1001.9	1000.4	421.93 µg/L	421.93 ppb	17:06:52
3	Ti 334.940†	211018.2	210609.0	465.58 µg/L	465.58 ppb	17:06:26
3	Tl 190.801†	333.8	355.8	467.83 µg/L	467.83 ppb	17:06:52
3	U 409.014†	5451.1	5522.1	457.75 µg/L	457.75 ppb	17:06:32
3	V 292.402†	46793.0	46785.8	461.39 µg/L	461.39 ppb	17:06:32
3	Zn 213.857†	20591.5	20034.3	466.68 µg/L	466.68 ppb	17:06:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1974776.3	100.59 %		0.524			0.52%
Sc RADIAL	56425.1	99.9 %		0.96			0.96%
Y 371.029	1357589.8	100.36 %		0.564			0.56%
Ag 328.068†	68061.3	507.82 µg/L		21.786	507.82 ppb	21.786	4.29%
QC value within limits for Ag 328.068 Recovery = 101.56%							
Al 396.153Radial†	7627.5	5295.8 µg/L		39.51	5295.8 ppb	39.51	0.75%
QC value within limits for Al 396.153Radial Recovery = 105.92%							
As 188.979†	280.3	501.38 µg/L		53.136	501.38 ppb	53.136	10.60%
QC value within limits for As 188.979 Recovery = 100.28%							
B 249.677†	12610.7	512.00 µg/L		26.067	512.00 ppb	26.067	5.09%
QC value within limits for B 249.677 Recovery = 102.40%							
Ba 233.527†	21053.0	506.33 µg/L		31.447	506.33 ppb	31.447	6.21%
QC value within limits for Ba 233.527 Recovery = 101.27%							
Be 313.107†	852289.9	505.65 µg/L		33.780	505.65 ppb	33.780	6.68%
QC value within limits for Be 313.107 Recovery = 101.13%							
Ca 317.933Radial†	6183.6	5281.9 µg/L		61.64	5281.9 ppb	61.64	1.17%
QC value within limits for Ca 317.933Radial Recovery = 105.64%							
Cd 226.502†	20300.3	506.21 µg/L		33.851	506.21 ppb	33.851	6.69%
QC value within limits for Cd 226.502 Recovery = 101.24%							
Co 228.616†	11161.9	504.89 µg/L		37.550	504.89 ppb	37.550	7.44%

QC value within limits for Co 228.616 Recovery = 100.98%							
Cr 267.716†	25130.8	505.07 µg/L	46.779	505.07 ppb	46.779	9.26%	
QC value within limits for Cr 267.716 Recovery = 101.01%							
Cu 324.752†	77614.9	507.37 µg/L	35.640	507.37 ppb	35.640	7.02%	
QC value within limits for Cu 324.752 Recovery = 101.47%							
Fe 238.204 Radial†	677.5	5354.0 µg/L	59.03	5354.0 ppb	59.03	1.10%	
QC value within limits for Fe 238.204 Radial Recovery = 107.08%							
K 766.490 Radial†	8209.9	5362.0 µg/L	69.32	5362.0 ppb	69.32	1.29%	
QC value within limits for K 766.490 Radial Recovery = 107.24%							
Mg 279.077 IEC†	606.3	5422.6 µg/L	75.22	5422.6 ppb	75.22	1.39%	
QC value within limits for Mg 279.077 IEC Recovery = 108.45%							
Mn 257.610†	164519.1	515.69 µg/L	32.527	515.69 ppb	32.527	6.31%	
QC value within limits for Mn 257.610 Recovery = 103.14%							
Mo 202.031†	5118.3	501.42 µg/L	63.069	501.42 ppb	63.069	12.58%	
QC value within limits for Mo 202.031 Recovery = 100.28%							
Na 589.592 Radial†	34817.3	10694 µg/L	83.4	10694 ppb	83.4	0.78%	
QC value within limits for Na 589.592 Radial Recovery = 106.94%							
Ni 231.604†	10153.8	505.63 µg/L	35.893	505.63 ppb	35.893	7.10%	
QC value within limits for Ni 231.604 Recovery = 101.13%							
P 214.914†	1255.2	2436.2 µg/L	295.76	2436.2 ppb	295.76	12.14%	
QC value within limits for P 214.914 Recovery = 97.45%							
Pb 220.353†	2098.2	510.20 µg/L	51.120	510.20 ppb	51.120	10.02%	
QC value within limits for Pb 220.353 Recovery = 102.04%							
S 181.975 Axial†	245.6	1018.3 µg/L	103.55	1018.3 ppb	103.55	10.17%	
QC value within limits for S 181.975 Axial Recovery = 101.83%							
Sb 206.836†	550.2	507.10 µg/L	54.752	507.10 ppb	54.752	10.80%	
QC value within limits for Sb 206.836 Recovery = 101.42%							
Se 196.026†	358.8	512.25 µg/L	45.639	512.25 ppb	45.639	8.91%	
QC value within limits for Se 196.026 Recovery = 102.45%							
SiO2†	27734.9	5474.5 µg/L	302.37	5474.5 ppb	302.37	5.52%	
QC value within limits for SiO2 Recovery = 102.38%							
Si 251.611†	33688.0	2561.0 µg/L	142.10	2561.0 ppb	142.10	5.55%	
QC value within limits for Si 251.611 Recovery = 102.44%							
Sn 189.927†	1185.8	500.11 µg/L	68.387	500.11 ppb	68.387	13.67%	
QC value within limits for Sn 189.927 Recovery = 100.02%							
Sr 421.552†	55997.8	516.59 µg/L	2.906	516.59 ppb	2.906	0.56%	
QC value within limits for Sr 421.552 Recovery = 103.32%							
Ti 334.940†	229249.1	506.81 µg/L	35.755	506.81 ppb	35.755	7.05%	
QC value within limits for Ti 334.940 Recovery = 101.36%							
Tl 190.801†	390.0	512.62 µg/L	40.080	512.62 ppb	40.080	7.82%	
QC value within limits for Tl 190.801 Recovery = 102.52%							
U 409.014†	6108.7	506.47 µg/L	42.195	506.47 ppb	42.195	8.33%	
QC value within limits for U 409.014 Recovery = 101.29%							
V 292.402†	51484.5	507.91 µg/L	40.335	507.91 ppb	40.335	7.94%	
QC value within limits for V 292.402 Recovery = 101.58%							
Zn 213.857†	21877.7	509.67 µg/L	37.277	509.67 ppb	37.277	7.31%	
QC value within limits for Zn 213.857 Recovery = 101.93%							

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 17:07:02

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	55412.9	55412.9	98.1 %		17:07:34
1	Al 396.153Radial†	37.8	31.1	21.627 µg/L	21.627 ppb	17:07:34
1	Ca 317.933Radial†	224.1	17.2	14.719 µg/L	14.719 ppb	17:07:55
1	Fe 238.204 Radial†	17.2	1.0	7.9128 µg/L	7.9128 ppb	17:07:55
1	K 766.490 Radial†	263.9	104.0	67.945 µg/L	67.945 ppb	17:07:34
1	Mg 279.077 IEC†	16.1	3.6	31.922 µg/L	31.922 ppb	17:07:55
1	Na 589.592 Radial†	689.0	230.2	70.711 µg/L	70.711 ppb	17:07:34
1	Sr 421.552†	101.9	75.1	0.6926 µg/L	0.6926 ppb	17:07:34
1	Sc 361.383	1951828.9	1951828.9	99.425 %		17:08:57
1	Y 371.029	1347100.7	1347100.7	99.582 %		17:08:57
1	Ag 328.068†	-411.9	-12.6	-0.0884 µg/L	-0.0884 ppb	17:09:02
1	As 188.979†	1.0	1.5	2.6447 µg/L	2.6447 ppb	17:09:23
1	B 249.677†	547.2	166.2	6.7725 µg/L	6.7725 ppb	17:09:02
1	Ba 233.527†	13.0	30.1	0.7248 µg/L	0.7248 ppb	17:09:23
1	Be 313.107†	-2489.6	351.6	0.2085 µg/L	0.2085 ppb	17:09:02
1	Cd 226.502†	-106.1	35.0	0.8724 µg/L	0.8724 ppb	17:09:23
1	Co 228.616†	8.3	6.4	0.2907 µg/L	0.2907 ppb	17:09:23
1	Cr 267.716†	3.3	53.7	1.0792 µg/L	1.0792 ppb	17:09:02
1	Cu 324.752†	2832.8	305.4	1.9949 µg/L	1.9949 ppb	17:09:02
1	Mn 257.610†	-94.7	160.8	0.5033 µg/L	0.5033 ppb	17:09:23
1	Mo 202.031†	11.2	16.6	1.6267 µg/L	1.6267 ppb	17:09:23
1	Ni 231.604†	329.4	19.0	0.9450 µg/L	0.9450 ppb	17:09:23
1	P 214.914†	17.5	2.3	4.3252 µg/L	4.3252 ppb	17:09:23
1	Pb 220.353†	117.3	27.1	6.5756 µg/L	6.5756 ppb	17:09:23
1	S 181.975 Axial†	13.9	-5.0	-20.708 µg/L	-20.708 ppb	17:09:23
1	Sb 206.836†	24.4	2.0	1.8677 µg/L	1.8677 ppb	17:09:23
1	Se 196.026†	8.1	-11.2	-15.713 µg/L	-15.713 ppb	17:09:23
1	SiO2†	1498.4	115.5	22.804 µg/L	22.804 ppb	17:09:02
1	Si 251.611†	397.1	88.7	6.7465 µg/L	6.7465 ppb	17:09:23
1	Sn 189.927†	7.9	7.6	3.2082 µg/L	3.2082 ppb	17:09:23
1	Ti 334.940†	420.5	247.9	0.5462 µg/L	0.5462 ppb	17:09:02
1	Tl 190.801†	-26.0	-3.7	-4.8506 µg/L	-4.8506 ppb	17:09:23
1	U 409.014†	-2.4	74.7	6.2026 µg/L	6.2026 ppb	17:09:02
1	V 292.402†	29.6	74.5	0.7487 µg/L	0.7487 ppb	17:09:02
1	Zn 213.857†	624.2	93.4	2.1827 µg/L	2.1827 ppb	17:09:23
2	Sc RADIAL	55845.1	55845.1	98.8 %		17:08:00
2	Al 396.153Radial†	15.5	8.3	5.7389 µg/L	5.7389 ppb	17:08:00
2	Ca 317.933Radial†	229.7	21.1	18.050 µg/L	18.050 ppb	17:08:21
2	Fe 238.204 Radial†	18.3	1.9	15.065 µg/L	15.065 ppb	17:08:21
2	K 766.490 Radial†	268.0	106.2	69.336 µg/L	69.336 ppb	17:08:00
2	Mg 279.077 IEC†	18.8	6.2	55.616 µg/L	55.616 ppb	17:08:21
2	Na 589.592 Radial†	718.0	254.2	78.078 µg/L	78.078 ppb	17:08:00
2	Sr 421.552†	118.8	91.4	0.8433 µg/L	0.8433 ppb	17:08:00
2	Sc 361.383	1967750.3	1967750.3	100.24 %		17:09:29
2	Y 371.029	1358640.9	1358640.9	100.44 %		17:09:29
2	Ag 328.068†	-328.6	73.7	0.5515 µg/L	0.5515 ppb	17:09:34
2	As 188.979†	0.4	0.9	1.5587 µg/L	1.5587 ppb	17:09:55
2	B 249.677†	564.6	179.1	7.2933 µg/L	7.2933 ppb	17:09:34
2	Ba 233.527†	22.7	39.7	0.9547 µg/L	0.9547 ppb	17:09:55
2	Be 313.107†	-2501.6	360.0	0.2134 µg/L	0.2134 ppb	17:09:34
2	Cd 226.502†	-111.0	30.9	0.7694 µg/L	0.7694 ppb	17:09:55
2	Co 228.616†	5.7	3.7	0.1688 µg/L	0.1688 ppb	17:09:55
2	Cr 267.716†	-17.2	33.2	0.6680 µg/L	0.6680 ppb	17:09:34
2	Cu 324.752†	2799.6	249.3	1.6293 µg/L	1.6293 ppb	17:09:34
2	Mn 257.610†	-100.4	155.9	0.4879 µg/L	0.4879 ppb	17:09:55
2	Mo 202.031†	11.5	16.9	1.6521 µg/L	1.6521 ppb	17:09:55
2	Ni 231.604†	309.9	-3.2	-0.1576 µg/L	-0.1576 ppb	17:09:55
2	P 214.914†	22.6	7.2	14.217 µg/L	14.217 ppb	17:09:55
2	Pb 220.353†	112.5	21.3	5.1809 µg/L	5.1809 ppb	17:09:55

2	S 181.975 Axial†	17.8	-1.2	-5.0873 µg/L	-5.0873 ppb	17:09:55
2	Sb 206.836†	28.6	6.1	5.5939 µg/L	5.5939 ppb	17:09:55
2	Se 196.026†	12.5	-6.8	-9.5638 µg/L	-9.5638 ppb	17:09:55
2	SiO2†	1499.4	104.3	20.597 µg/L	20.597 ppb	17:09:34
2	Si 251.611†	402.2	90.6	6.8889 µg/L	6.8889 ppb	17:09:55
2	Sn 189.927†	9.5	9.2	3.8641 µg/L	3.8641 ppb	17:09:55
2	Ti 334.940†	469.3	293.2	0.6444 µg/L	0.6444 ppb	17:09:34
2	Tl 190.801†	-20.6	1.9	2.4344 µg/L	2.4344 ppb	17:09:55
2	U 409.014†	-26.6	50.5	4.1927 µg/L	4.1927 ppb	17:09:34
2	V 292.402†	21.3	66.0	0.6641 µg/L	0.6641 ppb	17:09:34
2	Zn 213.857†	610.2	74.4	1.7390 µg/L	1.7390 ppb	17:09:55
3	Sc RADIAL	55020.8	55020.8	97.4 %		17:08:26
3	Al 396.153Radial†	25.2	18.5	12.855 µg/L	12.855 ppb	17:08:26
3	Ca 317.933Radial†	219.3	13.9	11.843 µg/L	11.843 ppb	17:08:46
3	Fe 238.204 Radial†	16.8	0.7	5.5902 µg/L	5.5902 ppb	17:08:46
3	K 766.490 Radial†	318.2	161.7	105.61 µg/L	105.61 ppb	17:08:26
3	Mg 279.077 IEC†	14.2	1.7	15.617 µg/L	15.617 ppb	17:08:46
3	Na 589.592 Radial†	674.2	220.1	67.603 µg/L	67.603 ppb	17:08:26
3	Sr 421.552†	108.4	82.5	0.7609 µg/L	0.7609 ppb	17:08:26
3	Sc 361.383	1948909.4	1948909.4	99.276 %		17:10:01
3	Y 371.029	1346308.2	1346308.2	99.523 %		17:10:01
3	Ag 328.068†	-352.8	46.2	0.3442 µg/L	0.3442 ppb	17:10:07
3	As 188.979†	-1.2	-0.7	-1.3112 µg/L	-1.3112 ppb	17:10:27
3	B 249.677†	510.9	130.5	5.3165 µg/L	5.3165 ppb	17:10:07
3	Ba 233.527†	13.0	30.2	0.7245 µg/L	0.7245 ppb	17:10:27
3	Be 313.107†	-2546.8	290.3	0.1721 µg/L	0.1721 ppb	17:10:07
3	Cd 226.502†	-112.3	28.5	0.7115 µg/L	0.7115 ppb	17:10:27
3	Co 228.616†	15.8	14.0	0.6325 µg/L	0.6325 ppb	17:10:27
3	Cr 267.716†	5.2	55.6	1.1178 µg/L	1.1178 ppb	17:10:07
3	Cu 324.752†	2793.0	269.6	1.7608 µg/L	1.7608 ppb	17:10:07
3	Mn 257.610†	-128.7	126.3	0.3957 µg/L	0.3957 ppb	17:10:27
3	Mo 202.031†	14.1	19.5	1.9140 µg/L	1.9140 ppb	17:10:27
3	Ni 231.604†	312.1	2.0	0.1004 µg/L	0.1004 ppb	17:10:27
3	P 214.914†	16.0	0.8	1.3809 µg/L	1.3809 ppb	17:10:27
3	Pb 220.353†	106.0	15.9	3.8630 µg/L	3.8630 ppb	17:10:27
3	S 181.975 Axial†	14.2	-4.6	-19.132 µg/L	-19.132 ppb	17:10:27
3	Sb 206.836†	16.0	-6.4	-5.8776 µg/L	-5.8776 ppb	17:10:27
3	Se 196.026†	18.1	-1.1	-1.5391 µg/L	-1.5391 ppb	17:10:27
3	SiO2†	1473.7	92.8	18.326 µg/L	18.326 ppb	17:10:07
3	Si 251.611†	414.5	106.9	8.1279 µg/L	8.1279 ppb	17:10:27
3	Sn 189.927†	10.6	10.3	4.3488 µg/L	4.3488 ppb	17:10:27
3	Ti 334.940†	439.9	268.1	0.5920 µg/L	0.5920 ppb	17:10:07
3	Tl 190.801†	-23.3	-1.1	-1.4129 µg/L	-1.4129 ppb	17:10:27
3	U 409.014†	-71.7	4.9	0.4060 µg/L	0.4060 ppb	17:10:07
3	V 292.402†	-20.7	23.9	0.2511 µg/L	0.2511 ppb	17:10:07
3	Zn 213.857†	601.7	71.7	1.6777 µg/L	1.6777 ppb	17:10:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1956162.9	99.646 %		0.5166			0.52%
Sc RADIAL	55426.3	98.1 %		0.73			0.74%
Y 371.029	1350683.2	99.847 %		0.5103			0.51%
Ag 328.068†	35.8	0.2691 µg/L		0.32647	0.2691 ppb	0.32647	121.32%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	19.3	13.407 µg/L		7.9584	13.407 ppb	7.9584	59.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.5	0.9641 µg/L		2.04391	0.9641 ppb	2.04391	212.00%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	158.6	6.4608 µg/L		1.02461	6.4608 ppb	1.02461	15.86%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	33.3	0.8013 µg/L		0.13279	0.8013 ppb	0.13279	16.57%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	334.0	0.1980 µg/L		0.02257	0.1980 ppb	0.02257	11.40%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	17.4	14.871 µg/L		3.1063	14.871 ppb	3.1063	20.89%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	31.5	0.7844 µg/L		0.08148	0.7844 ppb	0.08148	10.39%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.0	0.3640 µg/L		0.24037	0.3640 ppb	0.24037	66.04%

Cr	267.716†	47.5	0.9550 µg/L	0.24930	0.9550 ppb	0.24930	26.10%
Cu	324.752†	274.8	1.7950 µg/L	0.18518	1.7950 ppb	0.18518	10.32%
Fe	238.204 Radial†	1.2	9.5227 µg/L	4.93823	9.5227 ppb	4.93823	51.86%
K	766.490 Radial†	124.0	80.963 µg/L	21.3541	80.963 ppb	21.3541	26.38%
Mg	279.077 IEC†	3.8	34.385 µg/L	20.1131	34.385 ppb	20.1131	58.49%
Mn	257.610†	147.7	0.4623 µg/L	0.05817	0.4623 ppb	0.05817	12.58%
Mo	202.031†	17.7	1.7309 µg/L	0.15903	1.7309 ppb	0.15903	9.19%
Na	589.592 Radial†	234.8	72.131 µg/L	5.3801	72.131 ppb	5.3801	7.46%
Ni	231.604†	5.9	0.2959 µg/L	0.57673	0.2959 ppb	0.57673	194.90%
P	214.914†	3.4	6.6410 µg/L	6.72404	6.6410 ppb	6.72404	101.25%
Pb	220.353†	21.4	5.2065 µg/L	1.35647	5.2065 ppb	1.35647	26.05%
S	181.975 Axial†	-3.6	-14.976 µg/L	8.5998	-14.976 ppb	8.5998	57.42%
Sb	206.836†	0.6	0.5280 µg/L	5.85192	0.5280 ppb	5.85192	>999.9%
Se	196.026†	-6.4	-8.9385 µg/L	7.10744	-8.9385 ppb	7.10744	79.51%
SiO2†		104.2	20.576 µg/L	2.2394	20.576 ppb	2.2394	10.88%
Si	251.611†	95.4	7.2544 µg/L	0.75977	7.2544 ppb	0.75977	10.47%
Sn	189.927†	9.0	3.8070 µg/L	0.57241	3.8070 ppb	0.57241	15.04%
Sr	421.552†	83.0	0.7656 µg/L	0.07544	0.7656 ppb	0.07544	9.85%
Ti	334.940†	269.7	0.5942 µg/L	0.04915	0.5942 ppb	0.04915	8.27%
Tl	190.801†	-1.0	-1.2763 µg/L	3.64442	-1.2763 ppb	3.64442	285.54%
U	409.014†	43.4	3.6004 µg/L	2.94331	3.6004 ppb	2.94331	81.75%
V	292.402†	54.8	0.5546 µg/L	0.26626	0.5546 ppb	0.26626	48.01%
Zn	213.857†	79.8	1.8665 µg/L	0.27558	1.8665 ppb	0.27558	14.76%

QC value within limits for Co 228.616 Recovery = Not calculated

QC value within limits for Cr 267.716 Recovery = Not calculated

QC value within limits for Cu 324.752 Recovery = Not calculated

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

QC value within limits for K 766.490 Radial Recovery = Not calculated

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

QC value within limits for Mn 257.610 Recovery = Not calculated

QC value within limits for Mo 202.031 Recovery = Not calculated

QC value within limits for Na 589.592 Radial Recovery = Not calculated

QC value within limits for Ni 231.604 Recovery = Not calculated

QC value within limits for P 214.914 Recovery = Not calculated

QC value within limits for Pb 220.353 Recovery = Not calculated

QC value within limits for S 181.975 Axial Recovery = Not calculated

QC value within limits for Sb 206.836 Recovery = Not calculated

QC value within limits for Se 196.026 Recovery = Not calculated

QC value within limits for SiO2 Recovery = Not calculated

QC value within limits for Si 251.611 Recovery = Not calculated

QC value within limits for Sn 189.927 Recovery = Not calculated

QC value within limits for Sr 421.552 Recovery = Not calculated

QC value within limits for Ti 334.940 Recovery = Not calculated

QC value within limits for Tl 190.801 Recovery = Not calculated

QC value within limits for U 409.014 Recovery = Not calculated

QC value within limits for V 292.402 Recovery = Not calculated

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 2/19/2010 17:18:12

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\021910E.sif

Batch ID:

Results Data Set: 021910A

Results Library: c:\pe\optima1\Results\Results.mdb
=====

Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/19/2010 16:28:12

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: 113

Sample ID: LR2

Date Collected: 2/19/2010 17:18:14

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57089.6	57089.6	101 %		17:18:49
1	Al 396.153Radial†	-10.5	-17.7	-12.364 µg/L	-12.364 ppb	17:18:49
1	Ca 317.933Radial†	228.9	15.3	13.039 µg/L	13.039 ppb	17:19:09
1	Fe 238.204 Radial†	8.4	-8.2	43.697 µg/L	43.697 ppb	17:19:09

1	K 766.490 Radial†	220.7	53.4	34.889 µg/L	34.889 ppb	17:18:49
1	Mg 279.077 IEC†	10.1	-2.8	-24.911 µg/L	-24.911 ppb	17:19:09
1	Na 589.592 Radial†	602.0	123.6	37.957 µg/L	37.957 ppb	17:18:49
1	Sr 421.552†	60.8	31.4	0.2896 µg/L	0.2896 ppb	17:18:49
1	Sc 361.383	1992980.4	1992980.4	101.52 %		17:20:12
1	Y 371.029	1370801.5	1370801.5	101.33 %		17:20:12
1	Ag 328.068†	-413.2	-5.4	-0.0402 µg/L	-0.0402 ppb	17:20:18
1	As 188.979†	2879.0	2836.3	5083.5 µg/L	5083.5 ppb	17:20:38
1	B 249.677†	863.8	466.7	19.057 µg/L	19.057 ppb	17:20:18
1	Ba 233.527†	-3.1	14.0	0.3366 µg/L	0.3366 ppb	17:20:38
1	Be 313.107†	-2634.3	260.8	0.1545 µg/L	0.1545 ppb	17:20:18
1	Cd 226.502†	-101.6	41.6	1.0480 µg/L	1.0480 ppb	17:20:38
1	Co 228.616†	114754.7	113033.4	5119.0 µg/L	5119.0 ppb	17:20:18
1	Cr 267.716†	-18.5	32.2	0.6465 µg/L	0.6465 ppb	17:20:18
1	Cu 324.752†	1806.3	-764.5	-4.9994 µg/L	-4.9994 ppb	17:20:18
1	Mn 257.610†	-157.7	100.7	0.3076 µg/L	0.3076 ppb	17:20:38
1	Mo 202.031†	8.0	13.2	1.2927 µg/L	1.2927 ppb	17:20:38
1	Ni 231.604†	383.1	65.0	-2.8550 µg/L	-2.8550 ppb	17:20:38
1	P 214.914†	5661.5	5561.4	11011 µg/L	11011 ppb	17:20:18
1	Pb 220.353†	103.9	11.4	2.7844 µg/L	2.7844 ppb	17:20:38
1	S 181.975 Axial†	11.6	-7.5	-31.222 µg/L	-31.222 ppb	17:20:38
1	Sb 206.836†	26.1	3.2	2.9217 µg/L	2.9217 ppb	17:20:38
1	Se 196.026†	15.5	-4.1	-5.9032 µg/L	-5.9032 ppb	17:20:38
1	SiO2†	426908.6	419120.7	82729 µg/L	82729 ppb	17:20:12
1	Si 251.611†	511420.1	503446.9	38273 µg/L	38273 ppb	17:20:12
1	Sn 189.927†	7.7	7.2	3.0305 µg/L	3.0305 ppb	17:20:38
1	Ti 334.940†	600.4	416.4	0.9232 µg/L	0.9232 ppb	17:20:18
1	Tl 190.801†	0.4	22.7	12.314 µg/L	12.314 ppb	17:20:38
1	U 409.014†	-95.3	-16.8	-1.3899 µg/L	-1.3899 ppb	17:20:18
1	V 292.402†	13.1	57.7	0.5647 µg/L	0.5647 ppb	17:20:18
1	Zn 213.857†	632.3	88.4	2.0732 µg/L	2.0732 ppb	17:20:38
2	Sc RADIAL	56165.6	56165.6	99.4 %		17:19:15
2	Al 396.153Radial†	-6.9	-14.3	-9.9617 µg/L	-9.9617 ppb	17:19:15
2	Ca 317.933Radial†	216.0	6.0	5.1201 µg/L	5.1201 ppb	17:19:35
2	Fe 238.204 Radial†	7.6	-8.9	36.342 µg/L	36.342 ppb	17:19:35
2	K 766.490 Radial†	221.8	58.1	37.930 µg/L	37.930 ppb	17:19:15
2	Mg 279.077 IEC†	7.5	-5.3	-47.450 µg/L	-47.450 ppb	17:19:35
2	Na 589.592 Radial†	593.1	124.4	38.204 µg/L	38.204 ppb	17:19:15
2	Sr 421.552†	33.6	5.0	0.0462 µg/L	0.0462 ppb	17:19:15
2	Sc 361.383	2021073.3	2021073.3	102.95 %		17:20:45
2	Y 371.029	1388832.8	1388832.8	102.67 %		17:20:45
2	Ag 328.068†	-393.4	19.5	0.1414 µg/L	0.1414 ppb	17:20:50
2	As 188.979†	2798.9	2719.1	4873.4 µg/L	4873.4 ppb	17:21:11
2	B 249.677†	844.8	436.4	17.824 µg/L	17.824 ppb	17:20:50
2	Ba 233.527†	-4.8	12.4	0.2992 µg/L	0.2992 ppb	17:21:11
2	Be 313.107†	-2671.8	260.5	0.1543 µg/L	0.1543 ppb	17:20:50
2	Cd 226.502†	-106.1	38.6	0.9740 µg/L	0.9740 ppb	17:21:11
2	Co 228.616†	114007.7	110736.6	5015.0 µg/L	5015.0 ppb	17:20:50
2	Cr 267.716†	-23.2	27.9	0.5600 µg/L	0.5600 ppb	17:20:50
2	Cu 324.752†	1789.0	-806.1	-5.2714 µg/L	-5.2714 ppb	17:20:50
2	Mn 257.610†	-160.2	100.4	0.3070 µg/L	0.3070 ppb	17:21:11
2	Mo 202.031†	1.7	7.0	0.6793 µg/L	0.6793 ppb	17:21:11
2	Ni 231.604†	365.6	42.8	-3.8392 µg/L	-3.8392 ppb	17:21:11
2	P 214.914†	5616.7	5440.3	10772 µg/L	10772 ppb	17:20:50
2	Pb 220.353†	110.3	16.2	3.9509 µg/L	3.9509 ppb	17:21:11
2	S 181.975 Axial†	18.6	-0.9	-3.7186 µg/L	-3.7186 ppb	17:21:11
2	Sb 206.836†	25.8	2.5	2.3409 µg/L	2.3409 ppb	17:21:11
2	Se 196.026†	13.5	-6.2	-8.8057 µg/L	-8.8057 ppb	17:21:11
2	SiO2†	425202.9	411618.8	81248 µg/L	81248 ppb	17:20:45
2	Si 251.611†	509536.8	494615.4	37602 µg/L	37602 ppb	17:20:45
2	Sn 189.927†	2.6	2.2	0.9156 µg/L	0.9156 ppb	17:21:11
2	Ti 334.940†	589.0	397.1	0.8822 µg/L	0.8822 ppb	17:20:50
2	Tl 190.801†	0.9	23.3	13.383 µg/L	13.383 ppb	17:21:11
2	U 409.014†	-89.3	-9.7	-0.7935 µg/L	-0.7935 ppb	17:20:50
2	V 292.402†	-20.8	24.5	0.2365 µg/L	0.2365 ppb	17:20:50
2	Zn 213.857†	620.1	67.9	1.5977 µg/L	1.5977 ppb	17:21:11
3	Sc RADIAL	56192.1	56192.1	99.5 %		17:19:41
3	Al 396.153Radial†	-3.6	-11.0	-7.6627 µg/L	-7.6627 ppb	17:19:41
3	Ca 317.933Radial†	218.7	8.6	7.3845 µg/L	7.3845 ppb	17:20:01
3	Fe 238.204 Radial†	9.7	-6.8	38.692 µg/L	38.692 ppb	17:20:01
3	K 766.490 Radial†	214.2	50.4	32.899 µg/L	32.899 ppb	17:19:41

3	Mg 279.077 IEC†	13.9	1.2	10.769 µg/L	10.769 ppb	17:20:01
3	Na 589.592 Radial†	600.0	131.0	40.239 µg/L	40.239 ppb	17:19:41
3	Sr 421.552†	67.6	39.2	0.3616 µg/L	0.3616 ppb	17:19:41
3	Sc 361.383	1998637.7	1998637.7	101.81 %		17:21:17
3	Y 371.029	1373104.8	1373104.8	101.50 %		17:21:17
3	Ag 328.068†	-417.7	-8.6	-0.0666 µg/L	-0.0666 ppb	17:21:23
3	As 188.979†	2369.6	2327.9	4172.3 µg/L	4172.3 ppb	17:21:43
3	B 249.677†	832.0	433.0	17.679 µg/L	17.679 ppb	17:21:23
3	Ba 233.527†	-4.2	12.9	0.3111 µg/L	0.3111 ppb	17:21:43
3	Be 313.107†	-2497.8	402.3	0.2384 µg/L	0.2384 ppb	17:21:23
3	Cd 226.502†	-118.0	25.8	0.6517 µg/L	0.6517 ppb	17:21:43
3	Co 228.616†	98118.9	96373.3	4364.5 µg/L	4364.5 ppb	17:21:23
3	Cr 267.716†	-6.1	44.4	0.8924 µg/L	0.8924 ppb	17:21:23
3	Cu 324.752†	1945.6	-632.7	-4.1375 µg/L	-4.1375 ppb	17:21:23
3	Mn 257.610†	-181.8	77.4	0.2349 µg/L	0.2349 ppb	17:21:43
3	Mo 202.031†	-0.1	5.3	0.5134 µg/L	0.5134 ppb	17:21:43
3	Ni 231.604†	349.6	31.0	-3.6536 µg/L	-3.6536 ppb	17:21:43
3	P 214.914†	4913.6	4810.9	9525.5 µg/L	9525.5 ppb	17:21:23
3	Pb 220.353†	106.2	13.4	3.2602 µg/L	3.2602 ppb	17:21:43
3	S 181.975 Axial†	19.1	-0.2	-0.8917 µg/L	-0.8917 ppb	17:21:43
3	Sb 206.836†	17.0	-5.8	-5.3639 µg/L	-5.3639 ppb	17:21:43
3	Se 196.026†	14.4	-5.1	-7.3641 µg/L	-7.3641 ppb	17:21:43
3	SiO2†	388378.1	380084.6	75024 µg/L	75024 ppb	17:21:17
3	Si 251.611†	465723.5	457136.5	34752 µg/L	34752 ppb	17:21:17
3	Sn 189.927†	7.2	6.7	2.8419 µg/L	2.8419 ppb	17:21:43
3	Ti 334.940†	599.4	413.7	0.9146 µg/L	0.9146 ppb	17:21:23
3	Tl 190.801†	-3.1	19.4	10.494 µg/L	10.494 ppb	17:21:43
3	U 409.014†	-33.0	44.6	3.7148 µg/L	3.7148 ppb	17:21:23
3	V 292.402†	-34.4	11.0	0.1103 µg/L	0.1103 ppb	17:21:23
3	Zn 213.857†	609.9	64.6	1.5181 µg/L	1.5181 ppb	17:21:43

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004230.5	102.09 %		0.757			0.74%
Sc RADIAL	56482.4	100.0 %		0.93			0.93%
Y 371.029	1377579.7	101.84 %		0.725			0.71%
Ag 328.068†	1.8	0.0115 µg/L		0.11324	0.0115 ppb	0.11324	983.61%
Al 396.153Radial†	-14.3	-9.9961 µg/L		2.35074	-9.9961 ppb	2.35074	23.52%
As 188.979†	2627.8	4709.7 µg/L		477.13	4709.7 ppb	477.13	10.13%
B 249.677†	445.4	18.187 µg/L		0.7573	18.187 ppb	0.7573	4.16%
Ba 233.527†	13.1	0.3156 µg/L		0.01910	0.3156 ppb	0.01910	6.05%
Be 313.107†	307.9	0.1824 µg/L		0.04852	0.1824 ppb	0.04852	26.60%
Ca 317.933Radial†	10.0	8.5144 µg/L		4.07847	8.5144 ppb	4.07847	47.90%
Cd 226.502†	35.4	0.8912 µg/L		0.21072	0.8912 ppb	0.21072	23.64%
Co 228.616†	106714.5	4832.9 µg/L		408.90	4832.9 ppb	408.90	8.46%
Cr 267.716†	34.8	0.6996 µg/L		0.17243	0.6996 ppb	0.17243	24.65%
Cu 324.752†	-734.4	-4.8027 µg/L		0.59198	-4.8027 ppb	0.59198	12.33%
Fe 238.204 Radial†	-8.0	39.577 µg/L		3.7566	39.577 ppb	3.7566	9.49%
K 766.490 Radial†	54.0	35.239 µg/L		2.5339	35.239 ppb	2.5339	7.19%
Mg 279.077 IEC†	-2.3	-20.531 µg/L		29.3558	-20.531 ppb	29.3558	142.98%
Mn 257.610†	92.8	0.2832 µg/L		0.04179	0.2832 ppb	0.04179	14.76%
Mo 202.031†	8.5	0.8285 µg/L		0.41049	0.8285 ppb	0.41049	49.55%
Na 589.592 Radial†	126.3	38.800 µg/L		1.2520	38.800 ppb	1.2520	3.23%
Ni 231.604†	46.3	-3.4493 µg/L		0.52296	-3.4493 ppb	0.52296	15.16%
P 214.914†	5270.9	10436 µg/L		797.7	10436 ppb	797.7	7.64%
Pb 220.353†	13.7	3.3319 µg/L		0.58655	3.3319 ppb	0.58655	17.60%
S 181.975 Axial†	-2.9	-11.944 µg/L		16.7551	-11.944 ppb	16.7551	140.28%
Sb 206.836†	-0.0	-0.0338 µg/L		4.62516	-0.0338 ppb	4.62516	>999.9%
Se 196.026†	-5.1	-7.3577 µg/L		1.45126	-7.3577 ppb	1.45126	19.72%
SiO2†	403608.1	79667 µg/L		4088.7	79667 ppb	4088.7	5.13%
Si 251.611†	485066.3	36876 µg/L		1869.2	36876 ppb	1869.2	5.07%
Sn 189.927†	5.4	2.2626 µg/L		1.17039	2.2626 ppb	1.17039	51.73%
Sr 421.552†	25.2	0.2325 µg/L		0.16530	0.2325 ppb	0.16530	71.11%
Ti 334.940†	409.0	0.9067 µg/L		0.02163	0.9067 ppb	0.02163	2.39%
Tl 190.801†	21.8	12.064 µg/L		1.4608	12.064 ppb	1.4608	12.11%
U 409.014†	6.0	0.5104 µg/L		2.79101	0.5104 ppb	2.79101	546.79%
V 292.402†	31.1	0.3038 µg/L		0.23456	0.3038 ppb	0.23456	77.20%
Zn 213.857†	73.7	1.7297 µg/L		0.30016	1.7297 ppb	0.30016	17.35%

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 17:21:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc RADIAL	55997.1	55997.1	99.1	%		17:22:28
1	Al 396.153Radial†	7484.4	7543.7	5236.5	µg/L	5236.5 ppb	17:22:28
1	Ca 317.933Radial†	6284.2	6128.9	5235.2	µg/L	5235.2 ppb	17:22:48
1	Fe 238.204 Radial†	689.0	678.6	5363.5	µg/L	5363.5 ppb	17:22:48
1	K 766.490 Radial†	8069.9	7976.8	5209.8	µg/L	5209.8 ppb	17:22:28
1	Mg 279.077 IEC†	607.2	599.8	5365.3	µg/L	5365.3 ppb	17:22:48
1	Na 589.592 Radial†	34612.1	34448.1	10580	µg/L	10580 ppb	17:22:28
1	Sr 421.552†	55249.7	55712.7	513.96	µg/L	513.96 ppb	17:22:28
1	Sc 361.383	1941292.6	1941292.6	98.888	%		17:23:51
1	Y 371.029	1335522.5	1335522.5	98.726	%		17:23:51
1	Ag 328.068†	70158.7	71349.1	532.40	µg/L	532.40 ppb	17:23:57
1	As 188.979†	304.1	308.0	550.96	µg/L	550.96 ppb	17:24:18
1	B 249.677†	13216.5	12981.0	527.15	µg/L	527.15 ppb	17:23:57
1	Ba 233.527†	22082.2	22347.5	537.47	µg/L	537.47 ppb	17:23:57
1	Be 313.107†	881057.8	893819.8	530.28	µg/L	530.28 ppb	17:23:51
1	Cd 226.502†	21234.9	21615.4	539.04	µg/L	539.04 ppb	17:23:57
1	Co 228.616†	11841.2	11972.4	541.59	µg/L	541.59 ppb	17:23:57
1	Cr 267.716†	26708.5	27059.1	543.83	µg/L	543.83 ppb	17:23:57
1	Cu 324.752†	83577.2	81973.2	535.82	µg/L	535.82 ppb	17:23:57
1	Mn 257.610†	169839.0	172004.6	539.13	µg/L	539.13 ppb	17:23:51
1	Mo 202.031†	5552.9	5620.6	550.61	µg/L	550.61 ppb	17:24:18
1	Ni 231.604†	11057.1	10869.0	541.24	µg/L	541.24 ppb	17:23:57
1	P 214.914†	1373.5	1373.6	2668.4	µg/L	2668.4 ppb	17:24:18
1	Pb 220.353†	2326.6	2261.9	550.03	µg/L	550.03 ppb	17:24:18
1	S 181.975 Axial†	279.6	263.8	1093.9	µg/L	1093.9 ppb	17:24:18
1	Sb 206.836†	611.1	595.5	549.07	µg/L	549.07 ppb	17:24:18
1	Se 196.026†	411.0	396.3	565.02	µg/L	565.02 ppb	17:24:18
1	SiO2†	30336.5	29286.0	5780.7	µg/L	5780.7 ppb	17:23:57
1	Si 251.611†	35486.6	35575.0	2704.5	µg/L	2704.5 ppb	17:23:57
1	Sn 189.927†	1307.2	1321.6	557.36	µg/L	557.36 ppb	17:24:18
1	Ti 334.940†	237204.0	239696.0	529.92	µg/L	529.92 ppb	17:23:51
1	Tl 190.801†	383.1	409.8	538.64	µg/L	538.64 ppb	17:24:18
1	U 409.014†	6443.7	6593.3	546.74	µg/L	546.74 ppb	17:23:57
1	V 292.402†	54369.9	55025.9	542.94	µg/L	542.94 ppb	17:23:57
1	Zn 213.857†	23470.8	23200.3	540.50	µg/L	540.50 ppb	17:23:57
2	Sc RADIAL	55374.2	55374.2	98.0	%		17:22:54
2	Al 396.153Radial†	7516.3	7661.2	5318.8	µg/L	5318.8 ppb	17:22:54
2	Ca 317.933Radial†	6316.8	6233.4	5324.5	µg/L	5324.5 ppb	17:23:14
2	Fe 238.204 Radial†	689.1	686.5	5425.5	µg/L	5425.5 ppb	17:23:14
2	K 766.490 Radial†	8078.4	8077.0	5275.2	µg/L	5275.2 ppb	17:22:54
2	Mg 279.077 IEC†	616.4	616.1	5510.0	µg/L	5510.0 ppb	17:23:14
2	Na 589.592 Radial†	34699.9	34930.4	10729	µg/L	10729 ppb	17:22:54
2	Sr 421.552†	55215.6	56305.0	519.42	µg/L	519.42 ppb	17:22:54
2	Sc 361.383	1972008.9	1972008.9	100.45	%		17:24:25
2	Y 371.029	1357440.8	1357440.8	100.35	%		17:24:25
2	Ag 328.068†	69394.0	69482.8	518.48	µg/L	518.48 ppb	17:24:30
2	As 188.979†	292.5	291.6	521.69	µg/L	521.69 ppb	17:24:51
2	B 249.677†	13098.0	12654.8	513.80	µg/L	513.80 ppb	17:24:30
2	Ba 233.527†	21766.9	21685.9	521.56	µg/L	521.56 ppb	17:24:30
2	Be 313.107†	875557.6	874466.7	518.80	µg/L	518.80 ppb	17:24:25
2	Cd 226.502†	20934.5	20981.8	523.22	µg/L	523.22 ppb	17:24:30
2	Co 228.616†	11674.3	11619.7	525.62	µg/L	525.62 ppb	17:24:30
2	Cr 267.716†	26349.4	26281.0	528.19	µg/L	528.19 ppb	17:24:30
2	Cu 324.752†	82762.2	79845.4	521.94	µg/L	521.94 ppb	17:24:30
2	Mn 257.610†	168819.9	168315.0	527.58	µg/L	527.58 ppb	17:24:25
2	Mo 202.031†	5374.4	5355.5	524.65	µg/L	524.65 ppb	17:24:51
2	Ni 231.604†	10896.7	10535.3	524.62	µg/L	524.62 ppb	17:24:30
2	P 214.914†	1349.1	1327.7	2578.5	µg/L	2578.5 ppb	17:24:51
2	Pb 220.353†	2255.8	2154.7	523.94	µg/L	523.94 ppb	17:24:51

2	S 181.975 Axial†	273.6	253.5	1051.2 µg/L	1051.2 ppb	17:24:51
2	Sb 206.836†	597.1	571.9	527.15 µg/L	527.15 ppb	17:24:51
2	Se 196.026†	399.0	377.9	539.15 µg/L	539.15 ppb	17:24:51
2	SiO2†	30015.2	28488.3	5623.2 µg/L	5623.2 ppb	17:24:30
2	Si 251.611†	35058.2	34589.5	2629.6 µg/L	2629.6 ppb	17:24:30
2	Sn 189.927†	1256.6	1250.5	527.41 µg/L	527.41 ppb	17:24:51
2	Ti 334.940†	235686.9	234449.5	518.30 µg/L	518.30 ppb	17:24:25
2	Tl 190.801†	379.7	400.4	526.29 µg/L	526.29 ppb	17:24:51
2	U 409.014†	6398.7	6446.9	534.56 µg/L	534.56 ppb	17:24:30
2	V 292.402†	53704.7	53507.4	527.90 µg/L	527.90 ppb	17:24:30
2	Zn 213.857†	23141.6	22502.9	524.22 µg/L	524.22 ppb	17:24:30
3	Sc RADIAL	55679.0	55679.0	98.6 %		17:23:19
3	Al 396.153Radial†	7596.6	7700.7	5348.4 µg/L	5348.4 ppb	17:23:19
3	Ca 317.933Radial†	6283.1	6164.0	5265.1 µg/L	5265.1 ppb	17:23:40
3	Fe 238.204 Radial†	686.1	679.6	5369.7 µg/L	5369.7 ppb	17:23:40
3	K 766.490 Radial†	8154.7	8109.3	5296.3 µg/L	5296.3 ppb	17:23:19
3	Mg 279.077 IEC†	612.2	608.4	5439.6 µg/L	5439.6 ppb	17:23:40
3	Na 589.592 Radial†	34975.0	35015.8	10755 µg/L	10755 ppb	17:23:19
3	Sr 421.552†	55908.1	56699.3	523.06 µg/L	523.06 ppb	17:23:19
3	Sc 361.383	1952535.0	1952535.0	99.461 %		17:24:58
3	Y 371.029	1343624.0	1343624.0	99.325 %		17:24:58
3	Ag 328.068†	63360.5	64105.6	478.17 µg/L	478.17 ppb	17:25:04
3	As 188.979†	241.7	243.4	435.49 µg/L	435.49 ppb	17:25:24
3	B 249.677†	11843.3	11523.4	467.57 µg/L	467.57 ppb	17:25:04
3	Ba 233.527†	19104.2	19224.8	462.34 µg/L	462.34 ppb	17:25:04
3	Be 313.107†	780835.5	787924.2	467.46 µg/L	467.46 ppb	17:24:58
3	Cd 226.502†	18231.2	18471.7	460.55 µg/L	460.55 ppb	17:25:04
3	Co 228.616†	10034.6	10087.0	456.23 µg/L	456.23 ppb	17:25:04
3	Cr 267.716†	21902.6	22071.8	443.60 µg/L	443.60 ppb	17:25:04
3	Cu 324.752†	72242.1	70090.0	458.26 µg/L	458.26 ppb	17:25:04
3	Mn 257.610†	151408.5	152485.3	478.01 µg/L	478.01 ppb	17:24:58
3	Mo 202.031†	4271.9	4300.4	421.32 µg/L	421.32 ppb	17:25:24
3	Ni 231.604†	9447.8	9186.7	457.48 µg/L	457.48 ppb	17:25:04
3	P 214.914†	1083.3	1073.8	2080.9 µg/L	2080.9 ppb	17:25:24
3	Pb 220.353†	1873.7	1793.0	435.92 µg/L	435.92 ppb	17:25:24
3	S 181.975 Axial†	233.8	216.1	896.36 µg/L	896.36 ppb	17:25:24
3	Sb 206.836†	489.4	469.6	432.51 µg/L	432.51 ppb	17:25:24
3	Se 196.026†	332.8	315.3	451.15 µg/L	451.15 ppb	17:25:24
3	SiO2†	26947.7	25702.2	5073.3 µg/L	5073.3 ppb	17:25:04
3	Si 251.611†	31277.9	31136.9	2367.1 µg/L	2367.1 ppb	17:25:04
3	Sn 189.927†	976.9	981.8	414.09 µg/L	414.09 ppb	17:25:24
3	Ti 334.940†	208555.8	209511.3	463.14 µg/L	463.14 ppb	17:24:58
3	Tl 190.801†	319.8	343.9	452.38 µg/L	452.38 ppb	17:25:24
3	U 409.014†	5254.4	5360.0	444.27 µg/L	444.27 ppb	17:25:04
3	V 292.402†	45815.6	46108.8	454.70 µg/L	454.70 ppb	17:25:04
3	Zn 213.857†	20168.8	19743.8	459.90 µg/L	459.90 ppb	17:25:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1955278.8	99.601 %	0.7916			0.79%
Sc RADIAL	55683.5	98.6 %	0.55			0.56%
Y 371.029	1345529.1	99.466 %	0.8193			0.82%
Ag 328.068†	68312.5	509.69 µg/L	28.165	509.69 ppb	28.165	5.53%
QC value within limits for Ag 328.068 Recovery = 101.94%						
Al 396.153Radial†	7635.2	5301.2 µg/L	57.98	5301.2 ppb	57.98	1.09%
QC value within limits for Al 396.153Radial Recovery = 106.02%						
As 188.979†	281.0	502.71 µg/L	60.027	502.71 ppb	60.027	11.94%
QC value within limits for As 188.979 Recovery = 100.54%						
B 249.677†	12386.4	502.84 µg/L	31.261	502.84 ppb	31.261	6.22%
QC value within limits for B 249.677 Recovery = 100.57%						
Ba 233.527†	21086.1	507.12 µg/L	39.588	507.12 ppb	39.588	7.81%
QC value within limits for Ba 233.527 Recovery = 101.42%						
Be 313.107†	852070.2	505.52 µg/L	33.453	505.52 ppb	33.453	6.62%
QC value within limits for Be 313.107 Recovery = 101.10%						
Ca 317.933Radial†	6175.4	5274.9 µg/L	45.45	5274.9 ppb	45.45	0.86%
QC value within limits for Ca 317.933Radial Recovery = 105.50%						
Cd 226.502†	20356.3	507.61 µg/L	41.509	507.61 ppb	41.509	8.18%
QC value within limits for Cd 226.502 Recovery = 101.52%						
Co 228.616†	11226.4	507.82 µg/L	45.380	507.82 ppb	45.380	8.94%

QC value within limits for Co 228.616 Recovery = 101.56%					
Cr 267.716†	25137.3	505.21 µg/L	53.922	505.21 ppb	53.922 10.67%
QC value within limits for Cr 267.716 Recovery = 101.04%					
Cu 324.752†	77302.9	505.34 µg/L	41.362	505.34 ppb	41.362 8.19%
QC value within limits for Cu 324.752 Recovery = 101.07%					
Fe 238.204 Radial†	681.6	5386.2 µg/L	34.14	5386.2 ppb	34.14 0.63%
QC value within limits for Fe 238.204 Radial Recovery = 107.72%					
K 766.490 Radial†	8054.3	5260.4 µg/L	45.13	5260.4 ppb	45.13 0.86%
QC value within limits for K 766.490 Radial Recovery = 105.21%					
Mg 279.077 IEC†	608.1	5438.3 µg/L	72.33	5438.3 ppb	72.33 1.33%
QC value within limits for Mg 279.077 IEC Recovery = 108.77%					
Mn 257.610†	164268.3	514.91 µg/L	32.475	514.91 ppb	32.475 6.31%
QC value within limits for Mn 257.610 Recovery = 102.98%					
Mo 202.031†	5092.2	498.86 µg/L	68.394	498.86 ppb	68.394 13.71%
QC value within limits for Mo 202.031 Recovery = 99.77%					
Na 589.592 Radial†	34798.1	10688 µg/L	94.0	10688 ppb	94.0 0.88%
QC value within limits for Na 589.592 Radial Recovery = 106.88%					
Ni 231.604†	10197.0	507.78 µg/L	44.349	507.78 ppb	44.349 8.73%
QC value within limits for Ni 231.604 Recovery = 101.56%					
P 214.914†	1258.3	2442.6 µg/L	316.42	2442.6 ppb	316.42 12.95%
QC value within limits for P 214.914 Recovery = 97.70%					
Pb 220.353†	2069.8	503.29 µg/L	59.790	503.29 ppb	59.790 11.88%
QC value within limits for Pb 220.353 Recovery = 100.66%					
S 181.975 Axial†	244.5	1013.8 µg/L	103.94	1013.8 ppb	103.94 10.25%
QC value within limits for S 181.975 Axial Recovery = 101.38%					
Sb 206.836†	545.7	502.91 µg/L	61.945	502.91 ppb	61.945 12.32%
QC value within limits for Sb 206.836 Recovery = 100.58%					
Se 196.026†	363.2	518.44 µg/L	59.692	518.44 ppb	59.692 11.51%
QC value within limits for Se 196.026 Recovery = 103.69%					
SiO2†	27825.5	5492.4 µg/L	371.40	5492.4 ppb	371.40 6.76%
QC value within limits for SiO2 Recovery = 102.71%					
Si 251.611†	33767.1	2567.0 µg/L	177.17	2567.0 ppb	177.17 6.90%
QC value within limits for Si 251.611 Recovery = 102.68%					
Sn 189.927†	1184.6	499.62 µg/L	75.568	499.62 ppb	75.568 15.13%
QC value within limits for Sn 189.927 Recovery = 99.92%					
Sr 421.552†	56239.0	518.81 µg/L	4.581	518.81 ppb	4.581 0.88%
QC value within limits for Sr 421.552 Recovery = 103.76%					
Ti 334.940†	227885.6	503.79 µg/L	35.678	503.79 ppb	35.678 7.08%
QC value within limits for Ti 334.940 Recovery = 100.76%					
Tl 190.801†	384.7	505.77 µg/L	46.646	505.77 ppb	46.646 9.22%
QC value within limits for Tl 190.801 Recovery = 101.15%					
U 409.014†	6133.4	508.52 µg/L	55.977	508.52 ppb	55.977 11.01%
QC value within limits for U 409.014 Recovery = 101.70%					
V 292.402†	51547.4	508.51 µg/L	47.203	508.51 ppb	47.203 9.28%
QC value within limits for V 292.402 Recovery = 101.70%					
Zn 213.857†	21815.7	508.21 µg/L	42.623	508.21 ppb	42.623 8.39%
QC value within limits for Zn 213.857 Recovery = 101.64%					

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 17:25:33

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	55715.1	55715.1	98.6 %		17:26:06
1	Al 396.153Radial†	9.9	2.7	1.8794 µg/L	1.8794 ppb	17:26:06
1	Ca 317.933Radial†	200.0	-8.4	-7.2065 µg/L	-7.2065 ppb	17:26:26
1	Fe 238.204 Radial†	18.1	1.8	14.281 µg/L	14.281 ppb	17:26:26
1	K 766.490 Radial†	190.3	28.0	18.262 µg/L	18.262 ppb	17:26:06
1	Mg 279.077 IEC†	10.8	-1.8	-16.403 µg/L	-16.403 ppb	17:26:26
1	Na 589.592 Radial†	566.5	102.3	31.414 µg/L	31.414 ppb	17:26:06
1	Sr 421.552†	8.2	-20.5	-0.1895 µg/L	-0.1895 ppb	17:26:06
1	Sc 361.383	1953458.7	1953458.7	99.508 %		17:27:28
1	Y 371.029	1347989.6	1347989.6	99.648 %		17:27:28
1	Ag 328.068†	-445.9	-46.5	-0.3428 µg/L	-0.3428 ppb	17:27:34
1	As 188.979†	1.8	2.2	4.0261 µg/L	4.0261 ppb	17:27:54
1	B 249.677†	402.6	20.4	0.8246 µg/L	0.8246 ppb	17:27:54
1	Ba 233.527†	-7.2	9.9	0.2372 µg/L	0.2372 ppb	17:27:54
1	Be 313.107†	-2535.3	307.9	0.1827 µg/L	0.1827 ppb	17:27:34
1	Cd 226.502†	-139.8	1.2	0.0290 µg/L	0.0290 ppb	17:27:54
1	Co 228.616†	8.7	6.8	0.3065 µg/L	0.3065 ppb	17:27:54
1	Cr 267.716†	-42.4	7.8	0.1560 µg/L	0.1560 ppb	17:27:34
1	Cu 324.752†	2642.5	111.8	0.7321 µg/L	0.7321 ppb	17:27:34
1	Mn 257.610†	-204.1	50.9	0.1618 µg/L	0.1618 ppb	17:27:54
1	Mo 202.031†	-2.0	3.3	0.3242 µg/L	0.3242 ppb	17:27:54
1	Ni 231.604†	314.6	3.8	0.1900 µg/L	0.1900 ppb	17:27:54
1	P 214.914†	18.8	3.5	6.8616 µg/L	6.8616 ppb	17:27:54
1	Pb 220.353†	98.3	7.8	1.8853 µg/L	1.8853 ppb	17:27:54
1	S 181.975 Axial†	15.5	-3.4	-14.112 µg/L	-14.112 ppb	17:27:54
1	Sb 206.836†	26.9	4.5	4.1739 µg/L	4.1739 ppb	17:27:54
1	Se 196.026†	12.3	-7.0	-9.7684 µg/L	-9.7684 ppb	17:27:54
1	SiO2†	1515.6	131.5	25.955 µg/L	25.955 ppb	17:27:34
1	Si 251.611†	416.0	107.4	8.1665 µg/L	8.1665 ppb	17:27:54
1	Sn 189.927†	2.2	1.9	0.7860 µg/L	0.7860 ppb	17:27:54
1	Ti 334.940†	256.5	82.7	0.1842 µg/L	0.1842 ppb	17:27:34
1	Tl 190.801†	-25.3	-3.1	-3.9679 µg/L	-3.9679 ppb	17:27:54
1	U 409.014†	32.9	110.1	9.1492 µg/L	9.1492 ppb	17:27:34
1	V 292.402†	-29.6	15.0	0.1604 µg/L	0.1604 ppb	17:27:34
1	Zn 213.857†	546.5	14.8	0.3443 µg/L	0.3443 ppb	17:27:54
2	Sc RADIAL	55504.2	55504.2	98.2 %		17:26:32
2	Al 396.153Radial†	11.6	4.4	3.0699 µg/L	3.0699 ppb	17:26:32
2	Ca 317.933Radial†	200.3	-7.4	-6.2839 µg/L	-6.2839 ppb	17:26:52
2	Fe 238.204 Radial†	17.9	1.6	12.645 µg/L	12.645 ppb	17:26:52
2	K 766.490 Radial†	201.9	40.6	26.491 µg/L	26.491 ppb	17:26:32
2	Mg 279.077 IEC†	10.5	-2.1	-19.078 µg/L	-19.078 ppb	17:26:52
2	Na 589.592 Radial†	562.4	100.3	30.804 µg/L	30.804 ppb	17:26:32
2	Sr 421.552†	36.5	8.4	0.0774 µg/L	0.0774 ppb	17:26:32
2	Sc 361.383	1950778.5	1950778.5	99.371 %		17:28:00
2	Y 371.029	1346193.0	1346193.0	99.515 %		17:28:00
2	Ag 328.068†	-396.0	3.1	0.0257 µg/L	0.0257 ppb	17:28:06
2	As 188.979†	1.1	1.6	2.8532 µg/L	2.8532 ppb	17:28:26
2	B 249.677†	390.0	8.3	0.3322 µg/L	0.3322 ppb	17:28:26
2	Ba 233.527†	-6.8	10.2	0.2452 µg/L	0.2452 ppb	17:28:26
2	Be 313.107†	-2616.4	222.8	0.1321 µg/L	0.1321 ppb	17:28:06
2	Cd 226.502†	-139.8	1.0	0.0242 µg/L	0.0242 ppb	17:28:26
2	Co 228.616†	3.7	1.8	0.0803 µg/L	0.0803 ppb	17:28:26
2	Cr 267.716†	-54.5	-4.5	-0.0900 µg/L	-0.0900 ppb	17:28:06
2	Cu 324.752†	2637.6	110.5	0.7233 µg/L	0.7233 ppb	17:28:06
2	Mn 257.610†	-213.1	41.5	0.1325 µg/L	0.1325 ppb	17:28:26
2	Mo 202.031†	-0.0	5.3	0.5204 µg/L	0.5204 ppb	17:28:26
2	Ni 231.604†	311.7	1.3	0.0651 µg/L	0.0651 ppb	17:28:26
2	P 214.914†	7.2	-8.1	-16.019 µg/L	-16.019 ppb	17:28:26
2	Pb 220.353†	96.7	6.4	1.5474 µg/L	1.5474 ppb	17:28:26

2	S 181.975 Axial†	17.4	-1.4	-5.8210 µg/L	-5.8210 ppb	17:28:26
2	Sb 206.836†	19.7	-2.6	-2.3998 µg/L	-2.3998 ppb	17:28:26
2	Se 196.026†	15.0	-4.2	-5.8108 µg/L	-5.8108 ppb	17:28:26
2	SiO2†	1459.9	77.6	15.313 µg/L	15.313 ppb	17:28:06
2	Si 251.611†	412.0	104.0	7.9062 µg/L	7.9062 ppb	17:28:26
2	Sn 189.927†	7.8	7.4	3.1294 µg/L	3.1294 ppb	17:28:26
2	Ti 334.940†	270.4	97.1	0.2161 µg/L	0.2161 ppb	17:28:06
2	Tl 190.801†	-21.2	1.0	1.3155 µg/L	1.3155 ppb	17:28:26
2	U 409.014†	-29.9	47.0	3.9019 µg/L	3.9019 ppb	17:28:06
2	V 292.402†	-11.1	33.5	0.3361 µg/L	0.3361 ppb	17:28:06
2	Zn 213.857†	544.6	13.6	0.3180 µg/L	0.3180 ppb	17:28:26
3	Sc RADIAL	55576.2	55576.2	98.4 %		17:26:57
3	Al 396.153Radial†	-4.2	-11.6	-8.0814 µg/L	-8.0814 ppb	17:26:57
3	Ca 317.933Radial†	198.4	-9.6	-8.1878 µg/L	-8.1878 ppb	17:27:18
3	Fe 238.204 Radial†	17.1	0.8	6.2197 µg/L	6.2197 ppb	17:27:18
3	K 766.490 Radial†	182.5	20.5	13.397 µg/L	13.397 ppb	17:26:57
3	Mg 279.077 IEC†	14.4	1.8	16.514 µg/L	16.514 ppb	17:27:18
3	Na 589.592 Radial†	564.0	101.1	31.056 µg/L	31.056 ppb	17:26:57
3	Sr 421.552†	84.4	57.0	0.5260 µg/L	0.5260 ppb	17:26:57
3	Sc 361.383	1984583.7	1984583.7	101.09 %		17:28:32
3	Y 371.029	1368650.9	1368650.9	101.18 %		17:28:32
3	Ag 328.068†	-463.7	-57.1	-0.4221 µg/L	-0.4221 ppb	17:28:38
3	As 188.979†	1.5	1.9	3.4901 µg/L	3.4901 ppb	17:28:58
3	B 249.677†	385.7	-2.6	-0.1102 µg/L	-0.1102 ppb	17:28:58
3	Ba 233.527†	-8.4	8.8	0.2107 µg/L	0.2107 ppb	17:28:58
3	Be 313.107†	-2606.1	277.8	0.1648 µg/L	0.1648 ppb	17:28:38
3	Cd 226.502†	-137.9	5.3	0.1312 µg/L	0.1312 ppb	17:28:58
3	Co 228.616†	11.7	9.7	0.4385 µg/L	0.4385 ppb	17:28:58
3	Cr 267.716†	-56.0	-5.0	-0.1002 µg/L	-0.1002 ppb	17:28:38
3	Cu 324.752†	2581.0	9.4	0.0621 µg/L	0.0621 ppb	17:28:38
3	Mn 257.610†	-221.0	37.4	0.1174 µg/L	0.1174 ppb	17:28:58
3	Mo 202.031†	2.7	8.0	0.7835 µg/L	0.7835 ppb	17:28:58
3	Ni 231.604†	311.4	-4.3	-0.2151 µg/L	-0.2151 ppb	17:28:58
3	P 214.914†	14.9	-0.6	-1.1261 µg/L	-1.1261 ppb	17:28:58
3	Pb 220.353†	89.4	-2.5	-0.6244 µg/L	-0.6244 ppb	17:28:58
3	S 181.975 Axial†	14.9	-4.2	-17.388 µg/L	-17.388 ppb	17:28:58
3	Sb 206.836†	22.0	-0.7	-0.6331 µg/L	-0.6331 ppb	17:28:58
3	Se 196.026†	16.1	-3.3	-4.6875 µg/L	-4.6875 ppb	17:28:58
3	SiO2†	1488.2	80.6	15.904 µg/L	15.904 ppb	17:28:38
3	Si 251.611†	405.3	90.2	6.8609 µg/L	6.8609 ppb	17:28:58
3	Sn 189.927†	5.4	5.0	2.0931 µg/L	2.0931 ppb	17:28:58
3	Ti 334.940†	242.9	65.3	0.1429 µg/L	0.1429 ppb	17:28:38
3	Tl 190.801†	-20.1	2.5	3.3063 µg/L	3.3063 ppb	17:28:58
3	U 409.014†	41.4	118.0	9.8042 µg/L	9.8042 ppb	17:28:38
3	V 292.402†	-37.8	7.4	0.0885 µg/L	0.0885 ppb	17:28:38
3	Zn 213.857†	537.5	-2.8	-0.0653 µg/L	-0.0653 ppb	17:28:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1962940.3	99.991 %	0.9572			0.96%
Sc RADIAL	55598.5	98.4 %	0.19			0.19%
Y 371.029	1354277.8	100.11 %	0.923			0.92%
Ag 328.068†	-33.5	-0.2464 µg/L	0.23900	-0.2464 ppb	0.23900	96.99%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.5	-1.0440 µg/L	6.12354	-1.0440 ppb	6.12354	586.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.9	3.4565 µg/L	0.58720	3.4565 ppb	0.58720	16.99%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	8.7	0.3489 µg/L	0.46764	0.3489 ppb	0.46764	134.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.6	0.2310 µg/L	0.01805	0.2310 ppb	0.01805	7.81%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	269.5	0.1599 µg/L	0.02562	0.1599 ppb	0.02562	16.03%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-8.5	-7.2261 µg/L	0.95208	-7.2261 ppb	0.95208	13.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	2.5	0.0615 µg/L	0.06046	0.0615 ppb	0.06046	98.36%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.1	0.2751 µg/L	0.18114	0.2751 ppb	0.18114	65.85%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-0.6	-0.0114 µg/L	0.14502	-0.0114 ppb	0.14502 >999.9%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	77.3	0.5058 µg/L	0.38426	0.5058 ppb	0.38426 75.97%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	1.4	11.049 µg/L	4.2612	11.049 ppb	4.2612 38.57%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	29.7	19.384 µg/L	6.6186	19.384 ppb	6.6186 34.15%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-0.7	-6.3222 µg/L	19.82205	-6.3222 ppb	19.82205 313.53%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	43.3	0.1372 µg/L	0.02261	0.1372 ppb	0.02261 16.47%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	5.5	0.5427 µg/L	0.23045	0.5427 ppb	0.23045 42.46%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	101.2	31.091 µg/L	0.3066	31.091 ppb	0.3066 0.99%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	0.3	0.0133 µg/L	0.20747	0.0133 ppb	0.20747 >999.9%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-1.7	-3.4277 µg/L	11.61243	-3.4277 ppb	11.61243 338.78%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	3.9	0.9361 µg/L	1.36196	0.9361 ppb	1.36196 145.50%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-3.0	-12.440 µg/L	5.9620	-12.440 ppb	5.9620 47.92%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	0.4	0.3803 µg/L	3.40201	0.3803 ppb	3.40201 894.45%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-4.8	-6.7556 µg/L	2.66893	-6.7556 ppb	2.66893 39.51%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	96.5	19.057 µg/L	5.9811	19.057 ppb	5.9811 31.38%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	100.6	7.6446 µg/L	0.69104	7.6446 ppb	0.69104 9.04%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	4.8	2.0028 µg/L	1.17429	2.0028 ppb	1.17429 58.63%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	15.0	0.1380 µg/L	0.36157	0.1380 ppb	0.36157 262.05%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	81.7	0.1811 µg/L	0.03671	0.1811 ppb	0.03671 20.27%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.2	0.2179 µg/L	3.75923	0.2179 ppb	3.75923 >999.9%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	91.7	7.6184 µg/L	3.23526	7.6184 ppb	3.23526 42.47%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	18.6	0.1950 µg/L	0.12739	0.1950 ppb	0.12739 65.33%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	8.5	0.1990 µg/L	0.22924	0.1990 ppb	0.22924 115.20%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 17:52:13

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	56387.7	56387.7	99.8 %		17:52:51
1	Al 396.153Radial†	7516.2	7523.2	5222.3 µg/L	5222.3 ppb	17:52:51
1	Ca 317.933Radial†	6203.6	6004.2	5128.7 µg/L	5128.7 ppb	17:53:12
1	Fe 238.204 Radial†	678.6	663.3	5242.5 µg/L	5242.5 ppb	17:53:12
1	K 766.490 Radial†	8065.5	7916.0	5170.1 µg/L	5170.1 ppb	17:52:51
1	Mg 279.077 IEC†	612.7	601.1	5376.4 µg/L	5376.4 ppb	17:53:12
1	Na 589.592 Radial†	34827.6	34422.1	10573 µg/L	10573 ppb	17:52:51
1	Sr 421.552†	55284.5	55361.6	510.72 µg/L	510.72 ppb	17:52:51
1	Sc 361.383	1961302.2	1961302.2	99.907 %		17:54:15
1	Y 371.029	1346537.9	1346537.9	99.540 %		17:54:15
1	Ag 328.068†	69774.1	70240.4	524.12 µg/L	524.12 ppb	17:54:21
1	As 188.979†	301.3	302.0	540.22 µg/L	540.22 ppb	17:54:41
1	B 249.677†	13080.8	12708.8	516.10 µg/L	516.10 ppb	17:54:21
1	Ba 233.527†	21956.6	21994.0	528.97 µg/L	528.97 ppb	17:54:21
1	Be 313.107†	883536.0	887210.5	526.36 µg/L	526.36 ppb	17:54:15
1	Cd 226.502†	21042.7	21203.9	528.78 µg/L	528.78 ppb	17:54:21
1	Co 228.616†	11741.3	11750.3	531.54 µg/L	531.54 ppb	17:54:21
1	Cr 267.716†	26482.6	26557.5	533.75 µg/L	533.75 ppb	17:54:21
1	Cu 324.752†	83088.9	80622.2	526.99 µg/L	526.99 ppb	17:54:21
1	Mn 257.610†	170434.3	170848.3	535.50 µg/L	535.50 ppb	17:54:15
1	Mo 202.031†	5552.2	5562.7	544.93 µg/L	544.93 ppb	17:54:41
1	Ni 231.604†	10987.8	10685.6	532.11 µg/L	532.11 ppb	17:54:21
1	P 214.914†	1368.8	1354.8	2632.0 µg/L	2632.0 ppb	17:54:41
1	Pb 220.353†	2310.1	2221.3	540.17 µg/L	540.17 ppb	17:54:41
1	S 181.975 Axial†	278.0	259.3	1075.2 µg/L	1075.2 ppb	17:54:41
1	Sb 206.836†	616.4	594.4	548.12 µg/L	548.12 ppb	17:54:41
1	Se 196.026†	407.1	388.1	553.19 µg/L	553.19 ppb	17:54:41
1	SiO2†	29956.0	28592.2	5643.7 µg/L	5643.7 ppb	17:54:21
1	Si 251.611†	34932.9	34654.6	2634.5 µg/L	2634.5 ppb	17:54:21
1	Sn 189.927†	1295.2	1296.1	546.62 µg/L	546.62 ppb	17:54:41
1	Ti 334.940†	237959.8	238005.3	526.18 µg/L	526.18 ppb	17:54:15
1	Tl 190.801†	387.6	410.3	539.25 µg/L	539.25 ppb	17:54:41
1	U 409.014†	6411.5	6494.5	538.55 µg/L	538.55 ppb	17:54:21
1	V 292.402†	54050.9	54145.8	534.27 µg/L	534.27 ppb	17:54:21
1	Zn 213.857†	23288.3	22775.5	530.59 µg/L	530.59 ppb	17:54:21
2	Sc RADIAL	56513.7	56513.7	100 %		17:53:17
2	Al 396.153Radial†	7511.3	7501.5	5207.6 µg/L	5207.6 ppb	17:53:17
2	Ca 317.933Radial†	6229.5	6016.2	5139.0 µg/L	5139.0 ppb	17:53:38
2	Fe 238.204 Radial†	684.9	668.1	5280.5 µg/L	5280.5 ppb	17:53:38
2	K 766.490 Radial†	8100.3	7932.7	5181.0 µg/L	5181.0 ppb	17:53:17
2	Mg 279.077 IEC†	601.5	588.5	5263.5 µg/L	5263.5 ppb	17:53:38
2	Na 589.592 Radial†	34828.0	34344.7	10549 µg/L	10549 ppb	17:53:17
2	Sr 421.552†	55539.3	55492.7	511.93 µg/L	511.93 ppb	17:53:17
2	Sc 361.383	1968482.8	1968482.8	100.27 %		17:54:48
2	Y 371.029	1351706.6	1351706.6	99.922 %		17:54:48
2	Ag 328.068†	69757.2	69968.7	522.10 µg/L	522.10 ppb	17:54:54
2	As 188.979†	290.5	290.2	519.13 µg/L	519.13 ppb	17:55:15
2	B 249.677†	13075.3	12655.5	513.91 µg/L	513.91 ppb	17:54:54
2	Ba 233.527†	21957.1	21914.4	527.05 µg/L	527.05 ppb	17:54:54
2	Be 313.107†	886040.3	886482.1	525.93 µg/L	525.93 ppb	17:54:48
2	Cd 226.502†	21056.7	21141.0	527.21 µg/L	527.21 ppb	17:54:54
2	Co 228.616†	11735.1	11701.2	529.30 µg/L	529.30 ppb	17:54:54
2	Cr 267.716†	26499.8	26477.9	532.15 µg/L	532.15 ppb	17:54:54
2	Cu 324.752†	83008.4	80238.5	524.49 µg/L	524.49 ppb	17:54:54
2	Mn 257.610†	171057.7	170847.6	535.50 µg/L	535.50 ppb	17:54:48
2	Mo 202.031†	5398.9	5389.5	527.98 µg/L	527.98 ppb	17:55:15
2	Ni 231.604†	11020.6	10678.2	531.74 µg/L	531.74 ppb	17:54:54
2	P 214.914†	1347.0	1328.0	2579.1 µg/L	2579.1 ppb	17:55:15
2	Pb 220.353†	2257.9	2160.8	525.43 µg/L	525.43 ppb	17:55:15

2	S 181.975 Axial†	275.1	255.4	1059.1 µg/L	1059.1 ppb	17:55:15
2	Sb 206.836†	599.1	574.9	529.97 µg/L	529.97 ppb	17:55:15
2	Se 196.026†	397.7	377.3	538.13 µg/L	538.13 ppb	17:55:15
2	SiO2†	29922.8	28449.7	5615.6 µg/L	5615.6 ppb	17:54:54
2	Si 251.611†	35029.2	34623.1	2632.1 µg/L	2632.1 ppb	17:54:54
2	Sn 189.927†	1263.5	1259.7	531.25 µg/L	531.25 ppb	17:55:15
2	Ti 334.940†	238598.7	237773.6	525.67 µg/L	525.67 ppb	17:54:48
2	Tl 190.801†	380.1	401.4	527.72 µg/L	527.72 ppb	17:55:15
2	U 409.014†	6311.3	6371.2	528.30 µg/L	528.30 ppb	17:54:54
2	V 292.402†	54031.0	53928.5	532.01 µg/L	532.01 ppb	17:54:54
2	Zn 213.857†	23199.9	22602.3	526.54 µg/L	526.54 ppb	17:54:54
3	Sc RADIAL	56302.2	56302.2	99.7 %		17:53:43
3	Al 396.153Radial†	7458.4	7476.7	5192.5 µg/L	5192.5 ppb	17:53:43
3	Ca 317.933Radial†	6210.0	6020.1	5142.2 µg/L	5142.2 ppb	17:54:03
3	Fe 238.204 Radial†	676.1	661.8	5229.6 µg/L	5229.6 ppb	17:54:03
3	K 766.490 Radial†	8076.1	7938.9	5185.0 µg/L	5185.0 ppb	17:53:43
3	Mg 279.077 IEC†	611.6	600.9	5372.7 µg/L	5372.7 ppb	17:54:03
3	Na 589.592 Radial†	34581.8	34228.4	10513 µg/L	10513 ppb	17:53:43
3	Sr 421.552†	55197.9	55358.8	510.69 µg/L	510.69 ppb	17:53:43
3	Sc 361.383	1973873.7	1973873.7	100.55 %		17:55:22
3	Y 371.029	1355653.4	1355653.4	100.21 %		17:55:22
3	Ag 328.068†	63217.1	63274.3	471.97 µg/L	471.97 ppb	17:55:27
3	As 188.979†	239.4	238.6	426.79 µg/L	426.79 ppb	17:55:48
3	B 249.677†	11772.4	11324.2	459.52 µg/L	459.52 ppb	17:55:27
3	Ba 233.527†	19082.8	18995.9	456.84 µg/L	456.84 ppb	17:55:27
3	Be 313.107†	789189.1	787745.2	467.35 µg/L	467.35 ppb	17:55:22
3	Cd 226.502†	18227.9	18270.3	455.54 µg/L	455.54 ppb	17:55:27
3	Co 228.616†	10065.9	10009.1	452.70 µg/L	452.70 ppb	17:55:27
3	Cr 267.716†	21831.4	21762.8	437.39 µg/L	437.39 ppb	17:55:27
3	Cu 324.752†	71769.6	68834.9	450.04 µg/L	450.04 ppb	17:55:27
3	Mn 257.610†	152925.4	152348.2	477.56 µg/L	477.56 ppb	17:55:22
3	Mo 202.031†	4301.6	4283.5	419.66 µg/L	419.66 ppb	17:55:48
3	Ni 231.604†	9432.0	9068.3	451.58 µg/L	451.58 ppb	17:55:27
3	P 214.914†	1090.2	1068.9	2072.2 µg/L	2072.2 ppb	17:55:48
3	Pb 220.353†	1884.4	1783.2	433.56 µg/L	433.56 ppb	17:55:48
3	S 181.975 Axial†	236.4	216.2	896.48 µg/L	896.48 ppb	17:55:48
3	Sb 206.836†	488.0	462.9	426.39 µg/L	426.39 ppb	17:55:48
3	Se 196.026†	334.6	313.5	448.33 µg/L	448.33 ppb	17:55:48
3	SiO2†	26642.0	25105.3	4955.5 µg/L	4955.5 ppb	17:55:27
3	Si 251.611†	30980.1	30500.6	2318.7 µg/L	2318.7 ppb	17:55:27
3	Sn 189.927†	986.2	980.5	413.54 µg/L	413.54 ppb	17:55:48
3	Ti 334.940†	210724.4	209401.3	462.90 µg/L	462.90 ppb	17:55:22
3	Tl 190.801†	331.8	352.3	463.31 µg/L	463.31 ppb	17:55:48
3	U 409.014†	5301.6	5349.8	443.44 µg/L	443.44 ppb	17:55:27
3	V 292.402†	45830.4	45625.5	449.95 µg/L	449.95 ppb	17:55:27
3	Zn 213.857†	20052.4	19408.7	452.08 µg/L	452.08 ppb	17:55:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1967886.2	100.24 %	0.321			0.32%
Sc RADIAL	56401.2	99.8 %	0.19			0.19%
Y 371.029	1351299.3	99.892 %	0.3379			0.34%
Ag 328.068†	67827.8	506.07 µg/L	29.542	506.07 ppb	29.542	5.84%
QC value within limits for Ag 328.068 Recovery = 101.21%						
Al 396.153Radial†	7500.4	5207.5 µg/L	14.90	5207.5 ppb	14.90	0.29%
QC value within limits for Al 396.153Radial Recovery = 104.15%						
As 188.979†	276.9	495.38 µg/L	60.328	495.38 ppb	60.328	12.18%
QC value within limits for As 188.979 Recovery = 99.08%						
B 249.677†	12229.5	496.51 µg/L	32.053	496.51 ppb	32.053	6.46%
QC value within limits for B 249.677 Recovery = 99.30%						
Ba 233.527†	20968.1	504.29 µg/L	41.100	504.29 ppb	41.100	8.15%
QC value within limits for Ba 233.527 Recovery = 100.86%						
Be 313.107†	853812.6	506.55 µg/L	33.945	506.55 ppb	33.945	6.70%
QC value within limits for Be 313.107 Recovery = 101.31%						
Ca 317.933Radial†	6013.5	5136.6 µg/L	7.07	5136.6 ppb	7.07	0.14%
QC value within limits for Ca 317.933Radial Recovery = 102.73%						
Cd 226.502†	20205.1	503.85 µg/L	41.841	503.85 ppb	41.841	8.30%
QC value within limits for Cd 226.502 Recovery = 100.77%						
Co 228.616†	11153.5	504.51 µg/L	44.882	504.51 ppb	44.882	8.90%

Cr	267.716†	24932.7	501.10 µg/L	55.174	501.10 ppb	55.174	11.01%
Cu	324.752†	76565.2	500.51 µg/L	43.720	500.51 ppb	43.720	8.74%
Fe	238.204 Radial†	664.4	5250.8 µg/L	26.46	5250.8 ppb	26.46	0.50%
K	766.490 Radial†	7929.2	5178.7 µg/L	7.74	5178.7 ppb	7.74	0.15%
Mg	279.077 IEC†	596.8	5337.6 µg/L	64.15	5337.6 ppb	64.15	1.20%
Mn	257.610†	164681.4	516.19 µg/L	33.451	516.19 ppb	33.451	6.48%
Mo	202.031†	5078.6	497.52 µg/L	67.959	497.52 ppb	67.959	13.66%
Na	589.592 Radial†	34331.7	10545 µg/L	29.9	10545 ppb	29.9	0.28%
Ni	231.604†	10144.1	505.14 µg/L	46.388	505.14 ppb	46.388	9.18%
P	214.914†	1250.6	2427.8 µg/L	309.09	2427.8 ppb	309.09	12.73%
Pb	220.353†	2055.1	499.72 µg/L	57.768	499.72 ppb	57.768	11.56%
S	181.975 Axial†	243.6	1010.2 µg/L	98.85	1010.2 ppb	98.85	9.79%
Sb	206.836†	544.1	501.49 µg/L	65.671	501.49 ppb	65.671	13.10%
Se	196.026†	359.6	513.22 µg/L	56.697	513.22 ppb	56.697	11.05%
SiO2†		27382.4	5404.9 µg/L	389.50	5404.9 ppb	389.50	7.21%
Si	251.611†	33259.5	2528.4 µg/L	181.64	2528.4 ppb	181.64	7.18%
Sn	189.927†	1178.7	497.14 µg/L	72.805	497.14 ppb	72.805	14.64%
Sr	421.552†	55404.3	511.11 µg/L	0.706	511.11 ppb	0.706	0.14%
Ti	334.940†	228393.4	504.92 µg/L	36.389	504.92 ppb	36.389	7.21%
Tl	190.801†	388.0	510.09 µg/L	40.923	510.09 ppb	40.923	8.02%
U	409.014†	6071.8	503.43 µg/L	52.204	503.43 ppb	52.204	10.37%
V	292.402†	51233.3	505.41 µg/L	48.044	505.41 ppb	48.044	9.51%
Zn	213.857†	21595.5	503.07 µg/L	44.204	503.07 ppb	44.204	8.79%

QC value within limits for Co 228.616 Recovery = 100.90%
 QC value within limits for Cr 267.716 Recovery = 100.22%
 QC value within limits for Cu 324.752 Recovery = 100.10%
 QC value within limits for Fe 238.204 Radial Recovery = 105.02%
 QC value within limits for K 766.490 Radial Recovery = 103.57%
 QC value within limits for Mg 279.077 IEC Recovery = 106.75%
 QC value within limits for Mn 257.610 Recovery = 103.24%
 QC value within limits for Mo 202.031 Recovery = 99.50%
 QC value within limits for Na 589.592 Radial Recovery = 105.45%
 QC value within limits for Ni 231.604 Recovery = 101.03%
 QC value within limits for P 214.914 Recovery = 97.11%
 QC value within limits for Pb 220.353 Recovery = 99.94%
 QC value within limits for S 181.975 Axial Recovery = 101.02%
 QC value within limits for Sb 206.836 Recovery = 100.30%
 QC value within limits for Se 196.026 Recovery = 102.64%
 QC value within limits for SiO2 Recovery = 101.07%
 QC value within limits for Si 251.611 Recovery = 101.14%
 QC value within limits for Sn 189.927 Recovery = 99.43%
 QC value within limits for Sr 421.552 Recovery = 102.22%
 QC value within limits for Ti 334.940 Recovery = 100.98%
 QC value within limits for Tl 190.801 Recovery = 102.02%
 QC value within limits for U 409.014 Recovery = 100.69%
 QC value within limits for V 292.402 Recovery = 101.08%
 QC value within limits for Zn 213.857 Recovery = 100.61%

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 17:55:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55016.4	55016.4	97.4 %		17:56:30
1	Al 396.153Radial†	-25.6	-33.6	-23.423 µg/L	-23.423 ppb	17:56:30
1	Ca 317.933Radial†	188.9	-17.3	-14.738 µg/L	-14.738 ppb	17:56:51
1	Fe 238.204 Radial†	16.8	0.7	5.5284 µg/L	5.5284 ppb	17:56:51
1	K 766.490 Radial†	203.2	43.7	28.526 µg/L	28.526 ppb	17:56:30
1	Mg 279.077 IEC†	6.2	-6.4	-57.504 µg/L	-57.504 ppb	17:56:51
1	Na 589.592 Radial†	507.1	48.5	14.906 µg/L	14.906 ppb	17:56:30
1	Sr 421.552†	39.0	11.2	0.1037 µg/L	0.1037 ppb	17:56:30
1	Sc 361.383	1965901.2	1965901.2	100.14 %		17:57:53
1	Y 371.029	1354342.9	1354342.9	100.12 %		17:57:53
1	Ag 328.068†	-375.0	27.2	0.2015 µg/L	0.2015 ppb	17:57:58
1	As 188.979†	2.9	3.3	5.9435 µg/L	5.9435 ppb	17:58:19
1	B 249.677†	389.1	4.4	0.1765 µg/L	0.1765 ppb	17:58:19
1	Ba 233.527†	-21.5	-4.4	-0.1059 µg/L	-0.1059 ppb	17:58:19
1	Be 313.107†	-2713.7	145.8	0.0865 µg/L	0.0865 ppb	17:57:58
1	Cd 226.502†	-132.8	9.1	0.2255 µg/L	0.2255 ppb	17:58:19
1	Co 228.616†	-6.2	-8.1	-0.3659 µg/L	-0.3659 ppb	17:58:19
1	Cr 267.716†	-50.1	0.4	0.0078 µg/L	0.0078 ppb	17:57:58
1	Cu 324.752†	2544.7	-2.7	-0.0168 µg/L	-0.0168 ppb	17:57:58
1	Mn 257.610†	-245.9	10.5	0.0359 µg/L	0.0359 ppb	17:58:19
1	Mo 202.031†	3.8	9.1	0.8915 µg/L	0.8915 ppb	17:58:19
1	Ni 231.604†	300.7	-12.0	-0.5990 µg/L	-0.5990 ppb	17:58:19
1	P 214.914†	17.4	2.0	4.0305 µg/L	4.0305 ppb	17:58:19
1	Pb 220.353†	97.4	6.3	1.5269 µg/L	1.5269 ppb	17:58:19
1	S 181.975 Axial†	17.7	-1.2	-5.1360 µg/L	-5.1360 ppb	17:58:19
1	Sb 206.836†	24.8	2.2	2.0583 µg/L	2.0583 ppb	17:58:19
1	Se 196.026†	12.5	-6.8	-9.5059 µg/L	-9.5059 ppb	17:58:19
1	SiO2†	1426.2	32.7	6.4463 µg/L	6.4463 ppb	17:57:58
1	Si 251.611†	326.4	15.3	1.1636 µg/L	1.1636 ppb	17:58:19
1	Sn 189.927†	4.0	3.6	1.5081 µg/L	1.5081 ppb	17:58:19
1	Ti 334.940†	201.4	26.1	0.0620 µg/L	0.0620 ppb	17:57:58
1	Tl 190.801†	-21.5	0.9	1.1647 µg/L	1.1647 ppb	17:58:19
1	U 409.014†	-51.8	25.4	2.1068 µg/L	2.1068 ppb	17:57:58
1	V 292.402†	-46.0	-1.1	-0.0014 µg/L	-0.0014 ppb	17:57:58
1	Zn 213.857†	533.4	-1.7	-0.0344 µg/L	-0.0344 ppb	17:58:19
2	Sc RADIAL	55682.3	55682.3	98.6 %		17:56:56
2	Al 396.153Radial†	-28.9	-36.6	-25.497 µg/L	-25.497 ppb	17:56:56
2	Ca 317.933Radial†	190.4	-18.1	-15.487 µg/L	-15.487 ppb	17:57:17
2	Fe 238.204 Radial†	16.8	0.5	4.1171 µg/L	4.1171 ppb	17:57:17
2	K 766.490 Radial†	223.9	62.2	40.619 µg/L	40.619 ppb	17:56:56
2	Mg 279.077 IEC†	9.9	-2.8	-25.072 µg/L	-25.072 ppb	17:57:17
2	Na 589.592 Radial†	519.3	54.7	16.798 µg/L	16.798 ppb	17:56:56
2	Sr 421.552†	32.7	4.3	0.0401 µg/L	0.0401 ppb	17:56:56
2	Sc 361.383	1957019.5	1957019.5	99.689 %		17:58:25
2	Y 371.029	1350334.7	1350334.7	99.821 %		17:58:25
2	Ag 328.068†	-377.0	23.5	0.1757 µg/L	0.1757 ppb	17:58:30
2	As 188.979†	-0.8	-0.3	-0.5788 µg/L	-0.5788 ppb	17:58:51
2	B 249.677†	388.0	5.1	0.2060 µg/L	0.2060 ppb	17:58:51
2	Ba 233.527†	-16.1	0.9	0.0215 µg/L	0.0215 ppb	17:58:51
2	Be 313.107†	-2677.7	169.6	0.1006 µg/L	0.1006 ppb	17:58:30
2	Cd 226.502†	-142.7	-1.4	-0.0367 µg/L	-0.0367 ppb	17:58:51
2	Co 228.616†	7.4	5.5	0.2501 µg/L	0.2501 ppb	17:58:51
2	Cr 267.716†	-33.3	17.0	0.3420 µg/L	0.3420 ppb	17:58:30
2	Cu 324.752†	2564.5	28.8	0.1884 µg/L	0.1884 ppb	17:58:30
2	Mn 257.610†	-244.8	10.4	0.0341 µg/L	0.0341 ppb	17:58:51
2	Mo 202.031†	-1.9	3.5	0.3412 µg/L	0.3412 ppb	17:58:51
2	Ni 231.604†	305.0	-6.4	-0.3187 µg/L	-0.3187 ppb	17:58:51
2	P 214.914†	15.9	0.6	1.2381 µg/L	1.2381 ppb	17:58:51
2	Pb 220.353†	85.8	-4.9	-1.1822 µg/L	-1.1822 ppb	17:58:51

2	S 181.975 Axial†	16.3	-2.6	-10.626 µg/L	-10.626 ppb	17:58:51
2	Sb 206.836†	25.7	3.2	2.9825 µg/L	2.9825 ppb	17:58:51
2	Se 196.026†	18.4	-0.8	-1.1281 µg/L	-1.1281 ppb	17:58:51
2	SiO2†	1461.8	74.8	14.763 µg/L	14.763 ppb	17:58:30
2	Si 251.611†	344.9	35.3	2.6849 µg/L	2.6849 ppb	17:58:51
2	Sn 189.927†	-1.0	-1.4	-0.5943 µg/L	-0.5943 ppb	17:58:51
2	Ti 334.940†	216.4	42.0	0.0947 µg/L	0.0947 ppb	17:58:30
2	Tl 190.801†	-19.8	2.5	3.2612 µg/L	3.2612 ppb	17:58:51
2	U 409.014†	-50.4	26.6	2.2066 µg/L	2.2066 ppb	17:58:30
2	V 292.402†	-18.0	26.7	0.2662 µg/L	0.2662 ppb	17:58:30
2	Zn 213.857†	535.3	2.5	0.0614 µg/L	0.0614 ppb	17:58:51
3	Sc RADIAL	55053.2	55053.2	97.4 %		17:57:22
3	Al 396.153Radial†	-40.3	-48.7	-33.898 µg/L	-33.898 ppb	17:57:22
3	Ca 317.933Radial†	188.9	-17.4	-14.892 µg/L	-14.892 ppb	17:57:42
3	Fe 238.204 Radial†	16.1	-0.0	-0.3068 µg/L	-0.3068 ppb	17:57:42
3	K 766.490 Radial†	212.7	53.3	34.793 µg/L	34.793 ppb	17:57:22
3	Mg 279.077 IEC†	19.0	6.7	59.990 µg/L	59.990 ppb	17:57:42
3	Na 589.592 Radial†	541.5	83.5	25.652 µg/L	25.652 ppb	17:57:22
3	Sr 421.552†	50.1	22.6	0.2082 µg/L	0.2082 ppb	17:57:22
3	Sc 361.383	1965248.8	1965248.8	100.11 %		17:58:57
3	Y 371.029	1354189.1	1354189.1	100.11 %		17:58:57
3	Ag 328.068†	-450.0	-47.9	-0.3524 µg/L	-0.3524 ppb	17:59:03
3	As 188.979†	0.1	0.6	1.0726 µg/L	1.0726 ppb	17:59:23
3	B 249.677†	379.0	-5.5	-0.2247 µg/L	-0.2247 ppb	17:59:23
3	Ba 233.527†	-9.6	7.5	0.1800 µg/L	0.1800 ppb	17:59:23
3	Be 313.107†	-2642.2	216.4	0.1284 µg/L	0.1284 ppb	17:59:03
3	Cd 226.502†	-137.1	4.7	0.1164 µg/L	0.1164 ppb	17:59:23
3	Co 228.616†	5.7	3.7	0.1693 µg/L	0.1693 ppb	17:59:23
3	Cr 267.716†	-63.8	-13.4	-0.2679 µg/L	-0.2679 ppb	17:59:03
3	Cu 324.752†	2541.3	-5.2	-0.0342 µg/L	-0.0342 ppb	17:59:03
3	Mn 257.610†	-242.2	14.1	0.0418 µg/L	0.0418 ppb	17:59:23
3	Mo 202.031†	-0.6	4.8	0.4652 µg/L	0.4652 ppb	17:59:23
3	Ni 231.604†	301.2	-11.4	-0.5704 µg/L	-0.5704 ppb	17:59:23
3	P 214.914†	21.9	6.6	13.019 µg/L	13.019 ppb	17:59:23
3	Pb 220.353†	81.2	-9.9	-2.4060 µg/L	-2.4060 ppb	17:59:23
3	S 181.975 Axial†	14.0	-4.9	-20.443 µg/L	-20.443 ppb	17:59:23
3	Sb 206.836†	27.7	5.2	4.7514 µg/L	4.7514 ppb	17:59:23
3	Se 196.026†	17.1	-2.2	-3.1763 µg/L	-3.1763 ppb	17:59:23
3	SiO2†	1412.3	19.2	3.7961 µg/L	3.7961 ppb	17:59:03
3	Si 251.611†	335.9	24.9	1.8933 µg/L	1.8933 ppb	17:59:23
3	Sn 189.927†	3.9	3.5	1.4733 µg/L	1.4733 ppb	17:59:23
3	Ti 334.940†	206.9	31.6	0.0650 µg/L	0.0650 ppb	17:59:03
3	Tl 190.801†	-23.3	-0.9	-1.1798 µg/L	-1.1798 ppb	17:59:23
3	U 409.014†	2.6	79.6	6.6183 µg/L	6.6183 ppb	17:59:03
3	V 292.402†	-4.6	40.2	0.4016 µg/L	0.4016 ppb	17:59:03
3	Zn 213.857†	533.9	-1.1	-0.0271 µg/L	-0.0271 ppb	17:59:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1962723.2	99.980 %	0.2522			0.25%
Sc RADIAL	55250.6	97.8 %	0.66			0.68%
Y 371.029	1352955.6	100.01 %	0.168			0.17%
Ag 328.068†	0.9	0.0083 µg/L	0.31265	0.0083 ppb	0.31265	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-39.7	-27.606 µg/L	5.5466	-27.606 ppb	5.5466	20.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.2	2.1458 µg/L	3.39103	2.1458 ppb	3.39103	158.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1.3	0.0526 µg/L	0.24059	0.0526 ppb	0.24059	457.43%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.3	0.0318 µg/L	0.14326	0.0318 ppb	0.14326	449.79%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	177.3	0.1052 µg/L	0.02132	0.1052 ppb	0.02132	20.27%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.6	-15.039 µg/L	0.3955	-15.039 ppb	0.3955	2.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.1	0.1017 µg/L	0.13173	0.1017 ppb	0.13173	129.53%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.4	0.0179 µg/L	0.33479	0.0179 ppb	0.33479	>999.9%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	1.4	0.0273 µg/L	0.30543	0.0273 ppb	0.30543 >999.9%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	7.0	0.0458 µg/L	0.12379	0.0458 ppb	0.12379 270.27%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	0.4	3.1129 µg/L	3.04443	3.1129 ppb	3.04443 97.80%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	53.0	34.646 µg/L	6.0478	34.646 ppb	6.0478 17.46%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-0.8	-7.5284 µg/L	60.67961	-7.5284 ppb	60.67961 806.01%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	11.7	0.0373 µg/L	0.00401	0.0373 ppb	0.00401 10.76%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	5.8	0.5659 µg/L	0.28866	0.5659 ppb	0.28866 51.01%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	62.2	19.119 µg/L	5.7369	19.119 ppb	5.7369 30.01%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-10.0	-0.4960 µg/L	0.15424	-0.4960 ppb	0.15424 31.09%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	3.1	6.0957 µg/L	6.15582	6.0957 ppb	6.15582 100.99%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-2.8	-0.6871 µg/L	2.01265	-0.6871 ppb	2.01265 292.92%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-2.9	-12.068 µg/L	7.7546	-12.068 ppb	7.7546 64.26%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	3.5	3.2641 µg/L	1.36846	3.2641 ppb	1.36846 41.92%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-3.3	-4.6035 µg/L	4.36743	-4.6035 ppb	4.36743 94.87%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	42.2	8.3350 µg/L	5.72201	8.3350 ppb	5.72201 68.65%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	25.2	1.9139 µg/L	0.76087	1.9139 ppb	0.76087 39.75%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	1.9	0.7957 µg/L	1.20387	0.7957 ppb	1.20387 151.30%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	12.7	0.1173 µg/L	0.08487	0.1173 ppb	0.08487 72.32%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	33.2	0.0739 µg/L	0.01807	0.0739 ppb	0.01807 24.45%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.8	1.0820 µg/L	2.22165	1.0820 ppb	2.22165 205.32%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	43.9	3.6439 µg/L	2.57643	3.6439 ppb	2.57643 70.71%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	21.9	0.2221 µg/L	0.20505	0.2221 ppb	0.20505 92.31%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-0.1	0.0000 µg/L	0.05335	0.0000 ppb	0.05335 >999.9%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 18:24:23

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	58110.7	58110.7	103 %		18:24:59
1	Al 396.153Radial†	7350.7	7139.0	4955.6 µg/L	4955.6 ppb	18:24:59
1	Ca 317.933Radial†	6185.2	5802.1	4956.0 µg/L	4956.0 ppb	18:25:20
1	Fe 238.204 Radial†	675.1	639.8	5056.7 µg/L	5056.7 ppb	18:25:20
1	K 766.490 Radial†	7936.4	7550.9	4931.6 µg/L	4931.6 ppb	18:24:59
1	Mg 279.077 IEC†	594.2	564.9	5052.6 µg/L	5052.6 ppb	18:25:20
1	Na 589.592 Radial†	33978.9	32562.3	10001 µg/L	10001 ppb	18:24:59
1	Sr 421.552†	54344.8	52805.6	487.14 µg/L	487.14 ppb	18:24:59
1	Sc 361.383	2010503.2	2010503.2	102.41 %		18:26:23
1	Y 371.029	1378737.8	1378737.8	101.92 %		18:26:23
1	Ag 328.068†	69160.3	67932.0	506.90 µg/L	506.90 ppb	18:26:28
1	As 188.979†	303.0	296.3	530.04 µg/L	530.04 ppb	18:26:49
1	B 249.677†	13059.0	12367.1	502.24 µg/L	502.24 ppb	18:26:28
1	Ba 233.527†	21831.0	21333.5	513.08 µg/L	513.08 ppb	18:26:28
1	Be 313.107†	864886.0	847358.1	502.72 µg/L	502.72 ppb	18:26:23
1	Cd 226.502†	21036.3	20682.2	515.78 µg/L	515.78 ppb	18:26:28
1	Co 228.616†	11703.6	11425.8	516.87 µg/L	516.87 ppb	18:26:28
1	Cr 267.716†	26284.2	25715.1	516.82 µg/L	516.82 ppb	18:26:28
1	Cu 324.752†	82127.8	77648.4	507.55 µg/L	507.55 ppb	18:26:28
1	Mn 257.610†	166823.1	163147.4	511.37 µg/L	511.37 ppb	18:26:23
1	Mo 202.031†	5448.5	5325.4	521.69 µg/L	521.69 ppb	18:26:49
1	Ni 231.604†	10977.7	10406.6	518.22 µg/L	518.22 ppb	18:26:28
1	P 214.914†	1361.9	1314.4	2554.1 µg/L	2554.1 ppb	18:26:49
1	Pb 220.353†	2277.9	2133.2	518.76 µg/L	518.76 ppb	18:26:49
1	S 181.975 Axial†	276.1	250.7	1039.6 µg/L	1039.6 ppb	18:26:49
1	Sb 206.836†	598.0	561.4	517.60 µg/L	517.60 ppb	18:26:49
1	Se 196.026†	404.7	375.8	535.75 µg/L	535.75 ppb	18:26:49
1	SiO2†	29945.4	27848.1	5496.8 µg/L	5496.8 ppb	18:26:28
1	Si 251.611†	34979.9	33844.9	2573.0 µg/L	2573.0 ppb	18:26:28
1	Sn 189.927†	1294.8	1263.9	533.06 µg/L	533.06 ppb	18:26:49
1	Ti 334.940†	232405.2	226752.9	501.31 µg/L	501.31 ppb	18:26:23
1	Tl 190.801†	387.3	400.5	526.22 µg/L	526.22 ppb	18:26:49
1	U 409.014†	6254.1	6183.8	512.77 µg/L	512.77 ppb	18:26:28
1	V 292.402†	53539.0	52322.0	516.23 µg/L	516.23 ppb	18:26:28
1	Zn 213.857†	23135.9	22056.3	513.84 µg/L	513.84 ppb	18:26:28
2	Sc RADIAL	57983.0	57983.0	103 %		18:25:25
2	Al 396.153Radial†	7301.1	7106.5	4933.3 µg/L	4933.3 ppb	18:25:25
2	Ca 317.933Radial†	6156.7	5787.5	4943.6 µg/L	4943.6 ppb	18:25:45
2	Fe 238.204 Radial†	670.2	636.5	5030.5 µg/L	5030.5 ppb	18:25:45
2	K 766.490 Radial†	7863.7	7497.0	4896.4 µg/L	4896.4 ppb	18:25:25
2	Mg 279.077 IEC†	585.6	557.7	4988.7 µg/L	4988.7 ppb	18:25:45
2	Na 589.592 Radial†	33805.3	32465.9	9971.7 µg/L	9971.7 ppb	18:25:25
2	Sr 421.552†	54068.8	52653.0	485.73 µg/L	485.73 ppb	18:25:25
2	Sc 361.383	2038047.8	2038047.8	103.82 %		18:26:56
2	Y 371.029	1399253.6	1399253.6	103.44 %		18:26:56
2	Ag 328.068†	68906.4	66774.7	498.26 µg/L	498.26 ppb	18:27:02
2	As 188.979†	291.3	281.1	502.79 µg/L	502.79 ppb	18:27:22
2	B 249.677†	13031.9	12168.7	494.15 µg/L	494.15 ppb	18:27:02
2	Ba 233.527†	21788.4	21004.4	505.16 µg/L	505.16 ppb	18:27:02
2	Be 313.107†	871938.9	842738.2	499.98 µg/L	499.98 ppb	18:26:56
2	Cd 226.502†	20959.6	20330.7	507.01 µg/L	507.01 ppb	18:27:02
2	Co 228.616†	11663.7	11232.9	508.13 µg/L	508.13 ppb	18:27:02
2	Cr 267.716†	26195.8	25283.1	508.13 µg/L	508.13 ppb	18:27:02
2	Cu 324.752†	81865.7	76312.2	498.82 µg/L	498.82 ppb	18:27:02
2	Mn 257.610†	168150.2	162224.2	508.48 µg/L	508.48 ppb	18:26:56
2	Mo 202.031†	5330.8	5140.1	503.54 µg/L	503.54 ppb	18:27:22
2	Ni 231.604†	10880.8	10168.4	506.35 µg/L	506.35 ppb	18:27:02
2	P 214.914†	1337.9	1273.4	2473.4 µg/L	2473.4 ppb	18:27:22
2	Pb 220.353†	2238.1	2064.9	502.11 µg/L	502.11 ppb	18:27:22

2	S 181.975 Axial†	271.4	242.5	1005.7 µg/L	1005.7 ppb	18:27:22
2	Sb 206.836†	590.8	546.6	503.85 µg/L	503.85 ppb	18:27:22
2	Se 196.026†	401.0	366.9	523.19 µg/L	523.19 ppb	18:27:22
2	SiO2†	29842.8	27354.0	5399.3 µg/L	5399.3 ppb	18:27:02
2	Si 251.611†	34939.6	33344.4	2534.9 µg/L	2534.9 ppb	18:27:02
2	Sn 189.927†	1259.4	1212.7	511.46 µg/L	511.46 ppb	18:27:22
2	Ti 334.940†	233999.5	225221.6	497.93 µg/L	497.93 ppb	18:26:56
2	Tl 190.801†	377.0	385.6	506.75 µg/L	506.75 ppb	18:27:22
2	U 409.014†	6252.8	6100.0	505.82 µg/L	505.82 ppb	18:27:02
2	V 292.402†	53301.3	51386.4	506.94 µg/L	506.94 ppb	18:27:02
2	Zn 213.857†	23074.0	21691.3	505.35 µg/L	505.35 ppb	18:27:02
3	Sc RADIAL	58101.7	58101.7	103 %		18:25:51
3	Al 396.153Radial†	7325.2	7115.3	4941.3 µg/L	4941.3 ppb	18:25:51
3	Ca 317.933Radial†	6167.8	5786.1	4942.3 µg/L	4942.3 ppb	18:26:11
3	Fe 238.204 Radial†	673.8	638.6	5046.3 µg/L	5046.3 ppb	18:26:11
3	K 766.490 Radial†	7958.4	7573.4	4946.3 µg/L	4946.3 ppb	18:25:51
3	Mg 279.077 IEC†	598.9	569.5	5092.5 µg/L	5092.5 ppb	18:26:11
3	Na 589.592 Radial†	33931.7	32521.6	9988.8 µg/L	9988.8 ppb	18:25:51
3	Sr 421.552†	54158.1	52632.2	485.54 µg/L	485.54 ppb	18:25:51
3	Sc 361.383	2006960.6	2006960.6	102.23 %		18:27:29
3	Y 371.029	1377064.8	1377064.8	101.80 %		18:27:29
3	Ag 328.068†	63249.3	62269.2	464.47 µg/L	464.47 ppb	18:27:35
3	As 188.979†	239.9	235.1	420.56 µg/L	420.56 ppb	18:27:55
3	B 249.677†	11912.9	11268.6	457.34 µg/L	457.34 ppb	18:27:35
3	Ba 233.527†	19263.5	18859.7	453.56 µg/L	453.56 ppb	18:27:35
3	Be 313.107†	784759.4	770472.5	457.11 µg/L	457.11 ppb	18:27:29
3	Cd 226.502†	18434.4	18173.4	453.14 µg/L	453.14 ppb	18:27:35
3	Co 228.616†	10122.4	9899.4	447.75 µg/L	447.75 ppb	18:27:35
3	Cr 267.716†	21992.5	21562.5	433.36 µg/L	433.36 ppb	18:27:35
3	Cu 324.752†	71871.2	67757.5	442.99 µg/L	442.99 ppb	18:27:35
3	Mn 257.610†	152131.1	149063.9	467.26 µg/L	467.26 ppb	18:27:29
3	Mo 202.031†	4313.3	4224.4	413.87 µg/L	413.87 ppb	18:27:55
3	Ni 231.604†	9585.0	9063.2	451.33 µg/L	451.33 ppb	18:27:35
3	P 214.914†	1100.5	1061.1	2057.6 µg/L	2057.6 ppb	18:27:55
3	Pb 220.353†	1891.6	1759.4	427.76 µg/L	427.76 ppb	18:27:55
3	S 181.975 Axial†	229.0	205.1	850.35 µg/L	850.35 ppb	18:27:55
3	Sb 206.836†	491.8	458.5	422.37 µg/L	422.37 ppb	18:27:55
3	Se 196.026†	337.5	310.8	444.41 µg/L	444.41 ppb	18:27:55
3	SiO2†	27007.5	25025.9	4939.8 µg/L	4939.8 ppb	18:27:35
3	Si 251.611†	31393.7	30397.3	2310.9 µg/L	2310.9 ppb	18:27:35
3	Sn 189.927†	994.9	972.8	410.27 µg/L	410.27 ppb	18:27:55
3	Ti 334.940†	209196.0	204451.2	451.97 µg/L	451.97 ppb	18:27:29
3	Tl 190.801†	327.6	342.9	450.86 µg/L	450.86 ppb	18:27:55
3	U 409.014†	5293.3	5254.7	435.59 µg/L	435.59 ppb	18:27:35
3	V 292.402†	45934.6	44975.9	443.54 µg/L	443.54 ppb	18:27:35
3	Zn 213.857†	20247.3	19270.6	448.88 µg/L	448.88 ppb	18:27:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2018503.9	102.82 %	0.867			0.84%
Sc RADIAL	58065.1	103 %	0.1			0.12%
Y 371.029	1385018.8	102.38 %	0.913			0.89%
Ag 328.068†	65658.6	489.88 µg/L	22.418	489.88 ppb	22.418	4.58%
QC value within limits for Ag 328.068 Recovery = 97.98%						
Al 396.153Radial†	7120.3	4943.4 µg/L	11.28	4943.4 ppb	11.28	0.23%
QC value within limits for Al 396.153Radial Recovery = 98.87%						
As 188.979†	270.8	484.46 µg/L	56.991	484.46 ppb	56.991	11.76%
QC value within limits for As 188.979 Recovery = 96.89%						
B 249.677†	11934.8	484.58 µg/L	23.933	484.58 ppb	23.933	4.94%
QC value within limits for B 249.677 Recovery = 96.92%						
Ba 233.527†	20399.2	490.60 µg/L	32.321	490.60 ppb	32.321	6.59%
QC value within limits for Ba 233.527 Recovery = 98.12%						
Be 313.107†	820189.6	486.60 µg/L	25.580	486.60 ppb	25.580	5.26%
QC value within limits for Be 313.107 Recovery = 97.32%						
Ca 317.933Radial†	5791.9	4947.3 µg/L	7.57	4947.3 ppb	7.57	0.15%
QC value within limits for Ca 317.933Radial Recovery = 98.95%						
Cd 226.502†	19728.8	491.98 µg/L	33.915	491.98 ppb	33.915	6.89%
QC value within limits for Cd 226.502 Recovery = 98.40%						
Co 228.616†	10852.7	490.92 µg/L	37.639	490.92 ppb	37.639	7.67%

Cr	267.716†	24186.9	486.10 µg/L	45.880	486.10 ppb	45.880	9.44%
QC value within limits for Cr 267.716 Recovery = 97.22%							
Cu	324.752†	73906.0	483.12 µg/L	35.030	483.12 ppb	35.030	7.25%
QC value within limits for Cu 324.752 Recovery = 96.62%							
Fe	238.204 Radial†	638.3	5044.5 µg/L	13.19	5044.5 ppb	13.19	0.26%
QC value within limits for Fe 238.204 Radial Recovery = 100.89%							
K	766.490 Radial†	7540.4	4924.8 µg/L	25.64	4924.8 ppb	25.64	0.52%
QC value within limits for K 766.490 Radial Recovery = 98.50%							
Mg	279.077 IEC†	564.0	5044.6 µg/L	52.37	5044.6 ppb	52.37	1.04%
QC value within limits for Mg 279.077 IEC Recovery = 100.89%							
Mn	257.610†	158145.2	495.70 µg/L	24.672	495.70 ppb	24.672	4.98%
QC value within limits for Mn 257.610 Recovery = 99.14%							
Mo	202.031†	4896.7	479.70 µg/L	57.728	479.70 ppb	57.728	12.03%
QC value within limits for Mo 202.031 Recovery = 95.94%							
Na	589.592 Radial†	32516.6	9987.3 µg/L	14.87	9987.3 ppb	14.87	0.15%
QC value within limits for Na 589.592 Radial Recovery = 99.87%							
Ni	231.604†	9879.4	491.97 µg/L	35.688	491.97 ppb	35.688	7.25%
QC value within limits for Ni 231.604 Recovery = 98.39%							
P	214.914†	1216.3	2361.7 µg/L	266.42	2361.7 ppb	266.42	11.28%
QC value within limits for P 214.914 Recovery = 94.47%							
Pb	220.353†	1985.8	482.88 µg/L	48.455	482.88 ppb	48.455	10.03%
QC value within limits for Pb 220.353 Recovery = 96.58%							
S	181.975 Axial†	232.7	965.19 µg/L	100.884	965.19 ppb	100.884	10.45%
QC value within limits for S 181.975 Axial Recovery = 96.52%							
Sb	206.836†	522.2	481.27 µg/L	51.474	481.27 ppb	51.474	10.70%
QC value within limits for Sb 206.836 Recovery = 96.25%							
Se	196.026†	351.2	501.12 µg/L	49.509	501.12 ppb	49.509	9.88%
QC value within limits for Se 196.026 Recovery = 100.22%							
SiO2†		26742.7	5278.7 µg/L	297.49	5278.7 ppb	297.49	5.64%
QC value within limits for SiO2 Recovery = 98.71%							
Si	251.611†	32528.9	2472.9 µg/L	141.62	2472.9 ppb	141.62	5.73%
QC value within limits for Si 251.611 Recovery = 98.92%							
Sn	189.927†	1149.8	484.93 µg/L	65.553	484.93 ppb	65.553	13.52%
QC value within limits for Sn 189.927 Recovery = 96.99%							
Sr	421.552†	52696.9	486.14 µg/L	0.873	486.14 ppb	0.873	0.18%
QC value within limits for Sr 421.552 Recovery = 97.23%							
Ti	334.940†	218808.6	483.73 µg/L	27.562	483.73 ppb	27.562	5.70%
QC value within limits for Ti 334.940 Recovery = 96.75%							
Tl	190.801†	376.3	494.61 µg/L	39.121	494.61 ppb	39.121	7.91%
QC value within limits for Tl 190.801 Recovery = 98.92%							
U	409.014†	5846.2	484.73 µg/L	42.700	484.73 ppb	42.700	8.81%
QC value within limits for U 409.014 Recovery = 96.95%							
V	292.402†	49561.4	488.90 µg/L	39.562	488.90 ppb	39.562	8.09%
QC value within limits for V 292.402 Recovery = 97.78%							
Zn	213.857†	21006.1	489.36 µg/L	35.308	489.36 ppb	35.308	7.22%
QC value within limits for Zn 213.857 Recovery = 97.87%							

All analyte(s) passed QC.

Sequence No.: 17

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 18:28:05

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	56920.6	56920.6	101 %		18:28:38
1	Al 396.153Radial†	-0.3	-7.6	-5.3346 µg/L	-5.3346 ppb	18:28:38
1	Ca 317.933Radial†	189.5	-23.2	-19.841 µg/L	-19.841 ppb	18:28:58
1	Fe 238.204 Radial†	19.4	2.7	21.377 µg/L	21.377 ppb	18:28:58
1	K 766.490 Radial†	221.6	55.0	35.912 µg/L	35.912 ppb	18:28:38
1	Mg 279.077 IEC†	10.8	-2.1	-18.380 µg/L	-18.380 ppb	18:28:58
1	Na 589.592 Radial†	498.2	22.3	6.8542 µg/L	6.8542 ppb	18:28:38
1	Sr 421.552†	54.9	25.7	0.2367 µg/L	0.2367 ppb	18:28:38
1	Sc 361.383	2032515.3	2032515.3	103.53 %		18:30:00
1	Y 371.029	1398820.8	1398820.8	103.41 %		18:30:00
1	Ag 328.068†	-457.1	-39.8	-0.2911 µg/L	-0.2911 ppb	18:30:06
1	As 188.979†	5.6	5.9	10.594 µg/L	10.594 ppb	18:30:26
1	B 249.677†	410.3	12.1	0.4845 µg/L	0.4845 ppb	18:30:26
1	Ba 233.527†	49.3	64.6	1.5526 µg/L	1.5526 ppb	18:30:26
1	Be 313.107†	-2857.0	96.2	0.0570 µg/L	0.0570 ppb	18:30:06
1	Cd 226.502†	-101.1	44.0	1.0963 µg/L	1.0963 ppb	18:30:26
1	Co 228.616†	28.1	25.2	1.1408 µg/L	1.1408 ppb	18:30:26
1	Cr 267.716†	-32.9	18.6	0.3731 µg/L	0.3731 ppb	18:30:06
1	Cu 324.752†	2585.0	-47.0	-0.3039 µg/L	-0.3039 ppb	18:30:06
1	Mn 257.610†	1142.9	1359.9	4.2620 µg/L	4.2620 ppb	18:30:26
1	Mo 202.031†	8.1	13.2	1.2945 µg/L	1.2945 ppb	18:30:26
1	Ni 231.604†	338.7	14.7	0.7339 µg/L	0.7339 ppb	18:30:26
1	P 214.914†	15.9	0.0	0.2437 µg/L	0.2437 ppb	18:30:26
1	Pb 220.353†	99.8	5.5	1.3339 µg/L	1.3339 ppb	18:30:26
1	S 181.975 Axial†	18.1	-1.5	-6.0253 µg/L	-6.0253 ppb	18:30:26
1	Sb 206.836†	22.7	-0.5	-0.4788 µg/L	-0.4788 ppb	18:30:26
1	Se 196.026†	18.0	-1.9	-2.6538 µg/L	-2.6538 ppb	18:30:26
1	SiO2†	1447.9	6.9	1.3541 µg/L	1.3541 ppb	18:30:06
1	Si 251.611†	659.6	326.5	24.820 µg/L	24.820 ppb	18:30:26
1	Sn 189.927†	38.3	36.6	15.441 µg/L	15.441 ppb	18:30:26
1	Ti 334.940†	321.1	135.1	0.3001 µg/L	0.3001 ppb	18:30:06
1	Tl 190.801†	-21.1	2.0	2.6395 µg/L	2.6395 ppb	18:30:26
1	U 409.014†	-28.7	49.4	4.1035 µg/L	4.1035 ppb	18:30:06
1	V 292.402†	-3.2	41.6	0.4232 µg/L	0.4232 ppb	18:30:06
1	Zn 213.857†	618.9	63.4	1.4848 µg/L	1.4848 ppb	18:30:26
2	Sc RADIAL	56709.3	56709.3	100 %		18:29:04
2	Al 396.153Radial†	-16.5	-23.8	-16.528 µg/L	-16.528 ppb	18:29:04
2	Ca 317.933Radial†	196.4	-15.6	-13.311 µg/L	-13.311 ppb	18:29:24
2	Fe 238.204 Radial†	19.1	2.4	18.992 µg/L	18.992 ppb	18:29:24
2	K 766.490 Radial†	204.3	38.5	25.150 µg/L	25.150 ppb	18:29:04
2	Mg 279.077 IEC†	11.8	-1.1	-9.6092 µg/L	-9.6092 ppb	18:29:24
2	Na 589.592 Radial†	485.8	11.8	3.6148 µg/L	3.6148 ppb	18:29:04
2	Sr 421.552†	30.8	1.9	0.0174 µg/L	0.0174 ppb	18:29:04
2	Sc 361.383	2017506.8	2017506.8	102.77 %		18:30:32
2	Y 371.029	1389281.0	1389281.0	102.70 %		18:30:32
2	Ag 328.068†	-439.2	-25.7	-0.1831 µg/L	-0.1831 ppb	18:30:38
2	As 188.979†	-2.8	-2.2	-4.0102 µg/L	-4.0102 ppb	18:30:58
2	B 249.677†	382.6	-11.8	-0.4899 µg/L	-0.4899 ppb	18:30:58
2	Ba 233.527†	4.3	21.2	0.5118 µg/L	0.5118 ppb	18:30:58
2	Be 313.107†	-2101.4	811.0	0.4800 µg/L	0.4800 ppb	18:30:38
2	Cd 226.502†	-138.5	6.9	0.1705 µg/L	0.1705 ppb	18:30:58
2	Co 228.616†	11.1	8.8	0.3922 µg/L	0.3922 ppb	18:30:58
2	Cr 267.716†	4.0	54.3	1.0911 µg/L	1.0911 ppb	18:30:38
2	Cu 324.752†	2748.4	130.6	0.8552 µg/L	0.8552 ppb	18:30:38
2	Mn 257.610†	83.5	337.3	1.0592 µg/L	1.0592 ppb	18:30:58
2	Mo 202.031†	-7.8	-2.2	-0.2192 µg/L	-0.2192 ppb	18:30:58
2	Ni 231.604†	324.9	3.8	0.1884 µg/L	0.1884 ppb	18:30:58
2	P 214.914†	13.0	-2.7	-5.2676 µg/L	-5.2676 ppb	18:30:58
2	Pb 220.353†	93.0	-0.4	-0.1127 µg/L	-0.1127 ppb	18:30:58

2	S 181.975 Axial†	20.2	0.7	2.8524 µg/L	2.8524 ppb	18:30:58
2	Sb 206.836†	24.9	1.7	1.5373 µg/L	1.5373 ppb	18:30:58
2	Se 196.026†	20.3	0.5	0.7192 µg/L	0.7192 ppb	18:30:58
2	SiO2†	1642.6	206.7	40.802 µg/L	40.802 ppb	18:30:38
2	Si 251.611†	453.6	130.8	9.9406 µg/L	9.9406 ppb	18:30:58
2	Sn 189.927†	19.1	18.2	7.6779 µg/L	7.6779 ppb	18:30:58
2	Ti 334.940†	1831.1	1606.7	3.5550 µg/L	3.5550 ppb	18:30:38
2	Tl 190.801†	-20.6	2.3	3.0926 µg/L	3.0926 ppb	18:30:58
2	U 409.014†	-17.3	60.3	5.0059 µg/L	5.0059 ppb	18:30:38
2	V 292.402†	54.7	98.0	0.9631 µg/L	0.9631 ppb	18:30:38
2	Zn 213.857†	549.1	-0.1	-0.0060 µg/L	-0.0060 ppb	18:30:58
3	Sc RADIAL	57463.0	57463.0	102 %		18:29:29
3	Al 396.153Radial†	-41.0	-47.6	-33.158 µg/L	-33.158 ppb	18:29:29
3	Ca 317.933Radial†	194.3	-20.2	-17.244 µg/L	-17.244 ppb	18:29:50
3	Fe 238.204 Radial†	18.7	1.8	14.201 µg/L	14.201 ppb	18:29:50
3	K 766.490 Radial†	178.1	10.2	6.6395 µg/L	6.6395 ppb	18:29:29
3	Mg 279.077 IEC†	8.7	-4.2	-37.957 µg/L	-37.957 ppb	18:29:50
3	Na 589.592 Radial†	506.8	26.1	8.0102 µg/L	8.0102 ppb	18:29:29
3	Sr 421.552†	42.9	13.3	0.1232 µg/L	0.1232 ppb	18:29:29
3	Sc 361.383	2013891.9	2013891.9	102.59 %		18:31:04
3	Y 371.029	1385497.7	1385497.7	102.42 %		18:31:04
3	Ag 328.068†	-434.1	-21.6	-0.1566 µg/L	-0.1566 ppb	18:31:10
3	As 188.979†	1.4	1.8	3.2592 µg/L	3.2592 ppb	18:31:31
3	B 249.677†	380.8	-12.9	-0.5336 µg/L	-0.5336 ppb	18:31:31
3	Ba 233.527†	-7.5	9.7	0.2343 µg/L	0.2343 ppb	18:31:31
3	Be 313.107†	-2627.4	294.5	0.1745 µg/L	0.1745 ppb	18:31:10
3	Cd 226.502†	-139.2	6.0	0.1475 µg/L	0.1475 ppb	18:31:31
3	Co 228.616†	-2.4	-4.2	-0.1927 µg/L	-0.1927 ppb	18:31:31
3	Cr 267.716†	-21.1	29.8	0.5980 µg/L	0.5980 ppb	18:31:10
3	Cu 324.752†	2619.6	9.8	0.0659 µg/L	0.0659 ppb	18:31:10
3	Mn 257.610†	-3.1	253.0	0.7956 µg/L	0.7956 ppb	18:31:31
3	Mo 202.031†	1.5	6.8	0.6637 µg/L	0.6637 ppb	18:31:31
3	Ni 231.604†	309.6	-10.5	-0.5253 µg/L	-0.5253 ppb	18:31:31
3	P 214.914†	10.7	-4.9	-9.6506 µg/L	-9.6506 ppb	18:31:31
3	Pb 220.353†	92.1	-1.1	-0.2804 µg/L	-0.2804 ppb	18:31:31
3	S 181.975 Axial†	20.6	1.2	4.9214 µg/L	4.9214 ppb	18:31:31
3	Sb 206.836†	22.0	-1.0	-0.9299 µg/L	-0.9299 ppb	18:31:31
3	Se 196.026†	22.4	2.6	3.6800 µg/L	3.6800 ppb	18:31:31
3	SiO2†	1531.3	101.1	19.951 µg/L	19.951 ppb	18:31:10
3	Si 251.611†	470.6	148.1	11.258 µg/L	11.258 ppb	18:31:31
3	Sn 189.927†	15.7	14.9	6.2845 µg/L	6.2845 ppb	18:31:31
3	Ti 334.940†	545.2	356.5	0.7913 µg/L	0.7913 ppb	18:31:10
3	Tl 190.801†	-18.8	4.0	5.2381 µg/L	5.2381 ppb	18:31:31
3	U 409.014†	-62.1	16.5	1.3714 µg/L	1.3714 ppb	18:31:10
3	V 292.402†	-10.9	34.2	0.3425 µg/L	0.3425 ppb	18:31:10
3	Zn 213.857†	537.6	-10.4	-0.2395 µg/L	-0.2395 ppb	18:31:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2021304.7	102.96 %	0.503			0.49%
Sc RADIAL	57030.9	101 %	0.7			0.68%
Y 371.029	1391199.8	102.84 %	0.508			0.49%
Ag 328.068†	-29.0	-0.2103 µg/L	0.07128	-0.2103 ppb	0.07128	33.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-26.3	-18.340 µg/L	14.0000	-18.340 ppb	14.0000	76.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.8	3.2809 µg/L	7.30195	3.2809 ppb	7.30195	222.56%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-4.2	-0.1797 µg/L	0.57561	-0.1797 ppb	0.57561	320.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	31.9	0.7662 µg/L	0.69500	0.7662 ppb	0.69500	90.70%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	400.6	0.2372 µg/L	0.21833	0.2372 ppb	0.21833	92.06%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-19.7	-16.799 µg/L	3.2876	-16.799 ppb	3.2876	19.57%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	19.0	0.4714 µg/L	0.54127	0.4714 ppb	0.54127	114.82%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.9	0.4468 µg/L	0.66842	0.4468 ppb	0.66842	149.61%

Cr	267.716†	34.2	0.6874 µg/L	0.36726	0.6874 ppb	0.36726	53.43%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	31.1	0.2057 µg/L	0.59207	0.2057 ppb	0.59207	287.77%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	2.3	18.190 µg/L	3.6545	18.190 ppb	3.6545	20.09%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	34.6	22.567 µg/L	14.8062	22.567 ppb	14.8062	65.61%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-2.5	-21.982 µg/L	14.5132	-21.982 ppb	14.5132	66.02%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	650.0	2.0389 µg/L	1.92974	2.0389 ppb	1.92974	94.65%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	5.9	0.5797 µg/L	0.76032	0.5797 ppb	0.76032	131.17%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	20.1	6.1597 µg/L	2.27853	6.1597 ppb	2.27853	36.99%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	2.7	0.1323 µg/L	0.63148	0.1323 ppb	0.63148	477.25%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-2.5	-4.8915 µg/L	4.95786	-4.8915 ppb	4.95786	101.36%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	1.3	0.3136 µg/L	0.88754	0.3136 ppb	0.88754	283.00%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.1	0.5829 µg/L	5.81558	0.5829 ppb	5.81558	997.77%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.0	0.0429 µg/L	1.31372	0.0429 ppb	1.31372	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	0.4	0.5818 µg/L	3.16914	0.5818 ppb	3.16914	544.71%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		104.9	20.702 µg/L	19.7346	20.702 ppb	19.7346	95.33%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	201.8	15.340 µg/L	8.2366	15.340 ppb	8.2366	53.69%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	23.3	9.8010 µg/L	4.93347	9.8010 ppb	4.93347	50.34%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	13.6	0.1258 µg/L	0.10971	0.1258 ppb	0.10971	87.24%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	699.4	1.5488 µg/L	1.75468	1.5488 ppb	1.75468	113.30%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	2.8	3.6567 µg/L	1.38813	3.6567 ppb	1.38813	37.96%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	42.1	3.4936 µg/L	1.89246	3.4936 ppb	1.89246	54.17%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	57.9	0.5763 µg/L	0.33743	0.5763 ppb	0.33743	58.55%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	17.6	0.4131 µg/L	0.93546	0.4131 ppb	0.93546	226.45%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 18:57:21

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	58333.6	58333.6	103 %		18:58:00
1	Al 396.153Radial†	7365.1	7125.7	4946.5 µg/L	4946.5 ppb	18:58:00
1	Ca 317.933Radial†	6192.0	5785.6	4942.0 µg/L	4942.0 ppb	18:58:20
1	Fe 238.204 Radial†	674.6	636.7	5032.7 µg/L	5032.7 ppb	18:58:20
1	K 766.490 Radial†	7915.6	7501.2	4899.2 µg/L	4899.2 ppb	18:58:00
1	Mg 279.077 IEC†	598.6	566.9	5070.8 µg/L	5070.8 ppb	18:58:20
1	Na 589.592 Radial†	33942.4	32400.8	9951.7 µg/L	9951.7 ppb	18:58:00
1	Sr 421.552†	54192.3	52456.0	483.91 µg/L	483.91 ppb	18:58:00
1	Sc 361.383	2038441.2	2038441.2	103.84 %		18:59:24
1	Y 371.029	1399434.4	1399434.4	103.45 %		18:59:24
1	Ag 328.068†	68624.6	66490.5	496.15 µg/L	496.15 ppb	18:59:29
1	As 188.979†	294.5	284.1	508.19 µg/L	508.19 ppb	18:59:50
1	B 249.677†	12921.2	12059.6	489.70 µg/L	489.70 ppb	18:59:29
1	Ba 233.527†	21646.3	20863.5	501.78 µg/L	501.78 ppb	18:59:29
1	Be 313.107†	864552.3	835462.4	495.66 µg/L	495.66 ppb	18:59:24
1	Cd 226.502†	20886.7	20256.6	505.16 µg/L	505.16 ppb	18:59:29
1	Co 228.616†	11617.5	11186.3	506.03 µg/L	506.03 ppb	18:59:29
1	Cr 267.716†	26041.8	25130.0	505.06 µg/L	505.06 ppb	18:59:29
1	Cu 324.752†	81610.2	76051.0	497.12 µg/L	497.12 ppb	18:59:29
1	Mn 257.610†	166517.1	160620.2	503.45 µg/L	503.45 ppb	18:59:24
1	Mo 202.031†	5420.2	5225.2	511.88 µg/L	511.88 ppb	18:59:50
1	Ni 231.604†	10851.5	10138.2	504.85 µg/L	504.85 ppb	18:59:29
1	P 214.914†	1356.9	1291.4	2509.3 µg/L	2509.3 ppb	18:59:50
1	Pb 220.353†	2274.9	2099.9	510.66 µg/L	510.66 ppb	18:59:50
1	S 181.975 Axial†	272.1	243.1	1008.0 µg/L	1008.0 ppb	18:59:50
1	Sb 206.836†	600.9	556.2	512.79 µg/L	512.79 ppb	18:59:50
1	Se 196.026†	401.3	367.2	523.52 µg/L	523.52 ppb	18:59:50
1	SiO2†	29690.3	27201.7	5369.3 µg/L	5369.3 ppb	18:59:29
1	Si 251.611†	34620.8	33030.9	2511.1 µg/L	2511.1 ppb	18:59:29
1	Sn 189.927†	1274.6	1227.1	517.53 µg/L	517.53 ppb	18:59:50
1	Ti 334.940†	232175.5	223421.5	493.94 µg/L	493.94 ppb	18:59:24
1	Tl 190.801†	380.4	388.7	510.84 µg/L	510.84 ppb	18:59:50
1	U 409.014†	6240.2	6086.8	504.71 µg/L	504.71 ppb	18:59:29
1	V 292.402†	53236.3	51313.9	506.29 µg/L	506.29 ppb	18:59:29
1	Zn 213.857†	23013.8	21629.0	503.89 µg/L	503.89 ppb	18:59:29
2	Sc RADIAL	58344.7	58344.7	103 %		18:58:26
2	Al 396.153Radial†	7317.7	7078.4	4913.9 µg/L	4913.9 ppb	18:58:26
2	Ca 317.933Radial†	6132.7	5727.0	4891.9 µg/L	4891.9 ppb	18:58:46
2	Fe 238.204 Radial†	665.9	628.2	4965.5 µg/L	4965.5 ppb	18:58:46
2	K 766.490 Radial†	7920.4	7504.4	4901.2 µg/L	4901.2 ppb	18:58:26
2	Mg 279.077 IEC†	590.4	558.9	4999.2 µg/L	4999.2 ppb	18:58:46
2	Na 589.592 Radial†	33811.9	32268.1	9910.9 µg/L	9910.9 ppb	18:58:26
2	Sr 421.552†	54099.6	52356.2	482.99 µg/L	482.99 ppb	18:58:26
2	Sc 361.383	2035256.6	2035256.6	103.67 %		18:59:57
2	Y 371.029	1396273.2	1396273.2	103.22 %		18:59:57
2	Ag 328.068†	68425.9	66402.2	495.48 µg/L	495.48 ppb	19:00:03
2	As 188.979†	292.9	282.9	506.17 µg/L	506.17 ppb	19:00:23
2	B 249.677†	12903.7	12062.2	489.84 µg/L	489.84 ppb	19:00:03
2	Ba 233.527†	21596.0	20847.7	501.39 µg/L	501.39 ppb	19:00:03
2	Be 313.107†	862338.3	834629.7	495.17 µg/L	495.17 ppb	18:59:57
2	Cd 226.502†	20772.6	20178.1	503.20 µg/L	503.20 ppb	19:00:03
2	Co 228.616†	11542.6	11131.5	503.54 µg/L	503.54 ppb	19:00:03
2	Cr 267.716†	25954.2	25084.7	504.15 µg/L	504.15 ppb	19:00:03
2	Cu 324.752†	81509.2	76076.5	497.28 µg/L	497.28 ppb	19:00:03
2	Mn 257.610†	166351.9	160711.8	503.73 µg/L	503.73 ppb	18:59:57
2	Mo 202.031†	5270.1	5088.7	498.51 µg/L	498.51 ppb	19:00:23
2	Ni 231.604†	10791.0	10096.2	502.76 µg/L	502.76 ppb	19:00:03
2	P 214.914†	1323.9	1261.6	2450.2 µg/L	2450.2 ppb	19:00:23
2	Pb 220.353†	2210.1	2040.8	496.26 µg/L	496.26 ppb	19:00:23

2	S 181.975 Axial†	270.0	241.5	1001.5 µg/L	1001.5 ppb	19:00:23
2	Sb 206.836†	587.9	544.6	501.96 µg/L	501.96 ppb	19:00:23
2	Se 196.026†	392.6	359.4	512.48 µg/L	512.48 ppb	19:00:23
2	SiO2†	29616.5	27175.2	5364.0 µg/L	5364.0 ppb	19:00:03
2	Si 251.611†	34657.6	33118.5	2517.7 µg/L	2517.7 ppb	19:00:03
2	Sn 189.927†	1231.7	1187.7	500.91 µg/L	500.91 ppb	19:00:23
2	Ti 334.940†	231864.1	223470.9	494.05 µg/L	494.05 ppb	18:59:57
2	Tl 190.801†	372.5	381.7	501.72 µg/L	501.72 ppb	19:00:23
2	U 409.014†	6180.9	6038.9	500.75 µg/L	500.75 ppb	19:00:03
2	V 292.402†	53024.3	51189.7	504.96 µg/L	504.96 ppb	19:00:03
2	Zn 213.857†	22918.2	21571.5	502.56 µg/L	502.56 ppb	19:00:03
3	Sc RADIAL	58456.7	58456.7	103 %		18:58:52
3	Al 396.153Radial†	7314.1	7061.4	4904.0 µg/L	4904.0 ppb	18:58:52
3	Ca 317.933Radial†	6160.3	5742.4	4905.0 µg/L	4905.0 ppb	18:59:12
3	Fe 238.204 Radial†	669.3	630.3	4980.2 µg/L	4980.2 ppb	18:59:12
3	K 766.490 Radial†	7905.3	7475.1	4882.1 µg/L	4882.1 ppb	18:58:52
3	Mg 279.077 IEC†	592.0	559.3	5000.9 µg/L	5000.9 ppb	18:59:12
3	Na 589.592 Radial†	33692.4	32089.9	9856.2 µg/L	9856.2 ppb	18:58:52
3	Sr 421.552†	53981.8	52142.0	481.02 µg/L	481.02 ppb	18:58:52
3	Sc 361.383	2047612.7	2047612.7	104.30 %		19:00:30
3	Y 371.029	1406490.5	1406490.5	103.97 %		19:00:30
3	Ag 328.068†	63103.6	60901.3	454.27 µg/L	454.27 ppb	19:00:36
3	As 188.979†	237.6	228.3	408.38 µg/L	408.38 ppb	19:00:57
3	B 249.677†	11765.8	10896.1	442.18 µg/L	442.18 ppb	19:00:36
3	Ba 233.527†	19176.1	18401.9	442.55 µg/L	442.55 ppb	19:00:36
3	Be 313.107†	782724.7	753282.0	446.91 µg/L	446.91 ppb	19:00:30
3	Cd 226.502†	18400.9	17783.3	443.41 µg/L	443.41 ppb	19:00:36
3	Co 228.616†	10109.3	9690.2	438.29 µg/L	438.29 ppb	19:00:36
3	Cr 267.716†	21969.5	21113.3	424.34 µg/L	424.34 ppb	19:00:36
3	Cu 324.752†	71747.0	66242.7	433.09 µg/L	433.09 ppb	19:00:36
3	Mn 257.610†	151555.7	145557.9	456.28 µg/L	456.28 ppb	19:00:30
3	Mo 202.031†	4263.1	4092.5	400.95 µg/L	400.95 ppb	19:00:57
3	Ni 231.604†	9465.5	8762.6	436.35 µg/L	436.35 ppb	19:00:36
3	P 214.914†	1103.2	1042.4	2021.3 µg/L	2021.3 ppb	19:00:57
3	Pb 220.353†	1887.4	1718.6	417.83 µg/L	417.83 ppb	19:00:57
3	S 181.975 Axial†	232.4	203.9	845.45 µg/L	845.45 ppb	19:00:57
3	Sb 206.836†	490.6	447.9	412.47 µg/L	412.47 ppb	19:00:57
3	Se 196.026†	335.5	302.3	432.38 µg/L	432.38 ppb	19:00:57
3	SiO2†	26801.6	24304.1	4797.3 µg/L	4797.3 ppb	19:00:36
3	Si 251.611†	31212.7	29614.1	2251.3 µg/L	2251.3 ppb	19:00:36
3	Sn 189.927†	987.7	946.6	399.24 µg/L	399.24 ppb	19:00:57
3	Ti 334.940†	208406.1	199631.3	441.31 µg/L	441.31 ppb	19:00:30
3	Tl 190.801†	322.4	331.5	435.96 µg/L	435.96 ppb	19:00:57
3	U 409.014†	5296.2	5154.8	427.29 µg/L	427.29 ppb	19:00:36
3	V 292.402†	45829.3	43982.9	433.72 µg/L	433.72 ppb	19:00:36
3	Zn 213.857†	20142.3	18776.7	437.38 µg/L	437.38 ppb	19:00:36

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2040436.8	103.94 %	0.327			0.31%
Sc RADIAL	58378.3	103 %	0.1			0.12%
Y 371.029	1400732.7	103.55 %	0.387			0.37%
Ag 328.068†	64598.0	481.97 µg/L	23.988	481.97 ppb	23.988	4.98%
QC value within limits for Ag 328.068 Recovery = 96.39%						
Al 396.153Radial†	7088.5	4921.5 µg/L	22.23	4921.5 ppb	22.23	0.45%
QC value within limits for Al 396.153Radial Recovery = 98.43%						
As 188.979†	265.1	474.24 µg/L	57.051	474.24 ppb	57.051	12.03%
QC value within limits for As 188.979 Recovery = 94.85%						
B 249.677†	11672.6	473.91 µg/L	27.477	473.91 ppb	27.477	5.80%
QC value within limits for B 249.677 Recovery = 94.78%						
Ba 233.527†	20037.7	481.91 µg/L	34.084	481.91 ppb	34.084	7.07%
QC value within limits for Ba 233.527 Recovery = 96.38%						
Be 313.107†	807791.4	479.25 µg/L	28.007	479.25 ppb	28.007	5.84%
QC value within limits for Be 313.107 Recovery = 95.85%						
Ca 317.933Radial†	5751.7	4913.0 µg/L	25.95	4913.0 ppb	25.95	0.53%
QC value within limits for Ca 317.933Radial Recovery = 98.26%						
Cd 226.502†	19406.0	483.92 µg/L	35.100	483.92 ppb	35.100	7.25%
QC value within limits for Cd 226.502 Recovery = 96.78%						
Co 228.616†	10669.3	482.62 µg/L	38.414	482.62 ppb	38.414	7.96%

Cr	267.716†	23776.0	477.85 µg/L	46.344	477.85 ppb	46.344	9.70%
Cu	324.752†	72790.1	475.83 µg/L	37.014	475.83 ppb	37.014	7.78%
Fe	238.204 Radial†	631.7	4992.8 µg/L	35.34	4992.8 ppb	35.34	0.71%
K	766.490 Radial†	7493.6	4894.2 µg/L	10.48	4894.2 ppb	10.48	0.21%
Mg	279.077 IEC†	561.7	5023.6 µg/L	40.85	5023.6 ppb	40.85	0.81%
Mn	257.610†	155630.0	487.82 µg/L	27.316	487.82 ppb	27.316	5.60%
Mo	202.031†	4802.1	470.44 µg/L	60.553	470.44 ppb	60.553	12.87%
Na	589.592 Radial†	32252.9	9906.3 µg/L	47.92	9906.3 ppb	47.92	0.48%
Ni	231.604†	9665.7	481.32 µg/L	38.955	481.32 ppb	38.955	8.09%
P	214.914†	1198.4	2326.9 µg/L	266.31	2326.9 ppb	266.31	11.44%
Pb	220.353†	1953.1	474.92 µg/L	49.957	474.92 ppb	49.957	10.52%
S	181.975 Axial†	229.5	951.68 µg/L	92.053	951.68 ppb	92.053	9.67%
Sb	206.836†	516.2	475.74 µg/L	55.061	475.74 ppb	55.061	11.57%
Se	196.026†	343.0	489.46 µg/L	49.737	489.46 ppb	49.737	10.16%
SiO2†		26227.0	5176.9 µg/L	328.72	5176.9 ppb	328.72	6.35%
Si	251.611†	31921.2	2426.7 µg/L	151.93	2426.7 ppb	151.93	6.26%
Sn	189.927†	1120.5	472.56 µg/L	64.040	472.56 ppb	64.040	13.55%
Sr	421.552†	52318.1	482.64 µg/L	1.480	482.64 ppb	1.480	0.31%
Ti	334.940†	215507.9	476.43 µg/L	30.416	476.43 ppb	30.416	6.38%
Tl	190.801†	367.3	482.84 µg/L	40.853	482.84 ppb	40.853	8.46%
U	409.014†	5760.1	477.59 µg/L	43.602	477.59 ppb	43.602	9.13%
V	292.402†	48828.8	481.66 µg/L	41.521	481.66 ppb	41.521	8.62%
Zn	213.857†	20659.1	481.28 µg/L	38.019	481.28 ppb	38.019	7.90%

QC value within limits for Co 228.616 Recovery = 96.52%
 QC value within limits for Cr 267.716 Recovery = 95.57%
 QC value within limits for Cu 324.752 Recovery = 95.17%
 QC value within limits for Fe 238.204 Radial Recovery = 99.86%
 QC value within limits for K 766.490 Radial Recovery = 97.88%
 QC value within limits for Mg 279.077 IEC Recovery = 100.47%
 QC value within limits for Mn 257.610 Recovery = 97.56%
 QC value within limits for Mo 202.031 Recovery = 94.09%
 QC value within limits for Na 589.592 Radial Recovery = 99.06%
 QC value within limits for Ni 231.604 Recovery = 96.26%
 QC value within limits for P 214.914 Recovery = 93.08%
 QC value within limits for Pb 220.353 Recovery = 94.98%
 QC value within limits for S 181.975 Axial Recovery = 95.17%
 QC value within limits for Sb 206.836 Recovery = 95.15%
 QC value within limits for Se 196.026 Recovery = 97.89%
 QC value within limits for SiO2 Recovery = 96.81%
 QC value within limits for Si 251.611 Recovery = 97.07%
 QC value within limits for Sn 189.927 Recovery = 94.51%
 QC value within limits for Sr 421.552 Recovery = 96.53%
 QC value within limits for Ti 334.940 Recovery = 95.29%
 QC value within limits for Tl 190.801 Recovery = 96.57%
 QC value within limits for U 409.014 Recovery = 95.52%
 QC value within limits for V 292.402 Recovery = 96.33%
 QC value within limits for Zn 213.857 Recovery = 96.26%

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 19:01:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57423.2	57423.2	102 %		19:01:39
1	Al 396.153Radial†	-18.9	-25.9	-18.036 µg/L	-18.036 ppb	19:01:39
1	Ca 317.933Radial†	194.6	-19.8	-16.907 µg/L	-16.907 ppb	19:02:00
1	Fe 238.204 Radial†	20.3	3.4	26.844 µg/L	26.844 ppb	19:02:00
1	K 766.490 Radial†	169.3	1.6	1.0514 µg/L	1.0514 ppb	19:01:39
1	Mg 279.077 IEC†	10.7	-2.3	-20.795 µg/L	-20.795 ppb	19:02:00
1	Na 589.592 Radial†	537.1	56.3	17.279 µg/L	17.279 ppb	19:01:39
1	Sr 421.552†	21.5	-7.7	-0.0709 µg/L	-0.0709 ppb	19:01:39
1	Sc 361.383	2013251.1	2013251.1	102.55 %		19:03:02
1	Y 371.029	1385844.0	1385844.0	102.45 %		19:03:02
1	Ag 328.068†	-425.6	-13.4	-0.0944 µg/L	-0.0944 ppb	19:03:07
1	As 188.979†	1.0	1.5	2.6013 µg/L	2.6013 ppb	19:03:28
1	B 249.677†	361.7	-31.5	-1.2963 µg/L	-1.2963 ppb	19:03:28
1	Ba 233.527†	-6.9	10.3	0.2492 µg/L	0.2492 ppb	19:03:28
1	Be 313.107†	-2769.2	155.5	0.0922 µg/L	0.0922 ppb	19:03:07
1	Cd 226.502†	-136.0	9.0	0.2223 µg/L	0.2223 ppb	19:03:28
1	Co 228.616†	7.0	4.9	0.2213 µg/L	0.2213 ppb	19:03:28
1	Cr 267.716†	-45.7	5.9	0.1181 µg/L	0.1181 ppb	19:03:07
1	Cu 324.752†	2554.2	-53.2	-0.3432 µg/L	-0.3432 ppb	19:03:07
1	Mn 257.610†	-168.0	92.2	0.2930 µg/L	0.2930 ppb	19:03:28
1	Mo 202.031†	-4.8	0.6	0.0615 µg/L	0.0615 ppb	19:03:28
1	Ni 231.604†	318.0	-2.3	-0.1132 µg/L	-0.1132 ppb	19:03:28
1	P 214.914†	14.8	-0.9	-1.7488 µg/L	-1.7488 ppb	19:03:28
1	Pb 220.353†	84.3	-8.7	-2.1358 µg/L	-2.1358 ppb	19:03:28
1	S 181.975 Axial†	16.4	-2.9	-12.184 µg/L	-12.184 ppb	19:03:28
1	Sb 206.836†	29.7	6.4	5.9047 µg/L	5.9047 ppb	19:03:28
1	Se 196.026†	21.6	1.7	2.5321 µg/L	2.5321 ppb	19:03:28
1	SiO2†	1445.6	18.1	3.5679 µg/L	3.5679 ppb	19:03:07
1	Si 251.611†	358.6	39.1	2.9715 µg/L	2.9715 ppb	19:03:28
1	Sn 189.927†	6.5	5.9	2.5018 µg/L	2.5018 ppb	19:03:28
1	Ti 334.940†	319.2	136.2	0.3026 µg/L	0.3026 ppb	19:03:07
1	Tl 190.801†	-23.1	-0.1	-0.1533 µg/L	-0.1533 ppb	19:03:28
1	U 409.014†	95.4	170.1	14.129 µg/L	14.129 ppb	19:03:07
1	V 292.402†	4.5	49.1	0.4975 µg/L	0.4975 ppb	19:03:07
1	Zn 213.857†	525.8	-21.7	-0.5072 µg/L	-0.5072 ppb	19:03:28
2	Sc RADIAL	57351.0	57351.0	102 %		19:02:05
2	Al 396.153Radial†	0.6	-6.8	-4.7217 µg/L	-4.7217 ppb	19:02:05
2	Ca 317.933Radial†	191.9	-22.2	-18.945 µg/L	-18.945 ppb	19:02:26
2	Fe 238.204 Radial†	16.4	-0.4	-2.9277 µg/L	-2.9277 ppb	19:02:26
2	K 766.490 Radial†	226.8	58.4	38.151 µg/L	38.151 ppb	19:02:05
2	Mg 279.077 IEC†	4.7	-8.2	-72.904 µg/L	-72.904 ppb	19:02:26
2	Na 589.592 Radial†	474.9	-4.4	-1.3380 µg/L	-1.3380 ppb	19:02:05
2	Sr 421.552†	49.2	19.7	0.1813 µg/L	0.1813 ppb	19:02:05
2	Sc 361.383	2012182.2	2012182.2	102.50 %		19:03:34
2	Y 371.029	1385686.0	1385686.0	102.43 %		19:03:34
2	Ag 328.068†	-448.4	-35.9	-0.2659 µg/L	-0.2659 ppb	19:03:39
2	As 188.979†	-1.5	-1.0	-1.7378 µg/L	-1.7378 ppb	19:04:00
2	B 249.677†	352.5	-40.3	-1.6393 µg/L	-1.6393 ppb	19:04:00
2	Ba 233.527†	-10.2	7.1	0.1714 µg/L	0.1714 ppb	19:04:00
2	Be 313.107†	-2906.5	20.0	0.0117 µg/L	0.0117 ppb	19:03:39
2	Cd 226.502†	-139.6	5.4	0.1354 µg/L	0.1354 ppb	19:04:00
2	Co 228.616†	8.8	6.6	0.3005 µg/L	0.3005 ppb	19:04:00
2	Cr 267.716†	-48.8	2.8	0.0565 µg/L	0.0565 ppb	19:03:39
2	Cu 324.752†	2585.7	-21.1	-0.1382 µg/L	-0.1382 ppb	19:03:39
2	Mn 257.610†	-165.3	94.7	0.2992 µg/L	0.2992 ppb	19:04:00
2	Mo 202.031†	-0.6	4.7	0.4624 µg/L	0.4624 ppb	19:04:00
2	Ni 231.604†	304.3	-15.4	-0.7700 µg/L	-0.7700 ppb	19:04:00
2	P 214.914†	20.3	4.4	8.7926 µg/L	8.7926 ppb	19:04:00
2	Pb 220.353†	93.2	-0.0	-0.0043 µg/L	-0.0043 ppb	19:04:00

2	S 181.975 Axial†	10.8	-8.4	-34.884 µg/L	-34.884 ppb	19:04:00
2	Sb 206.836†	19.1	-3.9	-3.5666 µg/L	-3.5666 ppb	19:04:00
2	Se 196.026†	15.1	-4.6	-6.4360 µg/L	-6.4360 ppb	19:04:00
2	SiO2†	1460.9	33.7	6.6594 µg/L	6.6594 ppb	19:03:39
2	Si 251.611†	358.4	39.0	2.9639 µg/L	2.9639 ppb	19:04:00
2	Sn 189.927†	4.7	4.2	1.7676 µg/L	1.7676 ppb	19:04:00
2	Ti 334.940†	408.1	223.1	0.4990 µg/L	0.4990 ppb	19:03:39
2	Tl 190.801†	-23.8	-0.9	-1.1422 µg/L	-1.1422 ppb	19:04:00
2	U 409.014†	-63.7	15.0	1.2443 µg/L	1.2443 ppb	19:03:39
2	V 292.402†	-44.3	1.5	0.0193 µg/L	0.0193 ppb	19:03:39
2	Zn 213.857†	528.3	-19.0	-0.4374 µg/L	-0.4374 ppb	19:04:00
3	Sc RADIAL	57190.0	57190.0	101 %		19:02:31
3	Al 396.153Radial†	-22.6	-29.7	-20.673 µg/L	-20.673 ppb	19:02:31
3	Ca 317.933Radial†	189.8	-23.8	-20.291 µg/L	-20.291 ppb	19:02:51
3	Fe 238.204 Radial†	18.6	1.8	13.987 µg/L	13.987 ppb	19:02:51
3	K 766.490 Radial†	197.7	30.3	19.782 µg/L	19.782 ppb	19:02:31
3	Mg 279.077 IEC†	10.1	-2.9	-25.784 µg/L	-25.784 ppb	19:02:51
3	Na 589.592 Radial†	485.7	7.6	2.3466 µg/L	2.3466 ppb	19:02:31
3	Sr 421.552†	55.0	25.5	0.2351 µg/L	0.2351 ppb	19:02:31
3	Sc 361.383	2000057.1	2000057.1	101.88 %		19:04:06
3	Y 371.029	1377155.5	1377155.5	101.80 %		19:04:06
3	Ag 328.068†	-451.3	-41.4	-0.3043 µg/L	-0.3043 ppb	19:04:11
3	As 188.979†	5.3	5.6	10.113 µg/L	10.113 ppb	19:04:32
3	B 249.677†	349.5	-41.1	-1.6816 µg/L	-1.6816 ppb	19:04:32
3	Ba 233.527†	-13.8	3.6	0.0860 µg/L	0.0860 ppb	19:04:32
3	Be 313.107†	-2997.1	-86.1	-0.0512 µg/L	-0.0512 ppb	19:04:11
3	Cd 226.502†	-137.9	6.3	0.1551 µg/L	0.1551 ppb	19:04:32
3	Co 228.616†	6.6	4.6	0.2062 µg/L	0.2062 ppb	19:04:32
3	Cr 267.716†	-22.6	28.2	0.5656 µg/L	0.5656 ppb	19:04:11
3	Cu 324.752†	2587.8	-3.8	-0.0226 µg/L	-0.0226 ppb	19:04:11
3	Mn 257.610†	-159.2	99.8	0.3153 µg/L	0.3153 ppb	19:04:32
3	Mo 202.031†	2.5	7.8	0.7608 µg/L	0.7608 ppb	19:04:32
3	Ni 231.604†	316.7	-1.4	-0.0722 µg/L	-0.0722 ppb	19:04:32
3	P 214.914†	14.3	-1.3	-2.5898 µg/L	-2.5898 ppb	19:04:32
3	Pb 220.353†	83.5	-8.9	-2.1741 µg/L	-2.1741 ppb	19:04:32
3	S 181.975 Axial†	16.2	-3.0	-12.393 µg/L	-12.393 ppb	19:04:32
3	Sb 206.836†	23.0	0.1	0.0887 µg/L	0.0887 ppb	19:04:32
3	Se 196.026†	9.9	-9.6	-13.418 µg/L	-13.418 ppb	19:04:32
3	SiO2†	1462.5	43.9	8.6651 µg/L	8.6651 ppb	19:04:11
3	Si 251.611†	360.6	43.4	3.2962 µg/L	3.2962 ppb	19:04:32
3	Sn 189.927†	6.4	5.9	2.4731 µg/L	2.4731 ppb	19:04:32
3	Ti 334.940†	309.8	129.0	0.2871 µg/L	0.2871 ppb	19:04:11
3	Tl 190.801†	-25.4	-2.6	-3.3285 µg/L	-3.3285 ppb	19:04:32
3	U 409.014†	-45.5	32.4	2.6931 µg/L	2.6931 ppb	19:04:11
3	V 292.402†	-23.1	22.0	0.2263 µg/L	0.2263 ppb	19:04:11
3	Zn 213.857†	527.6	-16.5	-0.3862 µg/L	-0.3862 ppb	19:04:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008496.8	102.31 %	0.373			0.36%
Sc RADIAL	57321.4	101 %	0.2			0.21%
Y 371.029	1382895.2	102.23 %	0.367			0.36%
Ag 328.068†	-30.2	-0.2215 µg/L	0.11176	-0.2215 ppb	0.11176	50.45%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-20.8	-14.477 µg/L	8.5505	-14.477 ppb	8.5505	59.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.0	3.6588 µg/L	5.99568	3.6588 ppb	5.99568	163.87%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-37.6	-1.5391 µg/L	0.21127	-1.5391 ppb	0.21127	13.73%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.0	0.1689 µg/L	0.08165	0.1689 ppb	0.08165	48.35%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	29.8	0.0176 µg/L	0.07185	0.0176 ppb	0.07185	409.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-21.9	-18.714 µg/L	1.7037	-18.714 ppb	1.7037	9.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1709 µg/L	0.04557	0.1709 ppb	0.04557	26.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.4	0.2427 µg/L	0.05064	0.2427 ppb	0.05064	20.87%

Cr	267.716†	12.3	0.2467 µg/L	0.27783	0.2467 ppb	0.27783	112.61%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cu	324.752†	-26.0	-0.1680 µg/L	0.16236	-0.1680 ppb	0.16236	96.63%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.6	12.634 µg/L	14.9319	12.634 ppb	14.9319	118.18%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	30.1	19.662 µg/L	18.5502	19.662 ppb	18.5502	94.35%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-4.5	-39.828 µg/L	28.7536	-39.828 ppb	28.7536	72.20%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	95.6	0.3025 µg/L	0.01153	0.3025 ppb	0.01153	3.81%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.4	0.4283 µg/L	0.35090	0.4283 ppb	0.35090	81.94%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	19.8	6.0958 µg/L	9.85836	6.0958 ppb	9.85836	161.73%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-6.4	-0.3185 µg/L	0.39156	-0.3185 ppb	0.39156	122.95%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	0.7	1.4847 µg/L	6.34276	1.4847 ppb	6.34276	427.21%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-5.9	-1.4381 µg/L	1.24182	-1.4381 ppb	1.24182	86.35%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-4.8	-19.820 µg/L	13.0459	-19.820 ppb	13.0459	65.82%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.9	0.8090 µg/L	4.77653	0.8090 ppb	4.77653	590.45%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-4.2	-5.7739 µg/L	7.99551	-5.7739 ppb	7.99551	138.48%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		31.9	6.2974 µg/L	2.56780	6.2974 ppb	2.56780	40.78%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	40.5	3.0772 µg/L	0.18971	3.0772 ppb	0.18971	6.16%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	5.3	2.2475 µg/L	0.41585	2.2475 ppb	0.41585	18.50%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	12.5	0.1152 µg/L	0.16339	0.1152 ppb	0.16339	141.88%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	162.8	0.3629 µg/L	0.11813	0.3629 ppb	0.11813	32.55%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.2	-1.5413 µg/L	1.62481	-1.5413 ppb	1.62481	105.42%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	72.5	6.0222 µg/L	7.05819	6.0222 ppb	7.05819	117.20%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	24.2	0.2477 µg/L	0.23982	0.2477 ppb	0.23982	96.82%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-19.1	-0.4436 µg/L	0.06072	-0.4436 ppb	0.06072	13.69%
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: 2/19/2010 19:26:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58011.2	58011.2	103 %		19:27:24
1	Al 396.153Radial†	7306.1	7107.9	4934.0 µg/L	4934.0 ppb	19:27:24
1	Ca 317.933Radial†	6126.5	5755.1	4915.9 µg/L	4915.9 ppb	19:27:44
1	Fe 238.204 Radial†	670.2	636.1	5027.8 µg/L	5027.8 ppb	19:27:44
1	K 766.490 Radial†	7850.1	7480.0	4885.3 µg/L	4885.3 ppb	19:27:24
1	Mg 279.077 IEC†	589.4	561.2	5020.1 µg/L	5020.1 ppb	19:27:44
1	Na 589.592 Radial†	33642.4	32291.3	9918.0 µg/L	9918.0 ppb	19:27:24
1	Sr 421.552†	53727.7	52295.2	482.43 µg/L	482.43 ppb	19:27:24
1	Sc 361.383	2023941.6	2023941.6	103.10 %		19:28:48
1	Y 371.029	1390155.2	1390155.2	102.76 %		19:28:48
1	Ag 328.068†	68263.9	66614.1	497.07 µg/L	497.07 ppb	19:28:53
1	As 188.979†	297.5	289.1	517.08 µg/L	517.08 ppb	19:29:14
1	B 249.677†	12754.8	11987.3	486.76 µg/L	486.76 ppb	19:28:53
1	Ba 233.527†	21527.5	20897.6	502.60 µg/L	502.60 ppb	19:28:53
1	Be 313.107†	859738.4	836757.9	496.43 µg/L	496.43 ppb	19:28:48
1	Cd 226.502†	20670.0	20190.5	503.51 µg/L	503.51 ppb	19:28:53
1	Co 228.616†	11554.6	11205.5	506.90 µg/L	506.90 ppb	19:28:53
1	Cr 267.716†	25881.7	25154.3	505.55 µg/L	505.55 ppb	19:28:53
1	Cu 324.752†	81255.0	76269.5	498.55 µg/L	498.55 ppb	19:28:53
1	Mn 257.610†	166147.8	161410.9	505.93 µg/L	505.93 ppb	19:28:48
1	Mo 202.031†	5454.8	5296.3	518.83 µg/L	518.83 ppb	19:29:14
1	Ni 231.604†	10745.9	10110.7	503.47 µg/L	503.47 ppb	19:28:53
1	P 214.914†	1361.8	1305.6	2537.4 µg/L	2537.4 ppb	19:29:14
1	Pb 220.353†	2266.4	2107.4	512.48 µg/L	512.48 ppb	19:29:14
1	S 181.975 Axial†	273.5	246.4	1021.7 µg/L	1021.7 ppb	19:29:14
1	Sb 206.836†	610.7	569.8	525.42 µg/L	525.42 ppb	19:29:14
1	Se 196.026†	395.7	364.5	519.83 µg/L	519.83 ppb	19:29:14
1	SiO2†	29524.0	27245.2	5377.9 µg/L	5377.9 ppb	19:28:53
1	Si 251.611†	34545.7	33196.9	2523.7 µg/L	2523.7 ppb	19:28:53
1	Sn 189.927†	1282.8	1243.9	524.60 µg/L	524.60 ppb	19:29:14
1	Ti 334.940†	231474.2	224343.1	495.98 µg/L	495.98 ppb	19:28:48
1	Tl 190.801†	382.2	393.1	516.55 µg/L	516.55 ppb	19:29:14
1	U 409.014†	6240.4	6130.0	508.31 µg/L	508.31 ppb	19:28:53
1	V 292.402†	52860.7	51317.0	506.38 µg/L	506.38 ppb	19:28:53
1	Zn 213.857†	22851.7	21630.6	503.94 µg/L	503.94 ppb	19:28:53
2	Sc RADIAL	58208.4	58208.4	103 %		19:27:50
2	Al 396.153Radial†	7271.3	7050.0	4894.0 µg/L	4894.0 ppb	19:27:50
2	Ca 317.933Radial†	6163.6	5771.0	4929.4 µg/L	4929.4 ppb	19:28:10
2	Fe 238.204 Radial†	675.5	639.1	5051.0 µg/L	5051.0 ppb	19:28:10
2	K 766.490 Radial†	7866.0	7469.5	4878.5 µg/L	4878.5 ppb	19:27:50
2	Mg 279.077 IEC†	590.4	560.2	5010.8 µg/L	5010.8 ppb	19:28:10
2	Na 589.592 Radial†	33660.4	32197.8	9889.3 µg/L	9889.3 ppb	19:27:50
2	Sr 421.552†	53698.2	52089.4	480.53 µg/L	480.53 ppb	19:27:50
2	Sc 361.383	2026589.1	2026589.1	103.23 %		19:29:21
2	Y 371.029	1392880.6	1392880.6	102.97 %		19:29:21
2	Ag 328.068†	68809.4	67056.0	500.36 µg/L	500.36 ppb	19:29:27
2	As 188.979†	296.8	288.0	515.16 µg/L	515.16 ppb	19:29:47
2	B 249.677†	12885.4	12097.7	491.25 µg/L	491.25 ppb	19:29:27
2	Ba 233.527†	21677.5	21015.6	505.43 µg/L	505.43 ppb	19:29:27
2	Be 313.107†	865418.2	841170.5	499.05 µg/L	499.05 ppb	19:29:21
2	Cd 226.502†	20826.2	20315.7	506.63 µg/L	506.63 ppb	19:29:27
2	Co 228.616†	11598.5	11233.3	508.15 µg/L	508.15 ppb	19:29:27
2	Cr 267.716†	26109.2	25341.9	509.31 µg/L	509.31 ppb	19:29:27
2	Cu 324.752†	81892.1	76783.6	501.90 µg/L	501.90 ppb	19:29:27
2	Mn 257.610†	167199.4	162219.0	508.46 µg/L	508.46 ppb	19:29:21
2	Mo 202.031†	5288.0	5127.7	502.33 µg/L	502.33 ppb	19:29:47
2	Ni 231.604†	10828.5	10177.0	506.78 µg/L	506.78 ppb	19:29:27
2	P 214.914†	1324.9	1268.1	2462.5 µg/L	2462.5 ppb	19:29:47
2	Pb 220.353†	2219.6	2059.1	500.70 µg/L	500.70 ppb	19:29:47

2	S 181.975 Axial†	269.0	241.6	1001.9 µg/L	1001.9 ppb	19:29:47
2	Sb 206.836†	585.9	545.1	502.40 µg/L	502.40 ppb	19:29:47
2	Se 196.026†	401.2	369.3	526.64 µg/L	526.64 ppb	19:29:47
2	SiO2†	29674.8	27353.9	5399.3 µg/L	5399.3 ppb	19:29:27
2	Si 251.611†	34681.9	33285.1	2530.4 µg/L	2530.4 ppb	19:29:27
2	Sn 189.927†	1240.2	1201.0	506.52 µg/L	506.52 ppb	19:29:47
2	Ti 334.940†	232768.0	225303.0	498.10 µg/L	498.10 ppb	19:29:21
2	Tl 190.801†	370.9	381.6	501.66 µg/L	501.66 ppb	19:29:47
2	U 409.014†	6213.7	6096.2	505.50 µg/L	505.50 ppb	19:29:27
2	V 292.402†	53162.8	51542.6	508.46 µg/L	508.46 ppb	19:29:27
2	Zn 213.857†	22978.8	21724.8	506.12 µg/L	506.12 ppb	19:29:27
3	Sc RADIAL	57939.2	57939.2	103 %		19:28:16
3	Al 396.153Radial†	7262.7	7074.4	4912.9 µg/L	4912.9 ppb	19:28:16
3	Ca 317.933Radial†	6172.6	5807.6	4960.7 µg/L	4960.7 ppb	19:28:36
3	Fe 238.204 Radial†	672.1	638.8	5047.6 µg/L	5047.6 ppb	19:28:36
3	K 766.490 Radial†	7867.0	7506.0	4902.3 µg/L	4902.3 ppb	19:28:16
3	Mg 279.077 IEC†	596.5	568.8	5086.0 µg/L	5086.0 ppb	19:28:36
3	Na 589.592 Radial†	33675.5	32364.3	9940.5 µg/L	9940.5 ppb	19:28:16
3	Sr 421.552†	53684.5	52318.1	482.64 µg/L	482.64 ppb	19:28:16
3	Sc 361.383	2019244.9	2019244.9	102.86 %		19:29:54
3	Y 371.029	1386733.2	1386733.2	102.51 %		19:29:54
3	Ag 328.068†	63032.4	61682.0	460.10 µg/L	460.10 ppb	19:30:00
3	As 188.979†	244.2	237.9	425.60 µg/L	425.60 ppb	19:30:20
3	B 249.677†	11714.9	11005.2	446.60 µg/L	446.60 ppb	19:30:00
3	Ba 233.527†	19107.8	18593.8	447.17 µg/L	447.17 ppb	19:30:00
3	Be 313.107†	780455.8	761618.7	451.85 µg/L	451.85 ppb	19:29:54
3	Cd 226.502†	18286.2	17919.6	446.80 µg/L	446.80 ppb	19:30:00
3	Co 228.616†	10093.7	9811.2	443.77 µg/L	443.77 ppb	19:30:00
3	Cr 267.716†	21917.3	21358.4	429.26 µg/L	429.26 ppb	19:30:00
3	Cu 324.752†	71787.5	67248.4	439.66 µg/L	439.66 ppb	19:30:00
3	Mn 257.610†	151706.1	147745.4	463.13 µg/L	463.13 ppb	19:29:54
3	Mo 202.031†	4317.7	4203.0	411.78 µg/L	411.78 ppb	19:30:20
3	Ni 231.604†	9445.6	8870.7	441.74 µg/L	441.74 ppb	19:30:00
3	P 214.914†	1095.4	1049.6	2035.1 µg/L	2035.1 ppb	19:30:20
3	Pb 220.353†	1899.2	1755.5	426.81 µg/L	426.81 ppb	19:30:20
3	S 181.975 Axial†	229.2	203.9	845.45 µg/L	845.45 ppb	19:30:20
3	Sb 206.836†	491.4	455.2	419.32 µg/L	419.32 ppb	19:30:20
3	Se 196.026†	335.0	306.4	438.20 µg/L	438.20 ppb	19:30:20
3	SiO2†	26768.8	24633.2	4862.3 µg/L	4862.3 ppb	19:30:00
3	Si 251.611†	31095.2	29920.3	2274.6 µg/L	2274.6 ppb	19:30:00
3	Sn 189.927†	986.7	958.9	404.42 µg/L	404.42 ppb	19:30:20
3	Ti 334.940†	208387.6	202420.4	447.48 µg/L	447.48 ppb	19:29:54
3	Tl 190.801†	323.7	337.1	443.33 µg/L	443.33 ppb	19:30:20
3	U 409.014†	5278.3	5208.6	431.75 µg/L	431.75 ppb	19:30:00
3	V 292.402†	45791.0	44563.0	439.48 µg/L	439.48 ppb	19:30:00
3	Zn 213.857†	20107.0	19013.7	442.90 µg/L	442.90 ppb	19:30:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2023258.5	103.06 %	0.189			0.18%
Sc RADIAL	58052.9	103 %	0.2			0.24%
Y 371.029	1389923.0	102.75 %	0.228			0.22%
Ag 328.068†	65117.4	485.84 µg/L	22.354	485.84 ppb	22.354	4.60%
QC value within limits for Ag 328.068 Recovery = 97.17%						
Al 396.153Radial†	7077.4	4913.6 µg/L	19.97	4913.6 ppb	19.97	0.41%
QC value within limits for Al 396.153Radial Recovery = 98.27%						
As 188.979†	271.6	485.95 µg/L	52.268	485.95 ppb	52.268	10.76%
QC value within limits for As 188.979 Recovery = 97.19%						
B 249.677†	11696.7	474.87 µg/L	24.588	474.87 ppb	24.588	5.18%
QC value within limits for B 249.677 Recovery = 94.97%						
Ba 233.527†	20169.0	485.07 µg/L	32.850	485.07 ppb	32.850	6.77%
QC value within limits for Ba 233.527 Recovery = 97.01%						
Be 313.107†	813182.4	482.44 µg/L	26.525	482.44 ppb	26.525	5.50%
QC value within limits for Be 313.107 Recovery = 96.49%						
Ca 317.933Radial†	5777.9	4935.4 µg/L	22.97	4935.4 ppb	22.97	0.47%
QC value within limits for Ca 317.933Radial Recovery = 98.71%						
Cd 226.502†	19475.3	485.65 µg/L	33.674	485.65 ppb	33.674	6.93%
QC value within limits for Cd 226.502 Recovery = 97.13%						
Co 228.616†	10750.0	486.27 µg/L	36.817	486.27 ppb	36.817	7.57%

QC value within limits for Co 228.616 Recovery = 97.25%							
Cr 267.716†	23951.5	481.37 µg/L	45.169	481.37 ppb	45.169	9.38%	
QC value within limits for Cr 267.716 Recovery = 96.27%							
Cu 324.752†	73433.8	480.04 µg/L	35.005	480.04 ppb	35.005	7.29%	
QC value within limits for Cu 324.752 Recovery = 96.01%							
Fe 238.204 Radial†	638.0	5042.1 µg/L	12.53	5042.1 ppb	12.53	0.25%	
QC value within limits for Fe 238.204 Radial Recovery = 100.84%							
K 766.490 Radial†	7485.2	4888.7 µg/L	12.26	4888.7 ppb	12.26	0.25%	
QC value within limits for K 766.490 Radial Recovery = 97.77%							
Mg 279.077 IEC†	563.4	5039.0 µg/L	41.01	5039.0 ppb	41.01	0.81%	
QC value within limits for Mg 279.077 IEC Recovery = 100.78%							
Mn 257.610†	157125.1	492.51 µg/L	25.470	492.51 ppb	25.470	5.17%	
QC value within limits for Mn 257.610 Recovery = 98.50%							
Mo 202.031†	4875.7	477.65 µg/L	57.638	477.65 ppb	57.638	12.07%	
QC value within limits for Mo 202.031 Recovery = 95.53%							
Na 589.592 Radial†	32284.4	9915.9 µg/L	25.63	9915.9 ppb	25.63	0.26%	
QC value within limits for Na 589.592 Radial Recovery = 99.16%							
Ni 231.604†	9719.5	484.00 µg/L	36.636	484.00 ppb	36.636	7.57%	
QC value within limits for Ni 231.604 Recovery = 96.80%							
P 214.914†	1207.8	2345.0 µg/L	270.98	2345.0 ppb	270.98	11.56%	
QC value within limits for P 214.914 Recovery = 93.80%							
Pb 220.353†	1974.0	480.00 µg/L	46.437	480.00 ppb	46.437	9.67%	
QC value within limits for Pb 220.353 Recovery = 96.00%							
S 181.975 Axial†	230.6	956.35 µg/L	96.547	956.35 ppb	96.547	10.10%	
QC value within limits for S 181.975 Axial Recovery = 95.63%							
Sb 206.836†	523.4	482.38 µg/L	55.814	482.38 ppb	55.814	11.57%	
QC value within limits for Sb 206.836 Recovery = 96.48%							
Se 196.026†	346.8	494.89 µg/L	49.212	494.89 ppb	49.212	9.94%	
QC value within limits for Se 196.026 Recovery = 98.98%							
SiO2†	26410.8	5213.1 µg/L	304.05	5213.1 ppb	304.05	5.83%	
QC value within limits for SiO2 Recovery = 97.49%							
Si 251.611†	32134.1	2442.9 µg/L	145.79	2442.9 ppb	145.79	5.97%	
QC value within limits for Si 251.611 Recovery = 97.72%							
Sn 189.927†	1134.6	478.51 µg/L	64.799	478.51 ppb	64.799	13.54%	
QC value within limits for Sn 189.927 Recovery = 95.70%							
Sr 421.552†	52234.2	481.87 µg/L	1.162	481.87 ppb	1.162	0.24%	
QC value within limits for Sr 421.552 Recovery = 96.37%							
Ti 334.940†	217355.5	480.52 µg/L	28.636	480.52 ppb	28.636	5.96%	
QC value within limits for Ti 334.940 Recovery = 96.10%							
Tl 190.801†	370.6	487.18 µg/L	38.702	487.18 ppb	38.702	7.94%	
QC value within limits for Tl 190.801 Recovery = 97.44%							
U 409.014†	5811.6	481.85 µg/L	43.409	481.85 ppb	43.409	9.01%	
QC value within limits for U 409.014 Recovery = 96.37%							
V 292.402†	49140.8	484.77 µg/L	39.238	484.77 ppb	39.238	8.09%	
QC value within limits for V 292.402 Recovery = 96.95%							
Zn 213.857†	20789.7	484.32 µg/L	35.886	484.32 ppb	35.886	7.41%	
QC value within limits for Zn 213.857 Recovery = 96.86%							

All analyte(s) passed QC.

Sequence No.: 34
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/19/2010 19:30:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57803.7	57803.7	102 %		19:31:04
1	Al 396.153Radial†	-10.0	-17.1	-11.924 µg/L	-11.924 ppb	19:31:04
1	Ca 317.933Radial†	196.7	-19.1	-16.278 µg/L	-16.278 ppb	19:31:24
1	Fe 238.204 Radial†	20.4	3.4	26.456 µg/L	26.456 ppb	19:31:24
1	K 766.490 Radial†	206.4	36.8	24.007 µg/L	24.007 ppb	19:31:04
1	Mg 279.077 IEC†	12.2	-0.9	-8.3904 µg/L	-8.3904 ppb	19:31:24
1	Na 589.592 Radial†	467.0	-15.7	-4.8300 µg/L	-4.8300 ppb	19:31:04
1	Sr 421.552†	46.6	16.7	0.1542 µg/L	0.1542 ppb	19:31:04
1	Sc 361.383	2025799.3	2025799.3	103.19 %		19:32:26
1	Y 371.029	1395690.7	1395690.7	103.17 %		19:32:26
1	Ag 328.068†	-418.9	-4.3	-0.0299 µg/L	-0.0299 ppb	19:32:32
1	As 188.979†	5.7	6.0	10.690 µg/L	10.690 ppb	19:32:52
1	B 249.677†	346.4	-48.5	-1.9903 µg/L	-1.9903 ppb	19:32:52
1	Ba 233.527†	-10.1	7.3	0.1761 µg/L	0.1761 ppb	19:32:52
1	Be 313.107†	-2840.4	103.2	0.0611 µg/L	0.0611 ppb	19:32:32
1	Cd 226.502†	-141.4	4.7	0.1130 µg/L	0.1130 ppb	19:32:52
1	Co 228.616†	3.9	1.9	0.0851 µg/L	0.0851 ppb	19:32:52
1	Cr 267.716†	-52.3	-0.3	-0.0059 µg/L	-0.0059 ppb	19:32:32
1	Cu 324.752†	2589.2	-34.6	-0.2223 µg/L	-0.2223 ppb	19:32:32
1	Mn 257.610†	-125.9	134.0	0.4234 µg/L	0.4234 ppb	19:32:52
1	Mo 202.031†	-3.8	1.7	0.1637 µg/L	0.1637 ppb	19:32:52
1	Ni 231.604†	312.5	-9.5	-0.4735 µg/L	-0.4735 ppb	19:32:52
1	P 214.914†	19.0	3.1	6.0665 µg/L	6.0665 ppb	19:32:52
1	Pb 220.353†	87.4	-6.2	-1.5170 µg/L	-1.5170 ppb	19:32:52
1	S 181.975 Axial†	16.2	-3.2	-13.428 µg/L	-13.428 ppb	19:32:52
1	Sb 206.836†	17.3	-5.7	-5.2171 µg/L	-5.2171 ppb	19:32:52
1	Se 196.026†	14.6	-5.2	-7.2159 µg/L	-7.2159 ppb	19:32:52
1	SiO2†	1457.3	20.6	4.0713 µg/L	4.0713 ppb	19:32:32
1	Si 251.611†	367.4	45.4	3.4484 µg/L	3.4484 ppb	19:32:52
1	Sn 189.927†	2.9	2.5	1.0388 µg/L	1.0388 ppb	19:32:52
1	Ti 334.940†	320.1	135.2	0.2995 µg/L	0.2995 ppb	19:32:32
1	Tl 190.801†	-20.2	2.8	3.6951 µg/L	3.6951 ppb	19:32:52
1	U 409.014†	5.9	82.8	6.8777 µg/L	6.8777 ppb	19:32:32
1	V 292.402†	-40.7	5.3	0.0634 µg/L	0.0634 ppb	19:32:32
1	Zn 213.857†	538.4	-12.7	-0.2952 µg/L	-0.2952 ppb	19:32:52
2	Sc RADIAL	57446.2	57446.2	102 %		19:31:29
2	Al 396.153Radial†	-13.6	-20.7	-14.413 µg/L	-14.413 ppb	19:31:29
2	Ca 317.933Radial†	196.2	-18.3	-15.615 µg/L	-15.615 ppb	19:31:50
2	Fe 238.204 Radial†	16.6	-0.3	-2.1967 µg/L	-2.1967 ppb	19:31:50
2	K 766.490 Radial†	247.6	78.5	51.300 µg/L	51.300 ppb	19:31:29
2	Mg 279.077 IEC†	10.6	-2.4	-21.567 µg/L	-21.567 ppb	19:31:50
2	Na 589.592 Radial†	483.2	3.0	0.9277 µg/L	0.9277 ppb	19:31:29
2	Sr 421.552†	2.4	-26.4	-0.2440 µg/L	-0.2440 ppb	19:31:29
2	Sc 361.383	2031745.9	2031745.9	103.50 %		19:32:58
2	Y 371.029	1401392.4	1401392.4	103.60 %		19:32:58
2	Ag 328.068†	-396.7	18.3	0.1368 µg/L	0.1368 ppb	19:33:04
2	As 188.979†	0.2	0.6	1.1375 µg/L	1.1375 ppb	19:33:24
2	B 249.677†	348.5	-47.4	-1.9319 µg/L	-1.9319 ppb	19:33:24
2	Ba 233.527†	-17.3	0.3	0.0083 µg/L	0.0083 ppb	19:33:24
2	Be 313.107†	-2882.3	70.8	0.0419 µg/L	0.0419 ppb	19:33:04
2	Cd 226.502†	-137.7	8.6	0.2144 µg/L	0.2144 ppb	19:33:24
2	Co 228.616†	-1.5	-3.4	-0.1547 µg/L	-0.1547 ppb	19:33:24
2	Cr 267.716†	-68.0	-15.3	-0.3078 µg/L	-0.3078 ppb	19:33:04
2	Cu 324.752†	2609.0	-22.8	-0.1493 µg/L	-0.1493 ppb	19:33:04
2	Mn 257.610†	-117.6	142.3	0.4463 µg/L	0.4463 ppb	19:33:24
2	Mo 202.031†	-2.4	3.0	0.2951 µg/L	0.2951 ppb	19:33:24
2	Ni 231.604†	312.9	-10.0	-0.4983 µg/L	-0.4983 ppb	19:33:24
2	P 214.914†	11.5	-4.2	-8.3725 µg/L	-8.3725 ppb	19:33:24
2	Pb 220.353†	83.2	-10.5	-2.5612 µg/L	-2.5612 ppb	19:33:24

2	S 181.975 Axial†	19.8	0.2	0.8387 µg/L	0.8387 ppb	19:33:24
2	Sb 206.836†	25.4	2.1	1.9038 µg/L	1.9038 ppb	19:33:24
2	Se 196.026†	16.0	-3.9	-5.4218 µg/L	-5.4218 ppb	19:33:24
2	SiO2†	1425.4	-14.3	-2.8218 µg/L	-2.8218 ppb	19:33:04
2	Si 251.611†	386.0	62.4	4.7401 µg/L	4.7401 ppb	19:33:24
2	Sn 189.927†	-0.4	-0.8	-0.3347 µg/L	-0.3347 ppb	19:33:24
2	Ti 334.940†	346.5	159.8	0.3550 µg/L	0.3550 ppb	19:33:04
2	Tl 190.801†	-19.1	3.9	5.0976 µg/L	5.0976 ppb	19:33:24
2	U 409.014†	-2.7	74.5	6.1922 µg/L	6.1922 ppb	19:33:04
2	V 292.402†	-29.1	16.7	0.1702 µg/L	0.1702 ppb	19:33:04
2	Zn 213.857†	529.8	-22.5	-0.5234 µg/L	-0.5234 ppb	19:33:24
3	Sc RADIAL	56634.0	56634.0	100 %		19:31:55
3	Al 396.153Radial†	3.4	-4.0	-2.7853 µg/L	-2.7853 ppb	19:31:55
3	Ca 317.933Radial†	194.5	-17.2	-14.719 µg/L	-14.719 ppb	19:32:16
3	Fe 238.204 Radial†	18.7	2.1	16.416 µg/L	16.416 ppb	19:32:16
3	K 766.490 Radial†	165.0	-0.4	-0.2546 µg/L	-0.2546 ppb	19:31:55
3	Mg 279.077 IEC†	11.4	-1.4	-12.921 µg/L	-12.921 ppb	19:32:16
3	Na 589.592 Radial†	499.6	26.2	8.0527 µg/L	8.0527 ppb	19:31:55
3	Sr 421.552†	20.0	-8.9	-0.0818 µg/L	-0.0818 ppb	19:31:55
3	Sc 361.383	2031784.6	2031784.6	103.50 %		19:33:30
3	Y 371.029	1401143.1	1401143.1	103.58 %		19:33:30
3	Ag 328.068†	-447.4	-30.7	-0.2248 µg/L	-0.2248 ppb	19:33:36
3	As 188.979†	-3.2	-2.6	-4.7006 µg/L	-4.7006 ppb	19:33:57
3	B 249.677†	355.0	-41.1	-1.6835 µg/L	-1.6835 ppb	19:33:57
3	Ba 233.527†	-12.0	5.5	0.1329 µg/L	0.1329 ppb	19:33:57
3	Be 313.107†	-2752.0	196.7	0.1167 µg/L	0.1167 ppb	19:33:36
3	Cd 226.502†	-133.4	12.8	0.3163 µg/L	0.3163 ppb	19:33:57
3	Co 228.616†	5.6	3.5	0.1593 µg/L	0.1593 ppb	19:33:57
3	Cr 267.716†	-3.9	46.6	0.9367 µg/L	0.9367 ppb	19:33:36
3	Cu 324.752†	2597.8	-33.7	-0.2180 µg/L	-0.2180 ppb	19:33:36
3	Mn 257.610†	-109.9	149.9	0.4720 µg/L	0.4720 ppb	19:33:57
3	Mo 202.031†	-0.0	5.3	0.5227 µg/L	0.5227 ppb	19:33:57
3	Ni 231.604†	321.2	-2.0	-0.0983 µg/L	-0.0983 ppb	19:33:57
3	P 214.914†	15.7	-0.2	-0.3967 µg/L	-0.3967 ppb	19:33:57
3	Pb 220.353†	93.0	-1.1	-0.2629 µg/L	-0.2629 ppb	19:33:57
3	S 181.975 Axial†	17.9	-1.7	-6.9059 µg/L	-6.9059 ppb	19:33:57
3	Sb 206.836†	24.5	1.2	1.0976 µg/L	1.0976 ppb	19:33:57
3	Se 196.026†	13.0	-6.8	-9.4419 µg/L	-9.4419 ppb	19:33:57
3	SiO2†	1471.5	30.2	5.9619 µg/L	5.9619 ppb	19:33:36
3	Si 251.611†	378.8	55.4	4.2091 µg/L	4.2091 ppb	19:33:57
3	Sn 189.927†	1.2	0.8	0.3212 µg/L	0.3212 ppb	19:33:57
3	Ti 334.940†	295.3	110.3	0.2447 µg/L	0.2447 ppb	19:33:36
3	Tl 190.801†	-22.9	0.3	0.3574 µg/L	0.3574 ppb	19:33:57
3	U 409.014†	-14.1	63.5	5.2725 µg/L	5.2725 ppb	19:33:36
3	V 292.402†	-25.9	19.7	0.2057 µg/L	0.2057 ppb	19:33:36
3	Zn 213.857†	530.6	-21.8	-0.5098 µg/L	-0.5098 ppb	19:33:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	2029776.6	103.40 %		0.175				0.17%
Sc RADIAL	57294.7	101 %		1.1				1.05%
Y 371.029	1399408.7	103.45 %		0.238				0.23%
Ag 328.068†	-5.5	-0.0393 µg/L		0.18096	-0.0393 ppb		0.18096	460.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.9	-9.7076 µg/L		6.12268	-9.7076 ppb		6.12268	63.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	2.3757 µg/L		7.76979	2.3757 ppb		7.76979	327.05%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-45.7	-1.8686 µg/L		0.16289	-1.8686 ppb		0.16289	8.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.4	0.1057 µg/L		0.08714	0.1057 ppb		0.08714	82.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	123.6	0.0732 µg/L		0.03884	0.0732 ppb		0.03884	53.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-18.2	-15.537 µg/L		0.7823	-15.537 ppb		0.7823	5.04%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	8.7	0.2146 µg/L		0.10166	0.2146 ppb		0.10166	47.38%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.7	0.0299 µg/L		0.16412	0.0299 ppb		0.16412	548.91%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	10.3 0.2077 µg/L	0.64914 0.2077 ppb	0.64914 312.58%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-30.4 -0.1965 µg/L	0.04097 -0.1965 ppb	0.04097 20.85%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.7 13.558 µg/L	14.5386 13.558 ppb	14.5386 107.23%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	38.3 25.017 µg/L	25.7921 25.017 ppb	25.7921 103.10%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.6 -14.293 µg/L	6.6944 -14.293 ppb	6.6944 46.84%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	142.1 0.4473 µg/L	0.02431 0.4473 ppb	0.02431 5.44%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	3.3 0.3272 µg/L	0.18162 0.3272 ppb	0.18162 55.51%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	4.5 1.3835 µg/L	6.45342 1.3835 ppb	6.45342 466.47%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-7.2 -0.3567 µg/L	0.22417 -0.3567 ppb	0.22417 62.84%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-0.5 -0.9009 µg/L	7.23268 -0.9009 ppb	7.23268 802.85%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-5.9 -1.4470 µg/L	1.15074 -1.4470 ppb	1.15074 79.52%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.6 -6.4984 µg/L	7.14204 -6.4984 ppb	7.14204 109.90%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-0.8 -0.7386 µg/L	3.89940 -0.7386 ppb	3.89940 527.97%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-5.3 -7.3599 µg/L	2.01391 -7.3599 ppb	2.01391 27.36%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	12.2 2.4038 µg/L	4.62317 2.4038 ppb	4.62317 192.33%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	54.4 4.1325 µg/L	0.64925 4.1325 ppb	0.64925 15.71%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	0.8 0.3418 µg/L	0.68701 0.3418 ppb	0.68701 201.02%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-6.2 -0.0572 µg/L	0.20025 -0.0572 ppb	0.20025 350.12%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	135.1 0.2997 µg/L	0.05511 0.2997 ppb	0.05511 18.39%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.3 3.0500 µg/L	2.43504 3.0500 ppb	2.43504 79.84%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	73.6 6.1141 µg/L	0.80544 6.1141 ppb	0.80544 13.17%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	13.9 0.1464 µg/L	0.07408 0.1464 ppb	0.07408 50.58%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-19.0 -0.4428 µg/L	0.12799 -0.4428 ppb	0.12799 28.90%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 42

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 19:59:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58617.0	58617.0	104 %		19:59:42
1	Al 396.153Radial†	7256.0	6986.0	4849.5 µg/L	4849.5 ppb	19:59:42
1	Ca 317.933Radial†	6123.5	5690.6	4860.8 µg/L	4860.8 ppb	20:00:02
1	Fe 238.204 Radial†	667.2	626.5	4951.5 µg/L	4951.5 ppb	20:00:02
1	K 766.490 Radial†	7829.5	7381.2	4820.8 µg/L	4820.8 ppb	19:59:42
1	Mg 279.077 IEC†	588.8	554.6	4961.1 µg/L	4961.1 ppb	20:00:02
1	Na 589.592 Radial†	33301.2	31623.9	9713.1 µg/L	9713.1 ppb	19:59:42
1	Sr 421.552†	53397.7	51436.4	474.51 µg/L	474.51 ppb	19:59:42
1	Sc 361.383	2068511.8	2068511.8	105.37 %		20:01:05
1	Y 371.029	1423469.8	1423469.8	105.23 %		20:01:05
1	Ag 328.068†	67922.0	64862.9	484.01 µg/L	484.01 ppb	20:01:11
1	As 188.979†	296.0	281.4	503.36 µg/L	503.36 ppb	20:01:31
1	B 249.677†	12790.0	11754.2	477.28 µg/L	477.28 ppb	20:01:11
1	Ba 233.527†	21499.5	20421.1	491.13 µg/L	491.13 ppb	20:01:11
1	Be 313.107†	867694.3	826340.4	490.25 µg/L	490.25 ppb	20:01:05
1	Cd 226.502†	20783.9	19866.6	495.43 µg/L	495.43 ppb	20:01:11
1	Co 228.616†	11539.6	10949.8	495.33 µg/L	495.33 ppb	20:01:11
1	Cr 267.716†	25939.4	24668.1	495.77 µg/L	495.77 ppb	20:01:11
1	Cu 324.752†	80834.9	74172.6	484.85 µg/L	484.85 ppb	20:01:11
1	Mn 257.610†	167548.2	159267.5	499.21 µg/L	499.21 ppb	20:01:05
1	Mo 202.031†	5432.8	5161.4	505.62 µg/L	505.62 ppb	20:01:31
1	Ni 231.604†	10817.5	9954.0	495.67 µg/L	495.67 ppb	20:01:11
1	P 214.914†	1353.6	1269.3	2466.8 µg/L	2466.8 ppb	20:01:31
1	Pb 220.353†	2262.0	2055.8	499.95 µg/L	499.95 ppb	20:01:31
1	S 181.975 Axial†	272.7	239.9	994.69 µg/L	994.69 ppb	20:01:31
1	Sb 206.836†	591.4	538.8	496.84 µg/L	496.84 ppb	20:01:31
1	Se 196.026†	402.1	362.3	516.51 µg/L	516.51 ppb	20:01:31
1	SiO2†	29474.8	26581.5	5246.8 µg/L	5246.8 ppb	20:01:11
1	Si 251.611†	34348.3	32287.6	2454.6 µg/L	2454.6 ppb	20:01:11
1	Sn 189.927†	1273.6	1208.3	509.59 µg/L	509.59 ppb	20:01:31
1	Ti 334.940†	232532.4	220509.7	487.50 µg/L	487.50 ppb	20:01:05
1	Tl 190.801†	380.7	383.7	504.27 µg/L	504.27 ppb	20:01:31
1	U 409.014†	6183.0	5945.1	492.96 µg/L	492.96 ppb	20:01:11
1	V 292.402†	52726.6	50084.9	494.22 µg/L	494.22 ppb	20:01:11
1	Zn 213.857†	22867.3	21167.8	493.14 µg/L	493.14 ppb	20:01:11
2	Sc RADIAL	58636.6	58636.6	104 %		20:00:07
2	Al 396.153Radial†	7235.2	6963.6	4834.1 µg/L	4834.1 ppb	20:00:07
2	Ca 317.933Radial†	6136.1	5700.8	4869.5 µg/L	4869.5 ppb	20:00:28
2	Fe 238.204 Radial†	670.0	629.0	4971.2 µg/L	4971.2 ppb	20:00:28
2	K 766.490 Radial†	7740.8	7293.1	4763.3 µg/L	4763.3 ppb	20:00:07
2	Mg 279.077 IEC†	589.3	554.9	4963.5 µg/L	4963.5 ppb	20:00:28
2	Na 589.592 Radial†	33169.7	31486.4	9670.8 µg/L	9670.8 ppb	20:00:07
2	Sr 421.552†	53167.6	51197.6	472.31 µg/L	472.31 ppb	20:00:07
2	Sc 361.383	2055969.6	2055969.6	104.73 %		20:01:39
2	Y 371.029	1414871.3	1414871.3	104.59 %		20:01:39
2	Ag 328.068†	68170.5	65493.4	488.71 µg/L	488.71 ppb	20:01:44
2	As 188.979†	286.1	273.7	489.56 µg/L	489.56 ppb	20:02:05
2	B 249.677†	12871.2	11905.8	483.46 µg/L	483.46 ppb	20:01:44
2	Ba 233.527†	21540.4	20584.7	495.07 µg/L	495.07 ppb	20:01:44
2	Be 313.107†	866432.8	830159.5	492.52 µg/L	492.52 ppb	20:01:39
2	Cd 226.502†	20792.6	19995.3	498.64 µg/L	498.64 ppb	20:01:44
2	Co 228.616†	11548.2	11024.7	498.71 µg/L	498.71 ppb	20:01:44
2	Cr 267.716†	25975.2	24852.5	499.48 µg/L	499.48 ppb	20:01:44
2	Cu 324.752†	80962.2	74762.1	488.70 µg/L	488.70 ppb	20:01:44
2	Mn 257.610†	167284.8	159986.0	501.46 µg/L	501.46 ppb	20:01:39
2	Mo 202.031†	5294.1	5060.4	495.73 µg/L	495.73 ppb	20:02:05
2	Ni 231.604†	10791.2	9991.5	497.54 µg/L	497.54 ppb	20:01:44
2	P 214.914†	1329.3	1253.9	2435.7 µg/L	2435.7 ppb	20:02:05
2	Pb 220.353†	2213.3	2022.4	491.80 µg/L	491.80 ppb	20:02:05

2	S 181.975 Axial†	269.1	238.0	986.93 µg/L	986.93 ppb	20:02:05
2	Sb 206.836†	582.9	534.0	492.29 µg/L	492.29 ppb	20:02:05
2	Se 196.026†	393.7	356.6	508.59 µg/L	508.59 ppb	20:02:05
2	SiO2†	29657.1	26926.2	5314.9 µg/L	5314.9 ppb	20:01:44
2	Si 251.611†	34634.6	32759.9	2490.5 µg/L	2490.5 ppb	20:01:44
2	Sn 189.927†	1234.0	1177.9	496.78 µg/L	496.78 ppb	20:02:05
2	Ti 334.940†	231981.3	221329.7	489.32 µg/L	489.32 ppb	20:01:39
2	Tl 190.801†	381.4	386.5	507.93 µg/L	507.93 ppb	20:02:05
2	U 409.014†	6098.6	5900.3	489.23 µg/L	489.23 ppb	20:01:44
2	V 292.402†	52826.1	50485.1	498.06 µg/L	498.06 ppb	20:01:44
2	Zn 213.857†	22870.8	21303.6	496.31 µg/L	496.31 ppb	20:01:44
3	Sc RADIAL	59033.7	59033.7	104 %		20:00:33
3	Al 396.153Radial†	7290.5	6969.7	4840.1 µg/L	4840.1 ppb	20:00:33
3	Ca 317.933Radial†	6120.4	5646.0	4822.7 µg/L	4822.7 ppb	20:00:54
3	Fe 238.204 Radial†	666.4	621.2	4908.6 µg/L	4908.6 ppb	20:00:54
3	K 766.490 Radial†	7821.9	7320.6	4781.2 µg/L	4781.2 ppb	20:00:33
3	Mg 279.077 IEC†	587.2	549.1	4910.3 µg/L	4910.3 ppb	20:00:54
3	Na 589.592 Radial†	33485.2	31573.4	9697.6 µg/L	9697.6 ppb	20:00:33
3	Sr 421.552†	53913.2	51566.5	475.71 µg/L	475.71 ppb	20:00:33
3	Sc 361.383	2033065.7	2033065.7	103.56 %		20:02:12
3	Y 371.029	1398835.6	1398835.6	103.41 %		20:02:12
3	Ag 328.068†	63294.2	61518.2	458.88 µg/L	458.88 ppb	20:02:18
3	As 188.979†	245.5	237.5	424.87 µg/L	424.87 ppb	20:02:38
3	B 249.677†	11858.0	11065.9	449.15 µg/L	449.15 ppb	20:02:18
3	Ba 233.527†	19323.7	18676.0	449.14 µg/L	449.14 ppb	20:02:18
3	Be 313.107†	782866.8	758788.6	450.18 µg/L	450.18 ppb	20:02:12
3	Cd 226.502†	18556.4	18059.6	450.32 µg/L	450.32 ppb	20:02:18
3	Co 228.616†	10216.8	9863.3	446.13 µg/L	446.13 ppb	20:02:18
3	Cr 267.716†	22173.2	21460.7	431.32 µg/L	431.32 ppb	20:02:18
3	Cu 324.752†	72319.8	67287.9	439.90 µg/L	439.90 ppb	20:02:18
3	Mn 257.610†	151992.9	147019.7	460.85 µg/L	460.85 ppb	20:02:12
3	Mo 202.031†	4312.9	4169.9	408.53 µg/L	408.53 ppb	20:02:38
3	Ni 231.604†	9615.9	8972.7	446.82 µg/L	446.82 ppb	20:02:18
3	P 214.914†	1099.8	1046.6	2029.2 µg/L	2029.2 ppb	20:02:38
3	Pb 220.353†	1898.6	1742.3	423.60 µg/L	423.60 ppb	20:02:38
3	S 181.975 Axial†	229.2	202.4	839.15 µg/L	839.15 ppb	20:02:38
3	Sb 206.836†	490.6	451.2	415.60 µg/L	415.60 ppb	20:02:38
3	Se 196.026†	342.7	311.6	445.29 µg/L	445.29 ppb	20:02:38
3	SiO2†	27143.6	24818.1	4898.8 µg/L	4898.8 ppb	20:02:18
3	Si 251.611†	31477.2	30083.6	2287.0 µg/L	2287.0 ppb	20:02:18
3	Sn 189.927†	996.2	961.5	405.52 µg/L	405.52 ppb	20:02:38
3	Ti 334.940†	208374.6	201030.6	444.41 µg/L	444.41 ppb	20:02:12
3	Tl 190.801†	320.5	331.9	436.49 µg/L	436.49 ppb	20:02:38
3	U 409.014†	5350.1	5243.1	434.64 µg/L	434.64 ppb	20:02:18
3	V 292.402†	46198.8	44654.1	440.34 µg/L	440.34 ppb	20:02:18
3	Zn 213.857†	20325.7	19092.0	444.73 µg/L	444.73 ppb	20:02:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2052515.7	104.55 %	0.916			0.88%
Sc RADIAL	58762.4	104 %	0.4			0.40%
Y 371.029	1412392.2	104.41 %	0.924			0.89%
Ag 328.068†	63958.2	477.20 µg/L	16.037	477.20 ppb	16.037	3.36%
QC value within limits for Ag 328.068 Recovery = 95.44%						
Al 396.153Radial†	6973.1	4841.2 µg/L	7.74	4841.2 ppb	7.74	0.16%
QC value within limits for Al 396.153Radial Recovery = 96.82%						
As 188.979†	264.2	472.59 µg/L	41.905	472.59 ppb	41.905	8.87%
QC value within limits for As 188.979 Recovery = 94.52%						
B 249.677†	11575.3	469.96 µg/L	18.288	469.96 ppb	18.288	3.89%
QC value within limits for B 249.677 Recovery = 93.99%						
Ba 233.527†	19893.9	478.45 µg/L	25.456	478.45 ppb	25.456	5.32%
QC value within limits for Ba 233.527 Recovery = 95.69%						
Be 313.107†	805096.2	477.65 µg/L	23.819	477.65 ppb	23.819	4.99%
QC value within limits for Be 313.107 Recovery = 95.53%						
Ca 317.933Radial†	5679.2	4851.0 µg/L	24.88	4851.0 ppb	24.88	0.51%
QC value within limits for Ca 317.933Radial Recovery = 97.02%						
Cd 226.502†	19307.2	481.46 µg/L	27.019	481.46 ppb	27.019	5.61%
QC value within limits for Cd 226.502 Recovery = 96.29%						
Co 228.616†	10612.6	480.06 µg/L	29.431	480.06 ppb	29.431	6.13%

QC value within limits for Co 228.616 Recovery = 96.01%							
Cr 267.716†	23660.4	475.52 µg/L	38.328	475.52 ppb	38.328	8.06%	
QC value within limits for Cr 267.716 Recovery = 95.10%							
Cu 324.752†	72074.2	471.15 µg/L	27.129	471.15 ppb	27.129	5.76%	
QC value within limits for Cu 324.752 Recovery = 94.23%							
Fe 238.204 Radial†	625.5	4943.8 µg/L	32.02	4943.8 ppb	32.02	0.65%	
QC value within limits for Fe 238.204 Radial Recovery = 98.88%							
K 766.490 Radial†	7331.7	4788.4 µg/L	29.43	4788.4 ppb	29.43	0.61%	
QC value within limits for K 766.490 Radial Recovery = 95.77%							
Mg 279.077 IEC†	552.9	4944.9 µg/L	30.07	4944.9 ppb	30.07	0.61%	
QC value within limits for Mg 279.077 IEC Recovery = 98.90%							
Mn 257.610†	155424.4	487.17 µg/L	22.824	487.17 ppb	22.824	4.68%	
QC value within limits for Mn 257.610 Recovery = 97.43%							
Mo 202.031†	4797.2	469.96 µg/L	53.431	469.96 ppb	53.431	11.37%	
QC value within limits for Mo 202.031 Recovery = 93.99%							
Na 589.592 Radial†	31561.2	9693.8 µg/L	21.36	9693.8 ppb	21.36	0.22%	
QC value within limits for Na 589.592 Radial Recovery = 96.94%							
Ni 231.604†	9639.4	480.01 µg/L	28.762	480.01 ppb	28.762	5.99%	
QC value within limits for Ni 231.604 Recovery = 96.00%							
P 214.914†	1189.9	2310.6 µg/L	244.20	2310.6 ppb	244.20	10.57%	
QC value within limits for P 214.914 Recovery = 92.42%							
Pb 220.353†	1940.2	471.78 µg/L	41.928	471.78 ppb	41.928	8.89%	
QC value within limits for Pb 220.353 Recovery = 94.36%							
S 181.975 Axial†	226.7	940.25 µg/L	87.646	940.25 ppb	87.646	9.32%	
QC value within limits for S 181.975 Axial Recovery = 94.03%							
Sb 206.836†	508.0	468.24 µg/L	45.646	468.24 ppb	45.646	9.75%	
QC value within limits for Sb 206.836 Recovery = 93.65%							
Se 196.026†	343.5	490.13 µg/L	39.036	490.13 ppb	39.036	7.96%	
QC value within limits for Se 196.026 Recovery = 98.03%							
SiO2†	26108.6	5153.5 µg/L	223.20	5153.5 ppb	223.20	4.33%	
QC value within limits for SiO2 Recovery = 96.37%							
Si 251.611†	31710.4	2410.7 µg/L	108.59	2410.7 ppb	108.59	4.50%	
QC value within limits for Si 251.611 Recovery = 96.43%							
Sn 189.927†	1115.9	470.63 µg/L	56.748	470.63 ppb	56.748	12.06%	
QC value within limits for Sn 189.927 Recovery = 94.13%							
Sr 421.552†	51400.1	474.17 µg/L	1.726	474.17 ppb	1.726	0.36%	
QC value within limits for Sr 421.552 Recovery = 94.83%							
Ti 334.940†	214290.0	473.74 µg/L	25.417	473.74 ppb	25.417	5.37%	
QC value within limits for Ti 334.940 Recovery = 94.75%							
Tl 190.801†	367.4	482.89 µg/L	40.230	482.89 ppb	40.230	8.33%	
QC value within limits for Tl 190.801 Recovery = 96.58%							
U 409.014†	5696.1	472.28 µg/L	32.647	472.28 ppb	32.647	6.91%	
QC value within limits for U 409.014 Recovery = 94.46%							
V 292.402†	48408.1	477.54 µg/L	32.275	477.54 ppb	32.275	6.76%	
QC value within limits for V 292.402 Recovery = 95.51%							
Zn 213.857†	20521.1	478.06 µg/L	28.907	478.06 ppb	28.907	6.05%	
QC value within limits for Zn 213.857 Recovery = 95.61%							

All analyte(s) passed QC.

Sequence No.: 43

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 20:02:47

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	57569.4	57569.4	102 %		20:03:20
1	Al 396.153Radial†	-22.6	-29.5	-20.579 µg/L	-20.579 ppb	20:03:20
1	Ca 317.933Radial†	198.2	-16.8	-14.330 µg/L	-14.330 ppb	20:03:40
1	Fe 238.204 Radial†	19.4	2.5	19.506 µg/L	19.506 ppb	20:03:40
1	K 766.490 Radial†	193.2	24.6	16.060 µg/L	16.060 ppb	20:03:20
1	Mg 279.077 IEC†	17.4	4.2	37.678 µg/L	37.678 ppb	20:03:40
1	Na 589.592 Radial†	507.7	26.1	8.0056 µg/L	8.0056 ppb	20:03:20
1	Sr 421.552†	69.4	39.3	0.3627 µg/L	0.3627 ppb	20:03:20
1	Sc 361.383	2028233.3	2028233.3	103.32 %		20:04:43
1	Y 371.029	1400221.9	1400221.9	103.51 %		20:04:43
1	Ag 328.068†	-425.8	-10.5	-0.0759 µg/L	-0.0759 ppb	20:04:48
1	As 188.979†	-0.0	0.4	0.7754 µg/L	0.7754 ppb	20:05:09
1	B 249.677†	384.2	-12.2	-0.5097 µg/L	-0.5097 ppb	20:05:09
1	Ba 233.527†	-8.4	9.0	0.2158 µg/L	0.2158 ppb	20:05:09
1	Be 313.107†	-2721.5	221.5	0.1313 µg/L	0.1313 ppb	20:04:48
1	Cd 226.502†	-138.1	8.0	0.1973 µg/L	0.1973 ppb	20:05:09
1	Co 228.616†	11.2	8.9	0.4024 µg/L	0.4024 ppb	20:05:09
1	Cr 267.716†	-77.7	-24.8	-0.4982 µg/L	-0.4982 ppb	20:04:48
1	Cu 324.752†	2603.6	-23.7	-0.1519 µg/L	-0.1519 ppb	20:04:48
1	Mn 257.610†	-163.1	98.1	0.3084 µg/L	0.3084 ppb	20:05:09
1	Mo 202.031†	7.5	12.6	1.2358 µg/L	1.2358 ppb	20:05:09
1	Ni 231.604†	299.1	-22.9	-1.1403 µg/L	-1.1403 ppb	20:05:09
1	P 214.914†	14.2	-1.6	-3.2353 µg/L	-3.2353 ppb	20:05:09
1	Pb 220.353†	90.8	-3.0	-0.7394 µg/L	-0.7394 ppb	20:05:09
1	S 181.975 Axial†	13.4	-5.9	-24.623 µg/L	-24.623 ppb	20:05:09
1	Sb 206.836†	25.4	2.1	1.9281 µg/L	1.9281 ppb	20:05:09
1	Se 196.026†	24.1	4.0	5.6292 µg/L	5.6292 ppb	20:05:09
1	SiO2†	1495.3	55.8	11.008 µg/L	11.008 ppb	20:04:48
1	Si 251.611†	422.4	98.2	7.4686 µg/L	7.4686 ppb	20:05:09
1	Sn 189.927†	3.5	3.0	1.2550 µg/L	1.2550 ppb	20:05:09
1	Ti 334.940†	384.2	196.9	0.4323 µg/L	0.4323 ppb	20:04:48
1	Tl 190.801†	-27.9	-4.6	-5.9805 µg/L	-5.9805 ppb	20:05:09
1	U 409.014†	2.8	79.8	6.6302 µg/L	6.6302 ppb	20:04:48
1	V 292.402†	-37.2	8.7	0.1027 µg/L	0.1027 ppb	20:04:48
1	Zn 213.857†	546.8	-5.1	-0.1177 µg/L	-0.1177 ppb	20:05:09
2	Sc RADIAL	57517.3	57517.3	102 %		20:03:46
2	Al 396.153Radial†	-0.6	-7.9	-5.5362 µg/L	-5.5362 ppb	20:03:46
2	Ca 317.933Radial†	193.6	-21.1	-17.995 µg/L	-17.995 ppb	20:04:06
2	Fe 238.204 Radial†	17.2	0.3	2.2760 µg/L	2.2760 ppb	20:04:06
2	K 766.490 Radial†	220.4	51.5	33.663 µg/L	33.663 ppb	20:03:46
2	Mg 279.077 IEC†	7.2	-5.8	-51.579 µg/L	-51.579 ppb	20:04:06
2	Na 589.592 Radial†	510.7	29.4	9.0386 µg/L	9.0386 ppb	20:03:46
2	Sr 421.552†	54.5	24.8	0.2285 µg/L	0.2285 ppb	20:03:46
2	Sc 361.383	2037744.1	2037744.1	103.80 %		20:05:15
2	Y 371.029	1408689.0	1408689.0	104.13 %		20:05:15
2	Ag 328.068†	-451.1	-32.9	-0.2433 µg/L	-0.2433 ppb	20:05:20
2	As 188.979†	-1.3	-0.8	-1.5061 µg/L	-1.5061 ppb	20:05:41
2	B 249.677†	373.4	-24.4	-0.9937 µg/L	-0.9937 ppb	20:05:41
2	Ba 233.527†	-11.7	5.8	0.1389 µg/L	0.1389 ppb	20:05:41
2	Be 313.107†	-2676.0	277.7	0.1647 µg/L	0.1647 ppb	20:05:20
2	Cd 226.502†	-133.2	13.4	0.3334 µg/L	0.3334 ppb	20:05:41
2	Co 228.616†	1.8	-0.2	-0.0098 µg/L	-0.0098 ppb	20:05:41
2	Cr 267.716†	-26.9	24.5	0.4922 µg/L	0.4922 ppb	20:05:20
2	Cu 324.752†	2624.5	-15.4	-0.0999 µg/L	-0.0999 ppb	20:05:20
2	Mn 257.610†	-174.3	88.1	0.2782 µg/L	0.2782 ppb	20:05:41
2	Mo 202.031†	-0.9	4.5	0.4383 µg/L	0.4383 ppb	20:05:41
2	Ni 231.604†	325.1	0.9	0.0446 µg/L	0.0446 ppb	20:05:41
2	P 214.914†	14.3	-1.6	-3.1937 µg/L	-3.1937 ppb	20:05:41
2	Pb 220.353†	89.5	-4.7	-1.1490 µg/L	-1.1490 ppb	20:05:41

2	S 181.975 Axial†	14.0	-5.5	-22.637 µg/L	-22.637 ppb	20:05:41
2	Sb 206.836†	15.2	-7.8	-7.1701 µg/L	-7.1701 ppb	20:05:41
2	Se 196.026†	20.1	0.0	0.0726 µg/L	0.0726 ppb	20:05:41
2	SiO2†	1557.2	108.6	21.433 µg/L	21.433 ppb	20:05:20
2	Si 251.611†	433.2	106.7	8.1144 µg/L	8.1144 ppb	20:05:41
2	Sn 189.927†	-0.5	-0.9	-0.3787 µg/L	-0.3787 ppb	20:05:41
2	Ti 334.940†	337.5	150.1	0.3359 µg/L	0.3359 ppb	20:05:20
2	Tl 190.801†	-19.6	3.5	4.5946 µg/L	4.5946 ppb	20:05:41
2	U 409.014†	-41.0	37.6	3.1255 µg/L	3.1255 ppb	20:05:20
2	V 292.402†	-37.8	8.4	0.0896 µg/L	0.0896 ppb	20:05:20
2	Zn 213.857†	536.8	-17.3	-0.4029 µg/L	-0.4029 ppb	20:05:41
3	Sc RADIAL	57101.8	57101.8	101 %		20:04:12
3	Al 396.153Radial†	-30.6	-37.6	-26.198 µg/L	-26.198 ppb	20:04:12
3	Ca 317.933Radial†	202.0	-11.4	-9.7154 µg/L	-9.7154 ppb	20:04:32
3	Fe 238.204 Radial†	16.6	-0.1	-0.8955 µg/L	-0.8955 ppb	20:04:32
3	K 766.490 Radial†	248.0	80.4	52.520 µg/L	52.520 ppb	20:04:12
3	Mg 279.077 IEC†	11.1	-1.9	-16.608 µg/L	-16.608 ppb	20:04:32
3	Na 589.592 Radial†	462.4	-14.7	-4.5060 µg/L	-4.5060 ppb	20:04:12
3	Sr 421.552†	86.8	57.1	0.5266 µg/L	0.5266 ppb	20:04:12
3	Sc 361.383	2024969.7	2024969.7	103.15 %		20:05:47
3	Y 371.029	1398302.4	1398302.4	103.37 %		20:05:47
3	Ag 328.068†	-423.6	-9.1	-0.0674 µg/L	-0.0674 ppb	20:05:53
3	As 188.979†	-1.6	-1.1	-1.9285 µg/L	-1.9285 ppb	20:06:13
3	B 249.677†	379.2	-16.5	-0.6717 µg/L	-0.6717 ppb	20:06:13
3	Ba 233.527†	0.7	17.8	0.4269 µg/L	0.4269 ppb	20:06:13
3	Be 313.107†	-2714.8	223.8	0.1327 µg/L	0.1327 ppb	20:05:53
3	Cd 226.502†	-132.0	13.7	0.3404 µg/L	0.3404 ppb	20:06:13
3	Co 228.616†	-1.2	-3.1	-0.1385 µg/L	-0.1385 ppb	20:06:13
3	Cr 267.716†	-33.0	18.3	0.3686 µg/L	0.3686 ppb	20:05:53
3	Cu 324.752†	2577.7	-44.8	-0.2926 µg/L	-0.2926 ppb	20:05:53
3	Mn 257.610†	-197.2	64.8	0.2036 µg/L	0.2036 ppb	20:06:13
3	Mo 202.031†	6.7	11.8	1.1572 µg/L	1.1572 ppb	20:06:13
3	Ni 231.604†	298.5	-22.9	-1.1431 µg/L	-1.1431 ppb	20:06:13
3	P 214.914†	13.3	-2.5	-4.8521 µg/L	-4.8521 ppb	20:06:13
3	Pb 220.353†	83.9	-9.6	-2.3299 µg/L	-2.3299 ppb	20:06:13
3	S 181.975 Axial†	20.3	0.8	3.2471 µg/L	3.2471 ppb	20:06:13
3	Sb 206.836†	24.6	1.3	1.2371 µg/L	1.2371 ppb	20:06:13
3	Se 196.026†	22.2	2.2	3.1385 µg/L	3.1385 ppb	20:06:13
3	SiO2†	1561.1	121.8	24.043 µg/L	24.043 ppb	20:05:53
3	Si 251.611†	451.8	127.4	9.6851 µg/L	9.6851 ppb	20:06:13
3	Sn 189.927†	2.9	2.4	1.0100 µg/L	1.0100 ppb	20:06:13
3	Ti 334.940†	371.5	185.1	0.4107 µg/L	0.4107 ppb	20:05:53
3	Tl 190.801†	-21.0	2.0	2.6499 µg/L	2.6499 ppb	20:06:13
3	U 409.014†	-27.8	50.1	4.1641 µg/L	4.1641 ppb	20:05:53
3	V 292.402†	-46.3	-0.1	0.0127 µg/L	0.0127 ppb	20:05:53
3	Zn 213.857†	547.9	-3.2	-0.0687 µg/L	-0.0687 ppb	20:06:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2030315.7	103.42 %	0.338			0.33%
Sc RADIAL	57396.2	102 %	0.5			0.45%
Y 371.029	1402404.4	103.67 %	0.409			0.39%
Ag 328.068†	-17.5	-0.1289 µg/L	0.09924	-0.1289 ppb	0.09924	77.01%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-25.0	-17.437 µg/L	10.6828	-17.437 ppb	10.6828	61.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.5	-0.8864 µg/L	1.45458	-0.8864 ppb	1.45458	164.10%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-17.7	-0.7250 µg/L	0.24636	-0.7250 ppb	0.24636	33.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.8	0.2605 µg/L	0.14916	0.2605 ppb	0.14916	57.25%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	241.0	0.1429 µg/L	0.01888	0.1429 ppb	0.01888	13.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-16.4	-14.013 µg/L	4.1488	-14.013 ppb	4.1488	29.61%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	11.7	0.2904 µg/L	0.08067	0.2904 ppb	0.08067	27.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.9	0.0847 µg/L	0.28258	0.0847 ppb	0.28258	333.70%

Cr	267.716†	6.0	0.1209 µg/L	0.53966	0.1209 ppb	0.53966	446.50%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cu	324.752†	-27.9	-0.1815 µg/L	0.09969	-0.1815 ppb	0.09969	54.94%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Fe	238.204 Radial†	0.9	6.9622 µg/L	10.97852	6.9622 ppb	10.97852	157.69%
QC value within limits for Cu 324.752 Recovery = Not calculated							
K	766.490 Radial†	52.2	34.081 µg/L	18.2334	34.081 ppb	18.2334	53.50%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-1.1	-10.170 µg/L	44.9756	-10.170 ppb	44.9756	442.25%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mn	257.610†	83.7	0.2634 µg/L	0.05392	0.2634 ppb	0.05392	20.47%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mo	202.031†	9.6	0.9437 µg/L	0.43952	0.9437 ppb	0.43952	46.57%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Na	589.592 Radial†	13.6	4.1794 µg/L	7.53951	4.1794 ppb	7.53951	180.40%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni	231.604†	-15.0	-0.7463 µg/L	0.68489	-0.7463 ppb	0.68489	91.77%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
P	214.914†	-1.9	-3.7603 µg/L	0.94573	-3.7603 ppb	0.94573	25.15%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb	220.353†	-5.8	-1.4061 µg/L	0.82584	-1.4061 ppb	0.82584	58.73%
QC value within limits for P 214.914 Recovery = Not calculated							
S	181.975 Axial†	-3.5	-14.671 µg/L	15.5492	-14.671 ppb	15.5492	105.99%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb	206.836†	-1.5	-1.3350 µg/L	5.06517	-1.3350 ppb	5.06517	379.42%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Se	196.026†	2.1	2.9468 µg/L	2.78328	2.9468 ppb	2.78328	94.45%
QC value within limits for Sb 206.836 Recovery = Not calculated							
SiO2†		95.4	18.828 µg/L	6.8971	18.828 ppb	6.8971	36.63%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	110.8	8.4227 µg/L	1.13993	8.4227 ppb	1.13993	13.53%
QC value within limits for SiO2 Recovery = Not calculated							
Sn	189.927†	1.5	0.6288 µg/L	0.88102	0.6288 ppb	0.88102	140.12%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sr	421.552†	40.4	0.3726 µg/L	0.14931	0.3726 ppb	0.14931	40.07%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti	334.940†	177.4	0.3930 µg/L	0.05061	0.3930 ppb	0.05061	12.88%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Tl	190.801†	0.3	0.4213 µg/L	5.62878	0.4213 ppb	5.62878	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated							
U	409.014†	55.8	4.6399 µg/L	1.80015	4.6399 ppb	1.80015	38.80%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V	292.402†	5.7	0.0683 µg/L	0.04863	0.0683 ppb	0.04863	71.18%
QC value within limits for U 409.014 Recovery = Not calculated							
Zn	213.857†	-8.5	-0.1964 µg/L	0.18047	-0.1964 ppb	0.18047	91.89%
QC value within limits for V 292.402 Recovery = Not calculated							
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 52

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 20:35:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57811.0	57811.0	102 %		20:36:24
1	Al 396.153Radial†	7388.1	7212.6	5006.8 µg/L	5006.8 ppb	20:36:24
1	Ca 317.933Radial†	6190.3	5838.2	4986.9 µg/L	4986.9 ppb	20:36:45
1	Fe 238.204 Radial†	686.3	654.2	5170.0 µg/L	5170.0 ppb	20:36:45
1	K 766.490 Radial†	7863.0	7519.2	4910.9 µg/L	4910.9 ppb	20:36:24
1	Mg 279.077 IEC†	595.3	569.0	5089.2 µg/L	5089.2 ppb	20:36:45
1	Na 589.592 Radial†	33730.1	32490.4	9979.2 µg/L	9979.2 ppb	20:36:24
1	Sr 421.552†	54087.0	52827.6	487.34 µg/L	487.34 ppb	20:36:24
1	Sc 361.383	2027762.0	2027762.0	103.29 %		20:37:48
1	Y 371.029	1396189.5	1396189.5	103.21 %		20:37:48
1	Ag 328.068†	68163.2	66391.9	495.42 µg/L	495.42 ppb	20:37:54
1	As 188.979†	292.5	283.7	507.44 µg/L	507.44 ppb	20:38:14
1	B 249.677†	12787.8	11996.0	487.04 µg/L	487.04 ppb	20:37:54
1	Ba 233.527†	21558.1	20888.0	502.36 µg/L	502.36 ppb	20:37:54
1	Be 313.107†	866205.3	841447.6	499.21 µg/L	499.21 ppb	20:37:48
1	Cd 226.502†	20872.3	20348.6	507.44 µg/L	507.44 ppb	20:37:54
1	Co 228.616†	11546.5	11176.4	505.59 µg/L	505.59 ppb	20:37:54
1	Cr 267.716†	26035.2	25255.6	507.58 µg/L	507.58 ppb	20:37:54
1	Cu 324.752†	80912.1	75789.0	495.43 µg/L	495.43 ppb	20:37:54
1	Mn 257.610†	167567.2	162481.4	509.30 µg/L	509.30 ppb	20:37:48
1	Mo 202.031†	5499.7	5329.7	522.12 µg/L	522.12 ppb	20:38:14
1	Ni 231.604†	10852.6	10194.3	507.64 µg/L	507.64 ppb	20:37:54
1	P 214.914†	1371.9	1312.8	2552.0 µg/L	2552.0 ppb	20:38:14
1	Pb 220.353†	2293.7	2129.7	517.93 µg/L	517.93 ppb	20:38:14
1	S 181.975 Axial†	271.3	243.7	1010.7 µg/L	1010.7 ppb	20:38:14
1	Sb 206.836†	610.9	568.9	524.60 µg/L	524.60 ppb	20:38:14
1	Se 196.026†	405.3	373.1	532.19 µg/L	532.19 ppb	20:38:14
1	SiO2†	29562.8	27228.8	5374.6 µg/L	5374.6 ppb	20:37:54
1	Si 251.611†	34535.5	33124.0	2518.1 µg/L	2518.1 ppb	20:37:54
1	Sn 189.927†	1288.7	1247.3	526.02 µg/L	526.02 ppb	20:38:14
1	Ti 334.940†	232020.0	224448.5	496.21 µg/L	496.21 ppb	20:37:48
1	Tl 190.801†	381.3	391.6	514.57 µg/L	514.57 ppb	20:38:14
1	U 409.014†	6126.5	6008.3	498.17 µg/L	498.17 ppb	20:37:54
1	V 292.402†	52790.3	51152.2	504.81 µg/L	504.81 ppb	20:37:54
1	Zn 213.857†	22965.6	21699.1	505.52 µg/L	505.52 ppb	20:37:54
2	Sc RADIAL	57688.1	57688.1	102 %		20:36:50
2	Al 396.153Radial†	7347.5	7188.2	4990.2 µg/L	4990.2 ppb	20:36:50
2	Ca 317.933Radial†	6170.4	5831.6	4981.2 µg/L	4981.2 ppb	20:37:11
2	Fe 238.204 Radial†	679.7	649.0	5129.7 µg/L	5129.7 ppb	20:37:11
2	K 766.490 Radial†	7862.4	7534.9	4921.2 µg/L	4921.2 ppb	20:36:50
2	Mg 279.077 IEC†	586.2	561.2	5019.8 µg/L	5019.8 ppb	20:37:11
2	Na 589.592 Radial†	33629.0	32461.7	9970.4 µg/L	9970.4 ppb	20:36:50
2	Sr 421.552†	53906.2	52763.0	486.75 µg/L	486.75 ppb	20:36:50
2	Sc 361.383	2033079.9	2033079.9	103.56 %		20:38:21
2	Y 371.029	1400966.0	1400966.0	103.56 %		20:38:21
2	Ag 328.068†	68767.8	66803.0	498.49 µg/L	498.49 ppb	20:38:27
2	As 188.979†	289.6	280.1	501.07 µg/L	501.07 ppb	20:38:48
2	B 249.677†	12962.6	12132.4	492.63 µg/L	492.63 ppb	20:38:27
2	Ba 233.527†	21784.9	21052.3	506.31 µg/L	506.31 ppb	20:38:27
2	Be 313.107†	868836.4	841794.7	499.42 µg/L	499.42 ppb	20:38:21
2	Cd 226.502†	21029.8	20447.8	509.92 µg/L	509.92 ppb	20:38:27
2	Co 228.616†	11697.0	11292.5	510.83 µg/L	510.83 ppb	20:38:27
2	Cr 267.716†	26246.5	25393.7	510.36 µg/L	510.36 ppb	20:38:27
2	Cu 324.752†	81619.6	76267.2	498.55 µg/L	498.55 ppb	20:38:27
2	Mn 257.610†	168162.1	162631.5	509.76 µg/L	509.76 ppb	20:38:21
2	Mo 202.031†	5295.6	5118.8	501.46 µg/L	501.46 ppb	20:38:48
2	Ni 231.604†	10929.3	10240.9	509.96 µg/L	509.96 ppb	20:38:27
2	P 214.914†	1331.9	1270.7	2468.1 µg/L	2468.1 ppb	20:38:48
2	Pb 220.353†	2225.5	2057.9	500.41 µg/L	500.41 ppb	20:38:48

2	S 181.975 Axial†	269.1	240.9	999.11 µg/L	999.11 ppb	20:38:48
2	Sb 206.836†	587.1	544.4	501.78 µg/L	501.78 ppb	20:38:48
2	Se 196.026†	397.3	364.3	519.74 µg/L	519.74 ppb	20:38:48
2	SiO2†	29990.1	27566.6	5441.3 µg/L	5441.3 ppb	20:38:27
2	Si 251.611†	34935.7	33422.9	2540.9 µg/L	2540.9 ppb	20:38:27
2	Sn 189.927†	1242.7	1199.6	505.90 µg/L	505.90 ppb	20:38:48
2	Ti 334.940†	232729.3	224545.8	496.43 µg/L	496.43 ppb	20:38:21
2	Tl 190.801†	371.6	381.2	501.12 µg/L	501.12 ppb	20:38:48
2	U 409.014†	6316.5	6176.2	512.13 µg/L	512.13 ppb	20:38:27
2	V 292.402†	53367.3	51575.7	508.79 µg/L	508.79 ppb	20:38:27
2	Zn 213.857†	23160.5	21829.2	508.56 µg/L	508.56 ppb	20:38:27
3	Sc RADIAL	57760.3	57760.3	102 %		20:37:16
3	Al 396.153Radial†	7302.7	7135.4	4955.4 µg/L	4955.4 ppb	20:37:16
3	Ca 317.933Radial†	6153.2	5807.2	4960.4 µg/L	4960.4 ppb	20:37:37
3	Fe 238.204 Radial†	676.8	645.4	5100.0 µg/L	5100.0 ppb	20:37:37
3	K 766.490 Radial†	7938.5	7599.7	4963.5 µg/L	4963.5 ppb	20:37:16
3	Mg 279.077 IEC†	588.7	563.0	5033.9 µg/L	5033.9 ppb	20:37:37
3	Na 589.592 Radial†	33538.1	32331.6	9930.4 µg/L	9930.4 ppb	20:37:16
3	Sr 421.552†	53805.7	52598.9	485.23 µg/L	485.23 ppb	20:37:16
3	Sc 361.383	2033958.3	2033958.3	103.61 %		20:38:55
3	Y 371.029	1400977.3	1400977.3	103.56 %		20:38:55
3	Ag 328.068†	62963.6	61172.3	456.31 µg/L	456.31 ppb	20:39:00
3	As 188.979†	248.4	240.2	429.67 µg/L	429.67 ppb	20:39:21
3	B 249.677†	11744.3	10951.1	444.37 µg/L	444.37 ppb	20:39:00
3	Ba 233.527†	19280.0	18625.6	447.93 µg/L	447.93 ppb	20:39:00
3	Be 313.107†	786101.6	761579.0	451.83 µg/L	451.83 ppb	20:38:55
3	Cd 226.502†	18540.5	18036.5	449.72 µg/L	449.72 ppb	20:39:00
3	Co 228.616†	10152.5	9797.0	443.12 µg/L	443.12 ppb	20:39:00
3	Cr 267.716†	22048.4	21330.9	428.71 µg/L	428.71 ppb	20:39:00
3	Cu 324.752†	71642.8	66603.9	435.46 µg/L	435.46 ppb	20:39:00
3	Mn 257.610†	152739.1	147675.5	462.92 µg/L	462.92 ppb	20:38:55
3	Mo 202.031†	4325.4	4180.1	409.54 µg/L	409.54 ppb	20:39:21
3	Ni 231.604†	9564.0	8918.6	444.13 µg/L	444.13 ppb	20:39:00
3	P 214.914†	1113.3	1059.1	2054.4 µg/L	2054.4 ppb	20:39:21
3	Pb 220.353†	1908.3	1750.9	425.71 µg/L	425.71 ppb	20:39:21
3	S 181.975 Axial†	235.9	208.8	865.74 µg/L	865.74 ppb	20:39:21
3	Sb 206.836†	489.0	449.5	414.04 µg/L	414.04 ppb	20:39:21
3	Se 196.026†	343.4	312.2	446.46 µg/L	446.46 ppb	20:39:21
3	SiO2†	26970.8	24639.8	4863.6 µg/L	4863.6 ppb	20:39:00
3	Si 251.611†	31321.6	29920.1	2274.6 µg/L	2274.6 ppb	20:39:00
3	Sn 189.927†	1005.3	969.9	409.06 µg/L	409.06 ppb	20:39:21
3	Ti 334.940†	209022.0	201567.2	445.59 µg/L	445.59 ppb	20:38:55
3	Tl 190.801†	324.2	335.3	441.01 µg/L	441.01 ppb	20:39:21
3	U 409.014†	5266.4	5160.0	427.71 µg/L	427.71 ppb	20:39:00
3	V 292.402†	45851.9	44299.7	436.90 µg/L	436.90 ppb	20:39:00
3	Zn 213.857†	20248.2	19008.5	442.78 µg/L	442.78 ppb	20:39:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031600.1	103.49 %	0.171			0.17%
Sc RADIAL	57753.1	102 %	0.1			0.11%
Y 371.029	1399377.6	103.45 %	0.204			0.20%
Ag 328.068†	64789.1	483.41 µg/L	23.516	483.41 ppb	23.516	4.86%
QC value within limits for Ag 328.068 Recovery = 96.68%						
Al 396.153Radial†	7178.8	4984.1 µg/L	26.23	4984.1 ppb	26.23	0.53%
QC value within limits for Al 396.153Radial Recovery = 99.68%						
As 188.979†	268.0	479.39 µg/L	43.175	479.39 ppb	43.175	9.01%
QC value within limits for As 188.979 Recovery = 95.88%						
B 249.677†	11693.1	474.68 µg/L	26.400	474.68 ppb	26.400	5.56%
QC value within limits for B 249.677 Recovery = 94.94%						
Ba 233.527†	20188.6	485.53 µg/L	32.628	485.53 ppb	32.628	6.72%
QC value within limits for Ba 233.527 Recovery = 97.11%						
Be 313.107†	814940.4	483.49 µg/L	27.416	483.49 ppb	27.416	5.67%
QC value within limits for Be 313.107 Recovery = 96.70%						
Ca 317.933Radial†	5825.7	4976.2 µg/L	13.94	4976.2 ppb	13.94	0.28%
QC value within limits for Ca 317.933Radial Recovery = 99.52%						
Cd 226.502†	19610.9	489.02 µg/L	34.065	489.02 ppb	34.065	6.97%
QC value within limits for Cd 226.502 Recovery = 97.80%						
Co 228.616†	10755.3	486.52 µg/L	37.669	486.52 ppb	37.669	7.74%

QC value within limits for Co 228.616 Recovery = 97.30%						
Cr 267.716†	23993.4	482.21 µg/L	46.358	482.21 ppb	46.358	9.61%
QC value within limits for Cr 267.716 Recovery = 96.44%						
Cu 324.752†	72886.7	476.48 µg/L	35.555	476.48 ppb	35.555	7.46%
QC value within limits for Cu 324.752 Recovery = 95.30%						
Fe 238.204 Radial†	649.5	5133.2 µg/L	35.15	5133.2 ppb	35.15	0.68%
QC value within limits for Fe 238.204 Radial Recovery = 102.66%						
K 766.490 Radial†	7551.3	4931.9 µg/L	27.89	4931.9 ppb	27.89	0.57%
QC value within limits for K 766.490 Radial Recovery = 98.64%						
Mg 279.077 IEC†	564.4	5047.6 µg/L	36.69	5047.6 ppb	36.69	0.73%
QC value within limits for Mg 279.077 IEC Recovery = 100.95%						
Mn 257.610†	157596.1	494.00 µg/L	26.909	494.00 ppb	26.909	5.45%
QC value within limits for Mn 257.610 Recovery = 98.80%						
Mo 202.031†	4876.2	477.70 µg/L	59.931	477.70 ppb	59.931	12.55%
QC value within limits for Mo 202.031 Recovery = 95.54%						
Na 589.592 Radial†	32427.9	9960.0 µg/L	26.00	9960.0 ppb	26.00	0.26%
QC value within limits for Na 589.592 Radial Recovery = 99.60%						
Ni 231.604†	9784.6	487.24 µg/L	37.359	487.24 ppb	37.359	7.67%
QC value within limits for Ni 231.604 Recovery = 97.45%						
P 214.914†	1214.2	2358.2 µg/L	266.40	2358.2 ppb	266.40	11.30%
QC value within limits for P 214.914 Recovery = 94.33%						
Pb 220.353†	1979.5	481.35 µg/L	48.976	481.35 ppb	48.976	10.17%
QC value within limits for Pb 220.353 Recovery = 96.27%						
S 181.975 Axial†	231.1	958.52 µg/L	80.559	958.52 ppb	80.559	8.40%
QC value within limits for S 181.975 Axial Recovery = 95.85%						
Sb 206.836†	520.9	480.14 µg/L	58.372	480.14 ppb	58.372	12.16%
QC value within limits for Sb 206.836 Recovery = 96.03%						
Se 196.026†	349.9	499.46 µg/L	46.321	499.46 ppb	46.321	9.27%
QC value within limits for Se 196.026 Recovery = 99.89%						
SiO2†	26478.4	5226.5 µg/L	316.05	5226.5 ppb	316.05	6.05%
QC value within limits for SiO2 Recovery = 97.74%						
Si 251.611†	32155.7	2444.5 µg/L	147.62	2444.5 ppb	147.62	6.04%
QC value within limits for Si 251.611 Recovery = 97.78%						
Sn 189.927†	1138.9	480.33 µg/L	62.530	480.33 ppb	62.530	13.02%
QC value within limits for Sn 189.927 Recovery = 96.07%						
Sr 421.552†	52729.8	486.44 µg/L	1.088	486.44 ppb	1.088	0.22%
QC value within limits for Sr 421.552 Recovery = 97.29%						
Ti 334.940†	216853.8	479.41 µg/L	29.286	479.41 ppb	29.286	6.11%
QC value within limits for Ti 334.940 Recovery = 95.88%						
Tl 190.801†	369.4	485.57 µg/L	39.170	485.57 ppb	39.170	8.07%
QC value within limits for Tl 190.801 Recovery = 97.11%						
U 409.014†	5781.5	479.34 µg/L	45.254	479.34 ppb	45.254	9.44%
QC value within limits for U 409.014 Recovery = 95.87%						
V 292.402†	49009.2	483.50 µg/L	40.407	483.50 ppb	40.407	8.36%
QC value within limits for V 292.402 Recovery = 96.70%						
Zn 213.857†	20845.6	485.62 µg/L	37.132	485.62 ppb	37.132	7.65%
QC value within limits for Zn 213.857 Recovery = 97.12%						

All analyte(s) passed QC.

Sequence No.: 53

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 20:39:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57162.5	57162.5	101 %		20:40:03
1	Al 396.153Radial†	-20.6	-27.7	-19.312 µg/L	-19.312 ppb	20:40:03
1	Ca 317.933Radial†	195.3	-18.2	-15.572 µg/L	-15.572 ppb	20:40:24
1	Fe 238.204 Radial†	18.3	1.6	12.247 µg/L	12.247 ppb	20:40:24
1	K 766.490 Radial†	190.9	23.7	15.502 µg/L	15.502 ppb	20:40:03
1	Mg 279.077 IEC†	9.0	-3.9	-34.969 µg/L	-34.969 ppb	20:40:24
1	Na 589.592 Radial†	476.5	-1.2	-0.3760 µg/L	-0.3760 ppb	20:40:03
1	Sr 421.552†	42.5	13.2	0.1218 µg/L	0.1218 ppb	20:40:03
1	Sc 361.383	2005809.0	2005809.0	102.17 %		20:41:26
1	Y 371.029	1386566.9	1386566.9	102.50 %		20:41:26
1	Ag 328.068†	-356.9	52.3	0.3879 µg/L	0.3879 ppb	20:41:31
1	As 188.979†	-5.8	-5.3	-9.4245 µg/L	-9.4245 ppb	20:41:52
1	B 249.677†	364.0	-27.9	-1.1423 µg/L	-1.1423 ppb	20:41:52
1	Ba 233.527†	-8.2	9.1	0.2179 µg/L	0.2179 ppb	20:41:52
1	Be 313.107†	-2726.8	187.0	0.1108 µg/L	0.1108 ppb	20:41:31
1	Cd 226.502†	-147.9	-3.1	-0.0778 µg/L	-0.0778 ppb	20:41:52
1	Co 228.616†	7.1	5.0	0.2268 µg/L	0.2268 ppb	20:41:52
1	Cr 267.716†	-43.6	7.7	0.1543 µg/L	0.1543 ppb	20:41:31
1	Cu 324.752†	2639.9	39.9	0.2624 µg/L	0.2624 ppb	20:41:31
1	Mn 257.610†	-151.5	107.7	0.3403 µg/L	0.3403 ppb	20:41:52
1	Mo 202.031†	6.4	11.6	1.1391 µg/L	1.1391 ppb	20:41:52
1	Ni 231.604†	316.5	-2.6	-0.1301 µg/L	-0.1301 ppb	20:41:52
1	P 214.914†	12.1	-3.5	-7.0029 µg/L	-7.0029 ppb	20:41:52
1	Pb 220.353†	81.5	-11.1	-2.7059 µg/L	-2.7059 ppb	20:41:52
1	S 181.975 Axial†	13.5	-5.7	-23.814 µg/L	-23.814 ppb	20:41:52
1	Sb 206.836†	24.3	1.2	1.1646 µg/L	1.1646 ppb	20:41:52
1	Se 196.026†	7.0	-12.5	-17.428 µg/L	-17.428 ppb	20:41:52
1	SiO2†	1501.0	77.5	15.292 µg/L	15.292 ppb	20:41:31
1	Si 251.611†	421.6	102.0	7.7577 µg/L	7.7577 ppb	20:41:52
1	Sn 189.927†	1.5	1.1	0.4747 µg/L	0.4747 ppb	20:41:52
1	Ti 334.940†	398.8	215.3	0.4788 µg/L	0.4788 ppb	20:41:31
1	Tl 190.801†	-25.8	-2.8	-3.6663 µg/L	-3.6663 ppb	20:41:52
1	U 409.014†	-80.7	-1.9	-0.1586 µg/L	-0.1586 ppb	20:41:31
1	V 292.402†	-54.6	-8.7	-0.0740 µg/L	-0.0740 ppb	20:41:31
1	Zn 213.857†	530.1	-15.6	-0.3645 µg/L	-0.3645 ppb	20:41:52
2	Sc RADIAL	57110.3	57110.3	101 %		20:40:29
2	Al 396.153Radial†	-14.1	-21.4	-14.870 µg/L	-14.870 ppb	20:40:29
2	Ca 317.933Radial†	198.8	-14.6	-12.455 µg/L	-12.455 ppb	20:40:49
2	Fe 238.204 Radial†	16.0	-0.7	-5.6974 µg/L	-5.6974 ppb	20:40:49
2	K 766.490 Radial†	221.1	53.7	35.087 µg/L	35.087 ppb	20:40:29
2	Mg 279.077 IEC†	11.7	-1.2	-10.895 µg/L	-10.895 ppb	20:40:49
2	Na 589.592 Radial†	429.7	-47.1	-14.471 µg/L	-14.471 ppb	20:40:29
2	Sr 421.552†	18.0	-11.0	-0.1015 µg/L	-0.1015 ppb	20:40:29
2	Sc 361.383	2018163.8	2018163.8	102.80 %		20:41:58
2	Y 371.029	1394669.2	1394669.2	103.10 %		20:41:58
2	Ag 328.068†	-380.5	31.5	0.2331 µg/L	0.2331 ppb	20:42:03
2	As 188.979†	-3.5	-2.9	-5.2309 µg/L	-5.2309 ppb	20:42:24
2	B 249.677†	356.6	-37.3	-1.5164 µg/L	-1.5164 ppb	20:42:24
2	Ba 233.527†	0.7	17.8	0.4272 µg/L	0.4272 ppb	20:42:24
2	Be 313.107†	-2645.1	282.8	0.1677 µg/L	0.1677 ppb	20:42:03
2	Cd 226.502†	-142.5	3.0	0.0759 µg/L	0.0759 ppb	20:42:24
2	Co 228.616†	8.4	6.3	0.2840 µg/L	0.2840 ppb	20:42:24
2	Cr 267.716†	-35.6	15.8	0.3172 µg/L	0.3172 ppb	20:42:03
2	Cu 324.752†	2611.1	-3.9	-0.0261 µg/L	-0.0261 ppb	20:42:03
2	Mn 257.610†	-153.4	106.8	0.3340 µg/L	0.3340 ppb	20:42:24
2	Mo 202.031†	1.6	6.9	0.6745 µg/L	0.6745 ppb	20:42:24
2	Ni 231.604†	310.9	-9.9	-0.4961 µg/L	-0.4961 ppb	20:42:24
2	P 214.914†	14.4	-1.3	-2.5139 µg/L	-2.5139 ppb	20:42:24
2	Pb 220.353†	85.6	-7.7	-1.8763 µg/L	-1.8763 ppb	20:42:24

2	S 181.975 Axial†	16.1	-3.2	-13.393 µg/L	-13.393 ppb	20:42:24
2	Sb 206.836†	24.8	1.7	1.5353 µg/L	1.5353 ppb	20:42:24
2	Se 196.026†	18.4	-1.4	-1.9764 µg/L	-1.9764 ppb	20:42:24
2	SiO2†	1495.4	63.0	12.440 µg/L	12.440 ppb	20:42:03
2	Si 251.611†	417.9	95.9	7.2895 µg/L	7.2895 ppb	20:42:24
2	Sn 189.927†	7.5	6.9	2.9027 µg/L	2.9027 ppb	20:42:24
2	Ti 334.940†	363.4	178.5	0.3955 µg/L	0.3955 ppb	20:42:03
2	Tl 190.801†	-20.3	2.6	3.4259 µg/L	3.4259 ppb	20:42:24
2	U 409.014†	-48.9	29.5	2.4528 µg/L	2.4528 ppb	20:42:03
2	V 292.402†	-44.8	1.2	0.0192 µg/L	0.0192 ppb	20:42:03
2	Zn 213.857†	537.2	-11.8	-0.2740 µg/L	-0.2740 ppb	20:42:24
3	Sc RADIAL	56287.1	56287.1	99.6 %		20:40:55
3	Al 396.153Radial†	-17.5	-24.9	-17.369 µg/L	-17.369 ppb	20:40:55
3	Ca 317.933Radial†	205.6	-4.9	-4.1718 µg/L	-4.1718 ppb	20:41:15
3	Fe 238.204 Radial†	18.7	2.2	17.059 µg/L	17.059 ppb	20:41:15
3	K 766.490 Radial†	216.2	52.0	33.972 µg/L	33.972 ppb	20:40:55
3	Mg 279.077 IEC†	14.3	1.5	13.643 µg/L	13.643 ppb	20:41:15
3	Na 589.592 Radial†	474.9	4.5	1.3843 µg/L	1.3843 ppb	20:40:55
3	Sr 421.552†	69.4	40.8	0.3766 µg/L	0.3766 ppb	20:40:55
3	Sc 361.383	2011137.2	2011137.2	102.45 %		20:42:30
3	Y 371.029	1391137.6	1391137.6	102.84 %		20:42:30
3	Ag 328.068†	-401.5	9.7	0.0756 µg/L	0.0756 ppb	20:42:35
3	As 188.979†	-0.8	-0.3	-0.5665 µg/L	-0.5665 ppb	20:42:56
3	B 249.677†	346.6	-45.8	-1.8768 µg/L	-1.8768 ppb	20:42:56
3	Ba 233.527†	-8.1	9.2	0.2209 µg/L	0.2209 ppb	20:42:56
3	Be 313.107†	-2811.5	111.4	0.0659 µg/L	0.0659 ppb	20:42:35
3	Cd 226.502†	-144.9	0.2	0.0027 µg/L	0.0027 ppb	20:42:56
3	Co 228.616†	2.5	0.5	0.0230 µg/L	0.0230 ppb	20:42:56
3	Cr 267.716†	-35.3	16.0	0.3209 µg/L	0.3209 ppb	20:42:35
3	Cu 324.752†	2596.5	-9.2	-0.0576 µg/L	-0.0576 ppb	20:42:35
3	Mn 257.610†	-144.2	115.3	0.3628 µg/L	0.3628 ppb	20:42:56
3	Mo 202.031†	5.0	10.2	1.0037 µg/L	1.0037 ppb	20:42:56
3	Ni 231.604†	304.8	-14.8	-0.7372 µg/L	-0.7372 ppb	20:42:56
3	P 214.914†	12.9	-2.8	-5.4792 µg/L	-5.4792 ppb	20:42:56
3	Pb 220.353†	85.3	-7.7	-1.8682 µg/L	-1.8682 ppb	20:42:56
3	S 181.975 Axial†	20.2	0.8	3.1941 µg/L	3.1941 ppb	20:42:56
3	Sb 206.836†	18.9	-4.0	-3.6766 µg/L	-3.6766 ppb	20:42:56
3	Se 196.026†	18.1	-1.7	-2.3416 µg/L	-2.3416 ppb	20:42:56
3	SiO2†	1495.2	67.9	13.403 µg/L	13.403 ppb	20:42:35
3	Si 251.611†	434.6	113.6	8.6363 µg/L	8.6363 ppb	20:42:56
3	Sn 189.927†	2.2	1.8	0.7385 µg/L	0.7385 ppb	20:42:56
3	Ti 334.940†	476.2	289.8	0.6400 µg/L	0.6400 ppb	20:42:35
3	Tl 190.801†	-22.5	0.4	0.5912 µg/L	0.5912 ppb	20:42:56
3	U 409.014†	-60.8	17.7	1.4714 µg/L	1.4714 ppb	20:42:35
3	V 292.402†	-1.0	43.8	0.4391 µg/L	0.4391 ppb	20:42:35
3	Zn 213.857†	528.9	-18.1	-0.4235 µg/L	-0.4235 ppb	20:42:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2011703.4	102.47 %	0.316			0.31%
Sc RADIAL	56853.3	101 %	0.9			0.86%
Y 371.029	1390791.2	102.81 %	0.300			0.29%
Ag 328.068†	31.2	0.2322 µg/L	0.15616	0.2322 ppb	0.15616	67.25%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-24.7	-17.184 µg/L	2.2266	-17.184 ppb	2.2266	12.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.8	-5.0740 µg/L	4.43112	-5.0740 ppb	4.43112	87.33%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-37.0	-1.5118 µg/L	0.36725	-1.5118 ppb	0.36725	24.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	12.0	0.2887 µg/L	0.11995	0.2887 ppb	0.11995	41.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	193.7	0.1148 µg/L	0.05103	0.1148 ppb	0.05103	44.46%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-12.6	-10.733 µg/L	5.8919	-10.733 ppb	5.8919	54.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	0.1	0.0002 µg/L	0.07690	0.0002 ppb	0.07690	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.9	0.1779 µg/L	0.13721	0.1779 ppb	0.13721	77.12%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	13.1 0.2641 µg/L	0.09516	0.2641 ppb 0.09516 36.03%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	9.0 0.0596 µg/L	0.17639	0.0596 ppb 0.17639 296.17%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.0 7.8695 µg/L	11.99309	7.8695 ppb 11.99309 152.40%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	43.2 28.187 µg/L	10.9995	28.187 ppb 10.9995 39.02%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.2 -10.740 µg/L	24.3062	-10.740 ppb 24.3062 226.30%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	109.9 0.3457 µg/L	0.01513	0.3457 ppb 0.01513 4.38%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	9.6 0.9391 µg/L	0.23895	0.9391 ppb 0.23895 25.45%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-14.6 -4.4874 µg/L	8.69036	-4.4874 ppb 8.69036 193.66%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-9.1 -0.4545 µg/L	0.30571	-0.4545 ppb 0.30571 67.27%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-2.5 -4.9987 µg/L	2.28274	-4.9987 ppb 2.28274 45.67%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-8.8 -2.1501 µg/L	0.48133	-2.1501 ppb 0.48133 22.39%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.7 -11.337 µg/L	13.6207	-11.337 ppb 13.6207 120.14%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-0.4 -0.3256 µg/L	2.90798	-0.3256 ppb 2.90798 893.20%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-5.2 -7.2486 µg/L	8.81736	-7.2486 ppb 8.81736 121.64%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	69.5 13.712 µg/L	1.4510	13.712 ppb 1.4510 10.58%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	103.8 7.8945 µg/L	0.68372	7.8945 ppb 0.68372 8.66%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	3.3 1.3720 µg/L	1.33219	1.3720 ppb 1.33219 97.10%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	14.3 0.1323 µg/L	0.23923	0.1323 ppb 0.23923 180.85%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	227.9 0.5048 µg/L	0.12431	0.5048 ppb 0.12431 24.63%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.1 0.1169 µg/L	3.56976	0.1169 ppb 3.56976 >999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	15.1 1.2552 µg/L	1.31907	1.2552 ppb 1.31907 105.09%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	12.1 0.1281 µg/L	0.27331	0.1281 ppb 0.27331 213.36%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-15.2 -0.3540 µg/L	0.07531	-0.3540 ppb 0.07531 21.27%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 61

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 21:08:23

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	58780.4	58780.4	104 %		21:08:58
1	Al 396.153Radial†	7195.1	6908.1	4795.0 µg/L	4795.0 ppb	21:08:58
1	Ca 317.933Radial†	6074.4	5627.0	4806.5 µg/L	4806.5 ppb	21:09:18
1	Fe 238.204 Radial†	666.1	623.6	4928.9 µg/L	4928.9 ppb	21:09:18
1	K 766.490 Radial†	7823.5	7354.4	4803.3 µg/L	4803.3 ppb	21:08:58
1	Mg 279.077 IEC†	587.1	551.5	4933.1 µg/L	4933.1 ppb	21:09:18
1	Na 589.592 Radial†	33229.4	31465.6	9664.4 µg/L	9664.4 ppb	21:08:58
1	Sr 421.552†	53405.2	51300.6	473.26 µg/L	473.26 ppb	21:08:58
1	Sc 361.383	2031693.4	2031693.4	103.49 %		21:10:22
1	Y 371.029	1400531.0	1400531.0	103.53 %		21:10:22
1	Ag 328.068†	67476.4	65600.6	489.51 µg/L	489.51 ppb	21:10:27
1	As 188.979†	292.3	282.9	506.06 µg/L	506.06 ppb	21:10:48
1	B 249.677†	12687.3	11875.0	482.23 µg/L	482.23 ppb	21:10:27
1	Ba 233.527†	21301.5	20599.6	495.43 µg/L	495.43 ppb	21:10:27
1	Be 313.107†	857576.3	831487.1	493.30 µg/L	493.30 ppb	21:10:22
1	Cd 226.502†	20668.3	20112.4	501.57 µg/L	501.57 ppb	21:10:27
1	Co 228.616†	11438.4	11050.4	499.89 µg/L	499.89 ppb	21:10:27
1	Cr 267.716†	25764.0	24944.8	501.33 µg/L	501.33 ppb	21:10:27
1	Cu 324.752†	80279.0	75025.7	490.41 µg/L	490.41 ppb	21:10:27
1	Mn 257.610†	165571.7	160239.4	502.25 µg/L	502.25 ppb	21:10:22
1	Mo 202.031†	5439.6	5261.4	515.41 µg/L	515.41 ppb	21:10:48
1	Ni 231.604†	10750.1	10074.9	501.70 µg/L	501.70 ppb	21:10:27
1	P 214.914†	1349.1	1288.2	2503.9 µg/L	2503.9 ppb	21:10:48
1	Pb 220.353†	2254.8	2087.7	507.72 µg/L	507.72 ppb	21:10:48
1	S 181.975 Axial†	277.5	249.2	1033.4 µg/L	1033.4 ppb	21:10:48
1	Sb 206.836†	587.9	545.6	503.19 µg/L	503.19 ppb	21:10:48
1	Se 196.026†	400.3	367.5	523.81 µg/L	523.81 ppb	21:10:48
1	SiO2†	29116.0	26741.7	5278.5 µg/L	5278.5 ppb	21:10:27
1	Si 251.611†	33907.1	32452.1	2467.1 µg/L	2467.1 ppb	21:10:27
1	Sn 189.927†	1278.1	1234.6	520.67 µg/L	520.67 ppb	21:10:48
1	Ti 334.940†	229666.3	221739.6	490.22 µg/L	490.22 ppb	21:10:22
1	Tl 190.801†	374.5	384.2	504.96 µg/L	504.96 ppb	21:10:48
1	U 409.014†	6113.1	5983.9	496.19 µg/L	496.19 ppb	21:10:27
1	V 292.402†	52349.3	50627.2	499.60 µg/L	499.60 ppb	21:10:27
1	Zn 213.857†	22683.3	21383.2	498.16 µg/L	498.16 ppb	21:10:27
2	Sc RADIAL	57808.7	57808.7	102 %		21:09:24
2	Al 396.153Radial†	7047.8	6880.4	4776.2 µg/L	4776.2 ppb	21:09:24
2	Ca 317.933Radial†	6096.5	5746.7	4908.7 µg/L	4908.7 ppb	21:09:44
2	Fe 238.204 Radial†	663.6	632.0	4994.7 µg/L	4994.7 ppb	21:09:44
2	K 766.490 Radial†	7642.6	7304.0	4770.4 µg/L	4770.4 ppb	21:09:24
2	Mg 279.077 IEC†	579.2	553.3	4948.6 µg/L	4948.6 ppb	21:09:44
2	Na 589.592 Radial†	32775.0	31558.4	9692.9 µg/L	9692.9 ppb	21:09:24
2	Sr 421.552†	52410.5	51191.2	472.25 µg/L	472.25 ppb	21:09:24
2	Sc 361.383	2049495.0	2049495.0	104.40 %		21:10:55
2	Y 371.029	1411660.7	1411660.7	104.35 %		21:10:55
2	Ag 328.068†	67550.5	65105.2	485.82 µg/L	485.82 ppb	21:11:01
2	As 188.979†	289.6	277.9	497.13 µg/L	497.13 ppb	21:11:21
2	B 249.677†	12725.6	11805.1	479.34 µg/L	479.34 ppb	21:11:01
2	Ba 233.527†	21349.4	20466.7	492.23 µg/L	492.23 ppb	21:11:01
2	Be 313.107†	866033.8	832390.8	493.84 µg/L	493.84 ppb	21:10:55
2	Cd 226.502†	20727.2	19995.3	498.64 µg/L	498.64 ppb	21:11:01
2	Co 228.616†	11460.7	10975.7	496.49 µg/L	496.49 ppb	21:11:01
2	Cr 267.716†	25871.8	24831.8	499.06 µg/L	499.06 ppb	21:11:01
2	Cu 324.752†	80404.8	74472.4	486.81 µg/L	486.81 ppb	21:11:01
2	Mn 257.610†	167118.2	160331.1	502.55 µg/L	502.55 ppb	21:10:55
2	Mo 202.031†	5254.1	5038.0	493.54 µg/L	493.54 ppb	21:11:21
2	Ni 231.604†	10763.2	9997.2	497.83 µg/L	497.83 ppb	21:11:01
2	P 214.914†	1302.2	1232.0	2392.5 µg/L	2392.5 ppb	21:11:21
2	Pb 220.353†	2211.3	2027.1	492.93 µg/L	492.93 ppb	21:11:21

2	S 181.975 Axial†	268.4	238.1	987.50 µg/L	987.50 ppb	21:11:21
2	Sb 206.836†	582.5	535.4	493.50 µg/L	493.50 ppb	21:11:21
2	Se 196.026†	387.4	351.8	501.93 µg/L	501.93 ppb	21:11:21
2	SiO2†	29211.0	26588.3	5248.2 µg/L	5248.2 ppb	21:11:01
2	Si 251.611†	34096.5	32348.9	2459.2 µg/L	2459.2 ppb	21:11:01
2	Sn 189.927†	1232.7	1180.4	497.82 µg/L	497.82 ppb	21:11:21
2	Ti 334.940†	231940.6	221990.5	490.78 µg/L	490.78 ppb	21:10:55
2	Tl 190.801†	370.0	376.8	495.24 µg/L	495.24 ppb	21:11:21
2	U 409.014†	6104.7	5924.5	491.24 µg/L	491.24 ppb	21:11:01
2	V 292.402†	52450.2	50284.5	496.09 µg/L	496.09 ppb	21:11:01
2	Zn 213.857†	22753.7	21260.4	495.30 µg/L	495.30 ppb	21:11:01
3	Sc RADIAL	57645.3	57645.3	102 %		21:09:50
3	Al 396.153Radial†	7101.7	6952.7	4828.5 µg/L	4828.5 ppb	21:09:50
3	Ca 317.933Radial†	6127.9	5794.4	4949.5 µg/L	4949.5 ppb	21:10:10
3	Fe 238.204 Radial†	665.9	636.0	5025.6 µg/L	5025.6 ppb	21:10:10
3	K 766.490 Radial†	7687.0	7368.0	4812.6 µg/L	4812.6 ppb	21:09:50
3	Mg 279.077 IEC†	588.9	564.4	5046.2 µg/L	5046.2 ppb	21:10:10
3	Na 589.592 Radial†	32797.2	31670.9	9727.5 µg/L	9727.5 ppb	21:09:50
3	Sr 421.552†	52594.3	51516.6	475.25 µg/L	475.25 ppb	21:09:50
3	Sc 361.383	2043330.2	2043330.2	104.09 %		21:11:28
3	Y 371.029	1408836.0	1408836.0	104.15 %		21:11:28
3	Ag 328.068†	61712.7	59691.8	445.28 µg/L	445.28 ppb	21:11:34
3	As 188.979†	240.0	231.0	413.29 µg/L	413.29 ppb	21:11:54
3	B 249.677†	11528.4	10691.7	433.82 µg/L	433.82 ppb	21:11:34
3	Ba 233.527†	18793.6	18072.9	434.64 µg/L	434.64 ppb	21:11:34
3	Be 313.107†	773952.6	746427.0	442.84 µg/L	442.84 ppb	21:11:28
3	Cd 226.502†	18104.4	17535.4	437.21 µg/L	437.21 ppb	21:11:34
3	Co 228.616†	9919.4	9528.1	430.96 µg/L	430.96 ppb	21:11:34
3	Cr 267.716†	21628.5	20829.9	418.64 µg/L	418.64 ppb	21:11:34
3	Cu 324.752†	70293.2	64990.1	424.92 µg/L	424.92 ppb	21:11:34
3	Mn 257.610†	150318.2	144673.6	453.51 µg/L	453.51 ppb	21:11:28
3	Mo 202.031†	4250.4	4088.9	400.60 µg/L	400.60 ppb	21:11:54
3	Ni 231.604†	9317.9	8639.7	430.24 µg/L	430.24 ppb	21:11:34
3	P 214.914†	1076.0	1018.4	1974.8 µg/L	1974.8 ppb	21:11:54
3	Pb 220.353†	1875.8	1711.2	416.06 µg/L	416.06 ppb	21:11:54
3	S 181.975 Axial†	231.3	203.3	842.98 µg/L	842.98 ppb	21:11:54
3	Sb 206.836†	484.5	443.0	408.08 µg/L	408.08 ppb	21:11:54
3	Se 196.026†	334.8	302.4	432.47 µg/L	432.47 ppb	21:11:54
3	SiO2†	26265.0	23842.4	4706.2 µg/L	4706.2 ppb	21:11:34
3	Si 251.611†	30430.4	28925.2	2199.0 µg/L	2199.0 ppb	21:11:34
3	Sn 189.927†	990.4	951.2	401.15 µg/L	401.15 ppb	21:11:54
3	Ti 334.940†	205711.5	197461.3	436.51 µg/L	436.51 ppb	21:11:28
3	Tl 190.801†	323.8	333.4	438.43 µg/L	438.43 ppb	21:11:54
3	U 409.014†	5199.4	5072.4	420.44 µg/L	420.44 ppb	21:11:34
3	V 292.402†	45058.2	43334.2	427.38 µg/L	427.38 ppb	21:11:34
3	Zn 213.857†	19790.2	18479.0	430.43 µg/L	430.43 ppb	21:11:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2041506.2	103.99 %	0.460			0.44%
Sc RADIAL	58078.1	103 %	1.1			1.06%
Y 371.029	1407009.2	104.01 %	0.428			0.41%
Ag 328.068†	63465.9	473.53 µg/L	24.543	473.53 ppb	24.543	5.18%
QC value within limits for Ag 328.068 Recovery = 94.71%						
Al 396.153Radial†	6913.7	4799.9 µg/L	26.45	4799.9 ppb	26.45	0.55%
QC value within limits for Al 396.153Radial Recovery = 96.00%						
As 188.979†	263.9	472.16 µg/L	51.179	472.16 ppb	51.179	10.84%
QC value within limits for As 188.979 Recovery = 94.43%						
B 249.677†	11457.3	465.13 µg/L	27.155	465.13 ppb	27.155	5.84%
QC value within limits for B 249.677 Recovery = 93.03%						
Ba 233.527†	19713.1	474.10 µg/L	34.210	474.10 ppb	34.210	7.22%
QC value within limits for Ba 233.527 Recovery = 94.82%						
Be 313.107†	803435.0	476.66 µg/L	29.291	476.66 ppb	29.291	6.15%
QC value within limits for Be 313.107 Recovery = 95.33%						
Ca 317.933Radial†	5722.7	4888.2 µg/L	73.67	4888.2 ppb	73.67	1.51%
QC value within limits for Ca 317.933Radial Recovery = 97.76%						
Cd 226.502†	19214.4	479.14 µg/L	36.339	479.14 ppb	36.339	7.58%
QC value within limits for Cd 226.502 Recovery = 95.83%						
Co 228.616†	10518.1	475.78 µg/L	38.855	475.78 ppb	38.855	8.17%

Cr 267.716†	23535.5	473.01 µg/L	47.102	9.96%
QC value within limits for Cr 267.716 Recovery = 94.60%				
Cu 324.752†	71496.1	467.38 µg/L	36.817	7.88%
QC value within limits for Cu 324.752 Recovery = 93.48%				
Fe 238.204 Radial†	630.5	4983.1 µg/L	49.36	0.99%
QC value within limits for Fe 238.204 Radial Recovery = 99.66%				
K 766.490 Radial†	7342.4	4795.4 µg/L	22.20	0.46%
QC value within limits for K 766.490 Radial Recovery = 95.91%				
Mg 279.077 IEC†	556.4	4976.0 µg/L	61.30	1.23%
QC value within limits for Mg 279.077 IEC Recovery = 99.52%				
Mn 257.610†	155081.3	486.10 µg/L	28.223	5.81%
QC value within limits for Mn 257.610 Recovery = 97.22%				
Mo 202.031†	4796.1	469.85 µg/L	60.963	12.97%
QC value within limits for Mo 202.031 Recovery = 93.97%				
Na 589.592 Radial†	31564.9	9695.0 µg/L	31.58	0.33%
QC value within limits for Na 589.592 Radial Recovery = 96.95%				
Ni 231.604†	9570.6	476.59 µg/L	40.187	8.43%
QC value within limits for Ni 231.604 Recovery = 95.32%				
P 214.914†	1179.5	2290.4 µg/L	278.94	12.18%
QC value within limits for P 214.914 Recovery = 91.62%				
Pb 220.353†	1942.0	472.24 µg/L	49.211	10.42%
QC value within limits for Pb 220.353 Recovery = 94.45%				
S 181.975 Axial†	230.2	954.62 µg/L	99.373	10.41%
QC value within limits for S 181.975 Axial Recovery = 95.46%				
Sb 206.836†	508.0	468.26 µg/L	52.337	11.18%
QC value within limits for Sb 206.836 Recovery = 93.65%				
Se 196.026†	340.5	486.07 µg/L	47.691	9.81%
QC value within limits for Se 196.026 Recovery = 97.21%				
SiO2†	25724.1	5077.6 µg/L	322.02	6.34%
QC value within limits for SiO2 Recovery = 94.95%				
Si 251.611†	31242.1	2375.1 µg/L	152.58	6.42%
QC value within limits for Si 251.611 Recovery = 95.00%				
Sn 189.927†	1122.0	473.21 µg/L	63.445	13.41%
QC value within limits for Sn 189.927 Recovery = 94.64%				
Sr 421.552†	51336.1	473.58 µg/L	1.527	0.32%
QC value within limits for Sr 421.552 Recovery = 94.72%				
Ti 334.940†	213730.5	472.50 µg/L	31.174	6.60%
QC value within limits for Ti 334.940 Recovery = 94.50%				
Tl 190.801†	364.8	479.54 µg/L	35.938	7.49%
QC value within limits for Tl 190.801 Recovery = 95.91%				
U 409.014†	5660.3	469.29 µg/L	42.377	9.03%
QC value within limits for U 409.014 Recovery = 93.86%				
V 292.402†	48082.0	474.36 µg/L	40.718	8.58%
QC value within limits for V 292.402 Recovery = 94.87%				
Zn 213.857†	20374.2	474.63 µg/L	38.303	8.07%
QC value within limits for Zn 213.857 Recovery = 94.93%				

All analyte(s) passed QC.

Sequence No.: 62

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 21:12:05

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	57648.5	57648.5	102 %		21:12:37
1	Al 396.153Radial†	-14.7	-21.7	-15.138 µg/L	-15.138 ppb	21:12:37
1	Ca 317.933Radial†	203.7	-11.6	-9.9121 µg/L	-9.9121 ppb	21:12:58
1	Fe 238.204 Radial†	16.4	-0.5	-4.2458 µg/L	-4.2458 ppb	21:12:58
1	K 766.490 Radial†	239.5	69.8	45.559 µg/L	45.559 ppb	21:12:37
1	Mg 279.077 IEC†	8.9	-4.1	-36.403 µg/L	-36.403 ppb	21:12:58
1	Na 589.592 Radial†	512.1	29.6	9.0983 µg/L	9.0983 ppb	21:12:37
1	Sr 421.552†	48.1	18.3	0.1688 µg/L	0.1688 ppb	21:12:37
1	Sc 361.383	2024672.5	2024672.5	103.14 %		21:14:00
1	Y 371.029	1400432.3	1400432.3	103.52 %		21:14:00
1	Ag 328.068†	-413.0	1.2	0.0111 µg/L	0.0111 ppb	21:14:05
1	As 188.979†	-0.7	-0.3	-0.4624 µg/L	-0.4624 ppb	21:14:26
1	B 249.677†	378.7	-16.9	-0.6888 µg/L	-0.6888 ppb	21:14:26
1	Ba 233.527†	-12.8	4.6	0.1123 µg/L	0.1123 ppb	21:14:26
1	Be 313.107†	-2775.1	164.9	0.0978 µg/L	0.0978 ppb	21:14:05
1	Cd 226.502†	-135.5	10.3	0.2573 µg/L	0.2573 ppb	21:14:26
1	Co 228.616†	7.3	5.2	0.2337 µg/L	0.2337 ppb	21:14:26
1	Cr 267.716†	-69.0	-16.5	-0.3312 µg/L	-0.3312 ppb	21:14:05
1	Cu 324.752†	2629.4	5.8	0.0370 µg/L	0.0370 ppb	21:14:05
1	Mn 257.610†	-259.5	4.4	0.0146 µg/L	0.0146 ppb	21:14:26
1	Mo 202.031†	0.2	5.6	0.5442 µg/L	0.5442 ppb	21:14:26
1	Ni 231.604†	315.8	-6.1	-0.3065 µg/L	-0.3065 ppb	21:14:26
1	P 214.914†	22.8	6.8	13.475 µg/L	13.475 ppb	21:14:26
1	Pb 220.353†	88.5	-5.2	-1.2633 µg/L	-1.2633 ppb	21:14:26
1	S 181.975 Axial†	14.4	-5.0	-20.717 µg/L	-20.717 ppb	21:14:26
1	Sb 206.836†	29.4	6.0	5.5139 µg/L	5.5139 ppb	21:14:26
1	Se 196.026†	18.0	-1.8	-2.5508 µg/L	-2.5508 ppb	21:14:26
1	SiO2†	1453.6	17.9	3.5281 µg/L	3.5281 ppb	21:14:05
1	Si 251.611†	344.2	23.1	1.7570 µg/L	1.7570 ppb	21:14:26
1	Sn 189.927†	6.9	6.3	2.6452 µg/L	2.6452 ppb	21:14:26
1	Ti 334.940†	260.8	77.8	0.1748 µg/L	0.1748 ppb	21:14:05
1	Tl 190.801†	-22.9	0.2	0.2097 µg/L	0.2097 ppb	21:14:26
1	U 409.014†	13.7	90.4	7.5095 µg/L	7.5095 ppb	21:14:05
1	V 292.402†	-3.7	41.2	0.4118 µg/L	0.4118 ppb	21:14:05
1	Zn 213.857†	548.2	-2.9	-0.0641 µg/L	-0.0641 ppb	21:14:26
2	Sc RADIAL	57532.9	57532.9	102 %		21:13:03
2	Al 396.153Radial†	12.0	4.4	3.0811 µg/L	3.0811 ppb	21:13:03
2	Ca 317.933Radial†	199.1	-15.8	-13.477 µg/L	-13.477 ppb	21:13:24
2	Fe 238.204 Radial†	16.8	-0.1	-0.4573 µg/L	-0.4573 ppb	21:13:24
2	K 766.490 Radial†	217.9	49.0	32.018 µg/L	32.018 ppb	21:13:03
2	Mg 279.077 IEC†	13.2	0.1	1.1462 µg/L	1.1462 ppb	21:13:24
2	Na 589.592 Radial†	531.4	49.6	15.230 µg/L	15.230 ppb	21:13:03
2	Sr 421.552†	44.8	15.2	0.1403 µg/L	0.1403 ppb	21:13:03
2	Sc 361.383	2034376.0	2034376.0	103.63 %		21:14:32
2	Y 371.029	1406950.8	1406950.8	104.01 %		21:14:32
2	Ag 328.068†	-398.7	16.9	0.1249 µg/L	0.1249 ppb	21:14:37
2	As 188.979†	3.7	4.1	7.2905 µg/L	7.2905 ppb	21:14:58
2	B 249.677†	367.6	-29.4	-1.1995 µg/L	-1.1995 ppb	21:14:58
2	Ba 233.527†	-11.7	5.8	0.1382 µg/L	0.1382 ppb	21:14:58
2	Be 313.107†	-2725.4	225.8	0.1339 µg/L	0.1339 ppb	21:14:37
2	Cd 226.502†	-127.6	18.5	0.4618 µg/L	0.4618 ppb	21:14:58
2	Co 228.616†	1.0	-1.0	-0.0440 µg/L	-0.0440 ppb	21:14:58
2	Cr 267.716†	-41.5	10.4	0.2082 µg/L	0.2082 ppb	21:14:37
2	Cu 324.752†	2590.3	-44.1	-0.2880 µg/L	-0.2880 ppb	21:14:37
2	Mn 257.610†	-252.5	12.4	0.0387 µg/L	0.0387 ppb	21:14:58
2	Mo 202.031†	-1.6	3.8	0.3741 µg/L	0.3741 ppb	21:14:58
2	Ni 231.604†	312.0	-11.3	-0.5640 µg/L	-0.5640 ppb	21:14:58
2	P 214.914†	12.2	-3.6	-7.0402 µg/L	-7.0402 ppb	21:14:58
2	Pb 220.353†	83.5	-10.4	-2.5295 µg/L	-2.5295 ppb	21:14:58

2	S 181.975 Axial†	19.3	-0.3	-1.1792 µg/L	-1.1792 ppb	21:14:58
2	Sb 206.836†	27.7	4.2	3.8619 µg/L	3.8619 ppb	21:14:58
2	Se 196.026†	19.1	-0.8	-1.1798 µg/L	-1.1798 ppb	21:14:58
2	SiO2†	1460.9	18.1	3.5783 µg/L	3.5783 ppb	21:14:37
2	Si 251.611†	357.2	34.1	2.5907 µg/L	2.5907 ppb	21:14:58
2	Sn 189.927†	1.7	1.3	0.5463 µg/L	0.5463 ppb	21:14:58
2	Ti 334.940†	290.1	104.9	0.2318 µg/L	0.2318 ppb	21:14:37
2	Tl 190.801†	-21.1	2.0	2.6077 µg/L	2.6077 ppb	21:14:58
2	U 409.014†	-69.8	9.7	0.8107 µg/L	0.8107 ppb	21:14:37
2	V 292.402†	-49.8	-3.3	-0.0276 µg/L	-0.0276 ppb	21:14:37
2	Zn 213.857†	547.2	-6.4	-0.1467 µg/L	-0.1467 ppb	21:14:58
3	Sc RADIAL	57754.3	57754.3	102 %		21:13:29
3	Al 396.153Radial†	-7.4	-14.6	-10.181 µg/L	-10.181 ppb	21:13:29
3	Ca 317.933Radial†	198.7	-16.9	-14.434 µg/L	-14.434 ppb	21:13:50
3	Fe 238.204 Radial†	15.1	-1.8	-14.173 µg/L	-14.173 ppb	21:13:50
3	K 766.490 Radial†	210.2	40.6	26.521 µg/L	26.521 ppb	21:13:29
3	Mg 279.077 IEC†	12.2	-0.9	-7.7282 µg/L	-7.7282 ppb	21:13:50
3	Na 589.592 Radial†	514.7	31.3	9.6113 µg/L	9.6113 ppb	21:13:29
3	Sr 421.552†	36.6	7.0	0.0646 µg/L	0.0646 ppb	21:13:29
3	Sc 361.383	2036784.5	2036784.5	103.75 %		21:15:04
3	Y 371.029	1408626.3	1408626.3	104.13 %		21:15:04
3	Ag 328.068†	-389.3	26.4	0.1980 µg/L	0.1980 ppb	21:15:10
3	As 188.979†	1.3	1.8	3.1417 µg/L	3.1417 ppb	21:15:30
3	B 249.677†	362.6	-34.7	-1.4060 µg/L	-1.4060 ppb	21:15:30
3	Ba 233.527†	-7.2	10.1	0.2434 µg/L	0.2434 ppb	21:15:30
3	Be 313.107†	-2768.8	187.1	0.1110 µg/L	0.1110 ppb	21:15:10
3	Cd 226.502†	-144.7	2.2	0.0556 µg/L	0.0556 ppb	21:15:30
3	Co 228.616†	-8.3	-9.9	-0.4480 µg/L	-0.4480 ppb	21:15:30
3	Cr 267.716†	-54.9	-2.5	-0.0503 µg/L	-0.0503 ppb	21:15:10
3	Cu 324.752†	2622.8	-15.8	-0.1051 µg/L	-0.1051 ppb	21:15:10
3	Mn 257.610†	-264.4	1.2	0.0020 µg/L	0.0020 ppb	21:15:30
3	Mo 202.031†	-0.5	4.9	0.4803 µg/L	0.4803 ppb	21:15:30
3	Ni 231.604†	316.5	-7.3	-0.3620 µg/L	-0.3620 ppb	21:15:30
3	P 214.914†	15.2	-0.7	-1.2959 µg/L	-1.2959 ppb	21:15:30
3	Pb 220.353†	89.8	-4.4	-1.0668 µg/L	-1.0668 ppb	21:15:30
3	S 181.975 Axial†	20.3	0.6	2.6598 µg/L	2.6598 ppb	21:15:30
3	Sb 206.836†	20.9	-2.4	-2.1959 µg/L	-2.1959 ppb	21:15:30
3	Se 196.026†	19.2	-0.8	-1.1695 µg/L	-1.1695 ppb	21:15:30
3	SiO2†	1478.1	33.0	6.5234 µg/L	6.5234 ppb	21:15:10
3	Si 251.611†	346.7	23.5	1.7856 µg/L	1.7856 ppb	21:15:30
3	Sn 189.927†	2.2	1.7	0.7297 µg/L	0.7297 ppb	21:15:30
3	Ti 334.940†	181.9	0.3	0.0010 µg/L	0.0010 ppb	21:15:10
3	Tl 190.801†	-25.3	-2.0	-2.6178 µg/L	-2.6178 ppb	21:15:30
3	U 409.014†	-25.5	52.5	4.3661 µg/L	4.3661 ppb	21:15:10
3	V 292.402†	9.1	53.5	0.5276 µg/L	0.5276 ppb	21:15:10
3	Zn 213.857†	536.2	-17.6	-0.4107 µg/L	-0.4107 ppb	21:15:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031944.3	103.51 %	0.327			0.32%
Sc RADIAL	57645.2	102 %	0.2			0.19%
Y 371.029	1405336.4	103.89 %	0.320			0.31%
Ag 328.068†	14.8	0.1113 µg/L	0.09420	0.1113 ppb	0.09420	84.60%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.6	-7.4128 µg/L	9.41994	-7.4128 ppb	9.41994	127.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.9	3.3232 µg/L	3.87965	3.3232 ppb	3.87965	116.74%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-27.0	-1.0981 µg/L	0.36915	-1.0981 ppb	0.36915	33.62%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.8	0.1646 µg/L	0.06947	0.1646 ppb	0.06947	42.19%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	192.6	0.1142 µg/L	0.01827	0.1142 ppb	0.01827	15.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-14.8	-12.608 µg/L	2.3832	-12.608 ppb	2.3832	18.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.3	0.2582 µg/L	0.20309	0.2582 ppb	0.20309	78.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.9	-0.0861 µg/L	0.34278	-0.0861 ppb	0.34278	398.18%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	-2.9	-0.0578 µg/L	0.26977	-0.0578 ppb
			0.26977	467.05%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	-18.1	-0.1187 µg/L	0.16294	-0.1187 ppb
			0.16294	137.27%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	-0.8	-6.2921 µg/L	7.08315	-6.2921 ppb
			7.08315	112.57%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	53.1	34.699 µg/L	9.7985	34.699 ppb
			9.7985	28.24%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	-1.6	-14.328 µg/L	19.6256	-14.328 ppb
			19.6256	136.97%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	6.0	0.0185 µg/L	0.01862	0.0185 ppb
			0.01862	100.93%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	4.8	0.4662 µg/L	0.08595	0.4662 ppb
			0.08595	18.44%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	36.8	11.313 µg/L	3.4017	11.313 ppb
			3.4017	30.07%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	-8.2	-0.4108 µg/L	0.13551	-0.4108 ppb
			0.13551	32.98%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	0.8	1.7128 µg/L	10.58316	1.7128 ppb
			10.58316	617.88%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	-6.7	-1.6199 µg/L	0.79389	-1.6199 ppb
			0.79389	49.01%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	-1.5	-6.4120 µg/L	12.53600	-6.4120 ppb
			12.53600	195.51%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	2.6	2.3933 µg/L	4.05930	2.3933 ppb
			4.05930	169.61%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	-1.2	-1.6333 µg/L	0.79453	-1.6333 ppb
			0.79453	48.64%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	23.0	4.5433 µg/L	1.71504	4.5433 ppb
			1.71504	37.75%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	26.9	2.0444 µg/L	0.47330	2.0444 ppb
			0.47330	23.15%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	3.1	1.3071 µg/L	1.16248	1.3071 ppb
			1.16248	88.94%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	13.5	0.1246 µg/L	0.05381	0.1246 ppb
			0.05381	43.20%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	61.0	0.1359 µg/L	0.12021	0.1359 ppb
			0.12021	88.48%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	0.0	0.0665 µg/L	2.61569	0.0665 ppb
			2.61569	>999.9%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	50.9	4.2288 µg/L	3.35151	4.2288 ppb
			3.35151	79.26%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	30.5	0.3039 µg/L	0.29290	0.3039 ppb
			0.29290	96.38%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	-9.0	-0.2072 µg/L	0.18103	-0.2072 ppb
			0.18103	87.39%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/19/2010 21:52:01
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58294.3	58294.3	103 %			21:52:41
1	Al 396.153Radial†	7182.0	6953.0	4826.2 µg/L	4826.2 ppb	4826.2 ppb	21:52:41
1	Ca 317.933Radial†	6144.9	5744.1	4906.5 µg/L	4906.5 ppb	4906.5 ppb	21:53:01
1	Fe 238.204 Radial†	674.3	636.9	5034.3 µg/L	5034.3 ppb	5034.3 ppb	21:53:01
1	K 766.490 Radial†	7708.3	7305.5	4771.3 µg/L	4771.3 ppb	4771.3 ppb	21:52:41
1	Mg 279.077 IEC†	585.5	554.7	4961.5 µg/L	4961.5 ppb	4961.5 ppb	21:53:01
1	Na 589.592 Radial†	33172.0	31676.2	9729.1 µg/L	9729.1 ppb	9729.1 ppb	21:52:41
1	Sr 421.552†	53074.5	51408.1	474.25 µg/L	474.25 ppb	474.25 ppb	21:52:41
1	Sc 361.383	2038801.4	2038801.4	103.86 %			21:54:04
1	Y 371.029	1405502.7	1405502.7	103.90 %			21:54:04
1	Ag 328.068†	68855.2	66700.9	497.72 µg/L	497.72 ppb	497.72 ppb	21:54:10
1	As 188.979†	301.6	290.9	520.35 µg/L	520.35 ppb	520.35 ppb	21:54:30
1	B 249.677†	12936.2	12071.9	490.21 µg/L	490.21 ppb	490.21 ppb	21:54:10
1	Ba 233.527†	21777.9	20986.5	504.73 µg/L	504.73 ppb	504.73 ppb	21:54:10
1	Be 313.107†	877883.1	848151.2	503.19 µg/L	503.19 ppb	503.19 ppb	21:54:04
1	Cd 226.502†	21105.9	20464.1	510.33 µg/L	510.33 ppb	510.33 ppb	21:54:10
1	Co 228.616†	11658.9	11224.2	507.74 µg/L	507.74 ppb	507.74 ppb	21:54:10
1	Cr 267.716†	26274.1	25349.1	509.46 µg/L	509.46 ppb	509.46 ppb	21:54:10
1	Cu 324.752†	81876.3	76293.3	498.70 µg/L	498.70 ppb	498.70 ppb	21:54:10
1	Mn 257.610†	169788.5	163741.9	513.23 µg/L	513.23 ppb	513.23 ppb	21:54:04
1	Mo 202.031†	5498.7	5299.9	519.19 µg/L	519.19 ppb	519.19 ppb	21:54:30
1	Ni 231.604†	10915.6	10198.1	507.83 µg/L	507.83 ppb	507.83 ppb	21:54:10
1	P 214.914†	1366.5	1300.5	2527.2 µg/L	2527.2 ppb	2527.2 ppb	21:54:30
1	Pb 220.353†	2295.3	2119.1	515.34 µg/L	515.34 ppb	515.34 ppb	21:54:30
1	S 181.975 Axial†	270.9	241.9	1003.1 µg/L	1003.1 ppb	1003.1 ppb	21:54:30
1	Sb 206.836†	593.9	549.4	506.62 µg/L	506.62 ppb	506.62 ppb	21:54:30
1	Se 196.026†	409.1	374.6	534.08 µg/L	534.08 ppb	534.08 ppb	21:54:30
1	SiO2†	29747.3	27251.5	5379.1 µg/L	5379.1 ppb	5379.1 ppb	21:54:10
1	Si 251.611†	34761.7	33160.6	2520.9 µg/L	2520.9 ppb	2520.9 ppb	21:54:10
1	Sn 189.927†	1289.3	1241.1	523.40 µg/L	523.40 ppb	523.40 ppb	21:54:30
1	Ti 334.940†	235226.3	226319.5	500.36 µg/L	500.36 ppb	500.36 ppb	21:54:04
1	Tl 190.801†	380.7	389.0	511.20 µg/L	511.20 ppb	511.20 ppb	21:54:30
1	U 409.014†	6210.9	6057.5	502.28 µg/L	502.28 ppb	502.28 ppb	21:54:10
1	V 292.402†	53474.0	51533.7	508.50 µg/L	508.50 ppb	508.50 ppb	21:54:10
1	Zn 213.857†	23135.3	21742.1	506.54 µg/L	506.54 ppb	506.54 ppb	21:54:10
2	Sc RADIAL	58681.1	58681.1	104 %			21:53:06
2	Al 396.153Radial†	7270.0	6991.8	4853.5 µg/L	4853.5 ppb	4853.5 ppb	21:53:06
2	Ca 317.933Radial†	6085.0	5647.1	4823.6 µg/L	4823.6 ppb	4823.6 ppb	21:53:27
2	Fe 238.204 Radial†	670.2	628.7	4969.3 µg/L	4969.3 ppb	4969.3 ppb	21:53:27
2	K 766.490 Radial†	7805.0	7349.3	4800.0 µg/L	4800.0 ppb	4800.0 ppb	21:53:06
2	Mg 279.077 IEC†	586.2	551.6	4933.9 µg/L	4933.9 ppb	4933.9 ppb	21:53:27
2	Na 589.592 Radial†	33396.3	31680.3	9730.4 µg/L	9730.4 ppb	9730.4 ppb	21:53:06
2	Sr 421.552†	53644.8	51618.1	476.18 µg/L	476.18 ppb	476.18 ppb	21:53:06
2	Sc 361.383	2035611.6	2035611.6	103.69 %			21:54:38
2	Y 371.029	1402256.7	1402256.7	103.66 %			21:54:38
2	Ag 328.068†	68542.9	66503.5	496.25 µg/L	496.25 ppb	496.25 ppb	21:54:43
2	As 188.979†	295.1	285.0	509.86 µg/L	509.86 ppb	509.86 ppb	21:55:04
2	B 249.677†	12897.2	12053.8	489.51 µg/L	489.51 ppb	489.51 ppb	21:54:43
2	Ba 233.527†	21658.8	20904.6	502.76 µg/L	502.76 ppb	502.76 ppb	21:54:43
2	Be 313.107†	876936.1	848562.5	503.44 µg/L	503.44 ppb	503.44 ppb	21:54:38
2	Cd 226.502†	20999.3	20393.1	508.57 µg/L	508.57 ppb	508.57 ppb	21:54:43
2	Co 228.616†	11591.9	11177.2	505.60 µg/L	505.60 ppb	505.60 ppb	21:54:43
2	Cr 267.716†	26197.4	25314.8	508.77 µg/L	508.77 ppb	508.77 ppb	21:54:43
2	Cu 324.752†	81474.1	76028.9	496.97 µg/L	496.97 ppb	496.97 ppb	21:54:43
2	Mn 257.610†	169436.5	163658.6	512.96 µg/L	512.96 ppb	512.96 ppb	21:54:38
2	Mo 202.031†	5362.1	5176.5	507.10 µg/L	507.10 ppb	507.10 ppb	21:55:04
2	Ni 231.604†	10886.7	10186.7	507.26 µg/L	507.26 ppb	507.26 ppb	21:54:43
2	P 214.914†	1342.5	1279.3	2485.4 µg/L	2485.4 ppb	2485.4 ppb	21:55:04
2	Pb 220.353†	2248.7	2077.6	505.24 µg/L	505.24 ppb	505.24 ppb	21:55:04

2	S 181.975 Axial†	273.9	245.2	1016.8 µg/L	1016.8 ppb	21:55:04
2	Sb 206.836†	581.9	538.7	496.67 µg/L	496.67 ppb	21:55:04
2	Se 196.026†	397.7	364.2	519.29 µg/L	519.29 ppb	21:55:04
2	SiO2†	29634.0	27187.2	5366.4 µg/L	5366.4 ppb	21:54:43
2	Si 251.611†	34631.9	33087.9	2515.4 µg/L	2515.4 ppb	21:54:43
2	Sn 189.927†	1251.2	1206.2	508.72 µg/L	508.72 ppb	21:55:04
2	Ti 334.940†	234968.5	226425.8	500.59 µg/L	500.59 ppb	21:54:38
2	Tl 190.801†	379.2	388.0	510.01 µg/L	510.01 ppb	21:55:04
2	U 409.014†	6096.3	5956.3	493.89 µg/L	493.89 ppb	21:54:43
2	V 292.402†	53226.6	51375.9	506.85 µg/L	506.85 ppb	21:54:43
2	Zn 213.857†	23007.5	21653.8	504.47 µg/L	504.47 ppb	21:54:43
3	Sc RADIAL	57886.6	57886.6	102 %		21:53:32
3	Al 396.153Radial†	7257.6	7075.9	4913.9 µg/L	4913.9 ppb	21:53:32
3	Ca 317.933Radial†	6157.6	5798.4	4952.8 µg/L	4952.8 ppb	21:53:53
3	Fe 238.204 Radial†	675.4	642.6	5077.7 µg/L	5077.7 ppb	21:53:53
3	K 766.490 Radial†	7760.4	7409.0	4838.9 µg/L	4838.9 ppb	21:53:32
3	Mg 279.077 IEC†	588.1	561.1	5017.3 µg/L	5017.3 ppb	21:53:53
3	Na 589.592 Radial†	33284.0	32012.0	9832.3 µg/L	9832.3 ppb	21:53:32
3	Sr 421.552†	53489.2	52175.1	481.32 µg/L	481.32 ppb	21:53:32
3	Sc 361.383	2029490.9	2029490.9	103.38 %		21:55:11
3	Y 371.029	1398933.7	1398933.7	103.41 %		21:55:11
3	Ag 328.068†	63112.5	61450.2	458.38 µg/L	458.38 ppb	21:55:16
3	As 188.979†	245.3	237.8	425.38 µg/L	425.38 ppb	21:55:37
3	B 249.677†	11837.4	11066.1	449.07 µg/L	449.07 ppb	21:55:16
3	Ba 233.527†	19154.5	18545.2	446.00 µg/L	446.00 ppb	21:55:16
3	Be 313.107†	788293.6	765369.5	454.08 µg/L	454.08 ppb	21:55:11
3	Cd 226.502†	18488.3	18025.4	449.44 µg/L	449.44 ppb	21:55:16
3	Co 228.616†	10118.0	9785.2	442.59 µg/L	442.59 ppb	21:55:16
3	Cr 267.716†	22060.3	21389.3	429.88 µg/L	429.88 ppb	21:55:16
3	Cu 324.752†	71764.5	66873.8	437.22 µg/L	437.22 ppb	21:55:16
3	Mn 257.610†	153169.4	148416.2	465.24 µg/L	465.24 ppb	21:55:11
3	Mo 202.031†	4341.5	4204.8	411.96 µg/L	411.96 ppb	21:55:37
3	Ni 231.604†	9550.0	8925.4	444.46 µg/L	444.46 ppb	21:55:16
3	P 214.914†	1104.5	1053.0	2042.0 µg/L	2042.0 ppb	21:55:37
3	Pb 220.353†	1894.1	1741.3	423.37 µg/L	423.37 ppb	21:55:37
3	S 181.975 Axial†	230.7	204.2	846.98 µg/L	846.98 ppb	21:55:37
3	Sb 206.836†	492.3	453.7	417.96 µg/L	417.96 ppb	21:55:37
3	Se 196.026†	339.0	308.6	441.39 µg/L	441.39 ppb	21:55:37
3	SiO2†	26881.8	24611.1	4857.9 µg/L	4857.9 ppb	21:55:16
3	Si 251.611†	31176.8	29846.6	2269.0 µg/L	2269.0 ppb	21:55:16
3	Sn 189.927†	996.0	963.1	406.17 µg/L	406.17 ppb	21:55:37
3	Ti 334.940†	209447.8	202423.1	447.49 µg/L	447.49 ppb	21:55:11
3	Tl 190.801†	327.8	339.5	446.42 µg/L	446.42 ppb	21:55:37
3	U 409.014†	5220.1	5126.5	424.93 µg/L	424.93 ppb	21:55:16
3	V 292.402†	46012.1	44552.1	439.38 µg/L	439.38 ppb	21:55:16
3	Zn 213.857†	20191.8	18997.1	442.51 µg/L	442.51 ppb	21:55:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2034634.6	103.64 %	0.241			0.23%
Sc RADIAL	58287.3	103 %	0.7			0.68%
Y 371.029	1402231.0	103.66 %	0.243			0.23%
Ag 328.068†	64884.9	484.12 µg/L	22.300	484.12 ppb	22.300	4.61%
QC value within limits for Ag 328.068 Recovery = 96.82%						
Al 396.153Radial†	7006.9	4864.5 µg/L	44.88	4864.5 ppb	44.88	0.92%
QC value within limits for Al 396.153Radial Recovery = 97.29%						
As 188.979†	271.2	485.20 µg/L	52.069	485.20 ppb	52.069	10.73%
QC value within limits for As 188.979 Recovery = 97.04%						
B 249.677†	11730.6	476.26 µg/L	23.552	476.26 ppb	23.552	4.95%
QC value within limits for B 249.677 Recovery = 95.25%						
Ba 233.527†	20145.4	484.50 µg/L	33.355	484.50 ppb	33.355	6.88%
QC value within limits for Ba 233.527 Recovery = 96.90%						
Be 313.107†	820694.4	486.90 µg/L	28.425	486.90 ppb	28.425	5.84%
QC value within limits for Be 313.107 Recovery = 97.38%						
Ca 317.933Radial†	5729.8	4894.3 µg/L	65.45	4894.3 ppb	65.45	1.34%
QC value within limits for Ca 317.933Radial Recovery = 97.89%						
Cd 226.502†	19627.6	489.45 µg/L	34.658	489.45 ppb	34.658	7.08%
QC value within limits for Cd 226.502 Recovery = 97.89%						
Co 228.616†	10728.9	485.31 µg/L	37.015	485.31 ppb	37.015	7.63%

Cr	267.716†	24017.7	482.70 µg/L	45.746	482.70 ppb	45.746	9.48%
Cu	324.752†	73065.3	477.63 µg/L	35.005	477.63 ppb	35.005	7.33%
Fe	238.204 Radial†	636.1	5027.1 µg/L	54.54	5027.1 ppb	54.54	1.08%
K	766.490 Radial†	7354.6	4803.4 µg/L	33.93	4803.4 ppb	33.93	0.71%
Mg	279.077 IEC†	555.8	4970.9 µg/L	42.48	4970.9 ppb	42.48	0.85%
Mn	257.610†	158605.5	497.15 µg/L	27.629	497.15 ppb	27.629	5.56%
Mo	202.031†	4893.7	479.42 µg/L	58.734	479.42 ppb	58.734	12.25%
Na	589.592 Radial†	31789.5	9763.9 µg/L	59.18	9763.9 ppb	59.18	0.61%
Ni	231.604†	9770.1	486.52 µg/L	36.423	486.52 ppb	36.423	7.49%
P	214.914†	1210.9	2351.5 µg/L	268.87	2351.5 ppb	268.87	11.43%
Pb	220.353†	1979.3	481.31 µg/L	50.440	481.31 ppb	50.440	10.48%
S	181.975 Axial†	230.4	955.62 µg/L	94.337	955.62 ppb	94.337	9.87%
Sb	206.836†	513.9	473.75 µg/L	48.569	473.75 ppb	48.569	10.25%
Se	196.026†	349.1	498.25 µg/L	49.795	498.25 ppb	49.795	9.99%
SiO2†		26349.9	5201.1 µg/L	297.31	5201.1 ppb	297.31	5.72%
Si	251.611†	32031.7	2435.1 µg/L	143.89	2435.1 ppb	143.89	5.91%
Sn	189.927†	1136.8	479.43 µg/L	63.868	479.43 ppb	63.868	13.32%
Sr	421.552†	51733.8	477.25 µg/L	3.657	477.25 ppb	3.657	0.77%
Ti	334.940†	218389.5	482.81 µg/L	30.592	482.81 ppb	30.592	6.34%
Tl	190.801†	372.2	489.21 µg/L	37.063	489.21 ppb	37.063	7.58%
U	409.014†	5713.4	473.70 µg/L	42.447	473.70 ppb	42.447	8.96%
V	292.402†	49153.9	484.91 µg/L	39.441	484.91 ppb	39.441	8.13%
Zn	213.857†	20797.7	484.50 µg/L	36.387	484.50 ppb	36.387	7.51%

QC value within limits for Co 228.616 Recovery = 97.06%

QC value within limits for Cr 267.716 Recovery = 96.54%

QC value within limits for Cu 324.752 Recovery = 95.53%

QC value within limits for Fe 238.204 Radial Recovery = 100.54%

QC value within limits for K 766.490 Radial Recovery = 96.07%

QC value within limits for Mg 279.077 IEC Recovery = 99.42%

QC value within limits for Mn 257.610 Radial Recovery = 99.43%

QC value within limits for Mo 202.031 Recovery = 95.88%

QC value within limits for Na 589.592 Radial Recovery = 97.64%

QC value within limits for Ni 231.604 Recovery = 97.30%

QC value within limits for P 214.914 Recovery = 94.06%

QC value within limits for Pb 220.353 Recovery = 96.26%

QC value within limits for S 181.975 Axial Recovery = 95.56%

QC value within limits for Sb 206.836 Recovery = 94.75%

QC value within limits for Se 196.026 Recovery = 99.65%

QC value within limits for SiO2 Recovery = 97.26%

QC value within limits for Si 251.611 Recovery = 97.40%

QC value within limits for Sn 189.927 Recovery = 95.89%

QC value within limits for Sr 421.552 Recovery = 95.45%

QC value within limits for Ti 334.940 Recovery = 96.56%

QC value within limits for Tl 190.801 Recovery = 97.84%

QC value within limits for U 409.014 Recovery = 94.74%

QC value within limits for V 292.402 Recovery = 96.98%

QC value within limits for Zn 213.857 Recovery = 96.90%

All analyte(s) passed QC.

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

Autosampler Location: 8
 Date Collected: 2/19/2010 21:55:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56008.4	56008.4	99.1 %		21:56:19
1	Al 396.153Radial†	-22.0	-29.6	-20.580 µg/L	-20.580 ppb	21:56:19
1	Ca 317.933Radial†	199.9	-9.6	-8.2382 µg/L	-8.2382 ppb	21:56:40
1	Fe 238.204 Radial†	17.9	1.5	11.526 µg/L	11.526 ppb	21:56:40
1	K 766.490 Radial†	220.6	57.6	37.606 µg/L	37.606 ppb	21:56:19
1	Mg 279.077 IEC†	11.6	-1.1	-9.8037 µg/L	-9.8037 ppb	21:56:40
1	Na 589.592 Radial†	493.3	25.4	7.7861 µg/L	7.7861 ppb	21:56:19
1	Sr 421.552†	76.4	48.2	0.4449 µg/L	0.4449 ppb	21:56:19
1	Sc 361.383	2005725.5	2005725.5	102.17 %		21:57:41
1	Y 371.029	1388119.7	1388119.7	102.61 %		21:57:41
1	Ag 328.068†	-414.5	-4.1	-0.0292 µg/L	-0.0292 ppb	21:57:47
1	As 188.979†	-0.2	0.2	0.3889 µg/L	0.3889 ppb	21:58:07
1	B 249.677†	373.9	-18.2	-0.7465 µg/L	-0.7465 ppb	21:58:07
1	Ba 233.527†	-14.8	2.6	0.0623 µg/L	0.0623 ppb	21:58:07
1	Be 313.107†	-2754.8	159.4	0.0946 µg/L	0.0946 ppb	21:57:47
1	Cd 226.502†	-146.2	-1.4	-0.0360 µg/L	-0.0360 ppb	21:58:07
1	Co 228.616†	0.9	-1.0	-0.0474 µg/L	-0.0474 ppb	21:58:07
1	Cr 267.716†	-37.0	14.2	0.2854 µg/L	0.2854 ppb	21:57:47
1	Cu 324.752†	2573.5	-24.9	-0.1610 µg/L	-0.1610 ppb	21:57:47
1	Mn 257.610†	-199.9	60.3	0.1908 µg/L	0.1908 ppb	21:58:07
1	Mo 202.031†	0.2	5.5	0.5418 µg/L	0.5418 ppb	21:58:07
1	Ni 231.604†	310.8	-8.1	-0.4047 µg/L	-0.4047 ppb	21:58:07
1	P 214.914†	12.5	-3.1	-6.0711 µg/L	-6.0711 ppb	21:58:07
1	Pb 220.353†	85.5	-7.3	-1.7723 µg/L	-1.7723 ppb	21:58:07
1	S 181.975 Axial†	18.2	-1.2	-4.7784 µg/L	-4.7784 ppb	21:58:07
1	Sb 206.836†	26.7	3.7	3.3830 µg/L	3.3830 ppb	21:58:07
1	Se 196.026†	14.0	-5.6	-7.7903 µg/L	-7.7903 ppb	21:58:07
1	SiO2†	1480.0	57.0	11.258 µg/L	11.258 ppb	21:57:47
1	Si 251.611†	360.8	42.5	3.2304 µg/L	3.2304 ppb	21:58:07
1	Sn 189.927†	5.1	4.6	1.9521 µg/L	1.9521 ppb	21:58:07
1	Ti 334.940†	260.5	80.0	0.1775 µg/L	0.1775 ppb	21:57:47
1	Tl 190.801†	-26.0	-3.1	-4.0069 µg/L	-4.0069 ppb	21:58:07
1	U 409.014†	-86.5	-7.5	-0.6279 µg/L	-0.6279 ppb	21:57:47
1	V 292.402†	-37.7	7.9	0.0821 µg/L	0.0821 ppb	21:57:47
1	Zn 213.857†	552.4	6.2	0.1486 µg/L	0.1486 ppb	21:58:07
2	Sc RADIAL	57173.7	57173.7	101 %		21:56:45
2	Al 396.153Radial†	-31.7	-38.7	-26.934 µg/L	-26.934 ppb	21:56:45
2	Ca 317.933Radial†	191.8	-21.7	-18.545 µg/L	-18.545 ppb	21:57:05
2	Fe 238.204 Radial†	17.2	0.4	3.3000 µg/L	3.3000 ppb	21:57:05
2	K 766.490 Radial†	225.8	58.1	37.968 µg/L	37.968 ppb	21:56:45
2	Mg 279.077 IEC†	9.7	-3.2	-28.801 µg/L	-28.801 ppb	21:57:05
2	Na 589.592 Radial†	447.5	-30.0	-9.2124 µg/L	-9.2124 ppb	21:56:45
2	Sr 421.552†	50.5	21.1	0.1949 µg/L	0.1949 ppb	21:56:45
2	Sc 361.383	2026912.1	2026912.1	103.25 %		21:58:13
2	Y 371.029	1401779.3	1401779.3	103.62 %		21:58:13
2	Ag 328.068†	-380.0	33.5	0.2477 µg/L	0.2477 ppb	21:58:19
2	As 188.979†	-0.5	-0.1	-0.1267 µg/L	-0.1267 ppb	21:58:39
2	B 249.677†	375.7	-20.3	-0.8273 µg/L	-0.8273 ppb	21:58:39
2	Ba 233.527†	-18.4	-0.7	-0.0176 µg/L	-0.0176 ppb	21:58:39
2	Be 313.107†	-2695.7	244.9	0.1452 µg/L	0.1452 ppb	21:58:19
2	Cd 226.502†	-138.0	8.1	0.2002 µg/L	0.2002 ppb	21:58:39
2	Co 228.616†	2.7	0.7	0.0322 µg/L	0.0322 ppb	21:58:39
2	Cr 267.716†	-33.8	17.6	0.3538 µg/L	0.3538 ppb	21:58:19
2	Cu 324.752†	2615.0	-11.1	-0.0717 µg/L	-0.0717 ppb	21:58:19
2	Mn 257.610†	-217.0	45.8	0.1451 µg/L	0.1451 ppb	21:58:39
2	Mo 202.031†	-0.5	4.9	0.4797 µg/L	0.4797 ppb	21:58:39
2	Ni 231.604†	315.6	-6.7	-0.3341 µg/L	-0.3341 ppb	21:58:39
2	P 214.914†	6.6	-9.0	-17.706 µg/L	-17.706 ppb	21:58:39
2	Pb 220.353†	96.0	2.0	0.4801 µg/L	0.4801 ppb	21:58:39

2	S 181.975 Axial†	17.3	-2.2	-9.1795 µg/L	-9.1795 ppb	21:58:39
2	Sb 206.836†	20.9	-2.3	-2.0746 µg/L	-2.0746 ppb	21:58:39
2	Se 196.026†	11.9	-7.8	-10.865 µg/L	-10.865 ppb	21:58:39
2	SiO2†	1472.8	34.8	6.8766 µg/L	6.8766 ppb	21:58:19
2	Si 251.611†	396.0	72.9	5.5446 µg/L	5.5446 ppb	21:58:39
2	Sn 189.927†	5.5	5.0	2.0997 µg/L	2.0997 ppb	21:58:39
2	Ti 334.940†	289.3	105.2	0.2346 µg/L	0.2346 ppb	21:58:19
2	Tl 190.801†	-22.0	1.1	1.4215 µg/L	1.4215 ppb	21:58:39
2	U 409.014†	-13.9	63.6	5.2886 µg/L	5.2886 ppb	21:58:19
2	V 292.402†	-61.5	-14.8	-0.1337 µg/L	-0.1337 ppb	21:58:19
2	Zn 213.857†	550.0	-1.7	-0.0370 µg/L	-0.0370 ppb	21:58:39
3	Sc RADIAL	56372.6	56372.6	99.8 %		21:57:11
3	Al 396.153Radial†	-29.3	-36.7	-25.549 µg/L	-25.549 ppb	21:57:11
3	Ca 317.933Radial†	191.2	-19.7	-16.825 µg/L	-16.825 ppb	21:57:31
3	Fe 238.204 Radial†	16.1	-0.4	-3.3964 µg/L	-3.3964 ppb	21:57:31
3	K 766.490 Radial†	211.8	47.3	30.861 µg/L	30.861 ppb	21:57:11
3	Mg 279.077 IEC†	13.6	0.8	7.2890 µg/L	7.2890 ppb	21:57:31
3	Na 589.592 Radial†	501.0	29.9	9.1712 µg/L	9.1712 ppb	21:57:11
3	Sr 421.552†	52.9	24.2	0.2232 µg/L	0.2232 ppb	21:57:11
3	Sc 361.383	2000712.7	2000712.7	101.91 %		21:58:46
3	Y 371.029	1384703.1	1384703.1	102.36 %		21:58:46
3	Ag 328.068†	-421.1	-11.6	-0.0829 µg/L	-0.0829 ppb	21:58:51
3	As 188.979†	1.5	1.9	3.3848 µg/L	3.3848 ppb	21:59:12
3	B 249.677†	368.1	-22.9	-0.9332 µg/L	-0.9332 ppb	21:59:12
3	Ba 233.527†	-8.4	8.8	0.2121 µg/L	0.2121 ppb	21:59:12
3	Be 313.107†	-2743.0	164.2	0.0974 µg/L	0.0974 ppb	21:58:51
3	Cd 226.502†	-139.1	5.2	0.1301 µg/L	0.1301 ppb	21:59:12
3	Co 228.616†	11.1	9.0	0.4061 µg/L	0.4061 ppb	21:59:12
3	Cr 267.716†	-57.8	-6.4	-0.1274 µg/L	-0.1274 ppb	21:58:51
3	Cu 324.752†	2614.2	21.4	0.1392 µg/L	0.1392 ppb	21:58:51
3	Mn 257.610†	-214.3	45.7	0.1425 µg/L	0.1425 ppb	21:59:12
3	Mo 202.031†	-1.4	4.0	0.3871 µg/L	0.3871 ppb	21:59:12
3	Ni 231.604†	307.7	-10.4	-0.5197 µg/L	-0.5197 ppb	21:59:12
3	P 214.914†	8.3	-7.2	-14.189 µg/L	-14.189 ppb	21:59:12
3	Pb 220.353†	80.5	-12.0	-2.9118 µg/L	-2.9118 ppb	21:59:12
3	S 181.975 Axial†	16.3	-2.9	-12.028 µg/L	-12.028 ppb	21:59:12
3	Sb 206.836†	20.6	-2.3	-2.1004 µg/L	-2.1004 ppb	21:59:12
3	Se 196.026†	16.0	-3.6	-5.0557 µg/L	-5.0557 ppb	21:59:12
3	SiO2†	1465.4	46.3	9.1427 µg/L	9.1427 ppb	21:58:51
3	Si 251.611†	387.9	70.0	5.3210 µg/L	5.3210 ppb	21:59:12
3	Sn 189.927†	6.0	5.5	2.3403 µg/L	2.3403 ppb	21:59:12
3	Ti 334.940†	247.3	67.7	0.1488 µg/L	0.1488 ppb	21:58:51
3	Tl 190.801†	-19.0	3.7	4.8315 µg/L	4.8315 ppb	21:59:12
3	U 409.014†	-77.0	1.6	0.1327 µg/L	0.1327 ppb	21:58:51
3	V 292.402†	6.4	51.0	0.4995 µg/L	0.4995 ppb	21:58:51
3	Zn 213.857†	535.6	-8.9	-0.2068 µg/L	-0.2068 ppb	21:59:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2011116.8	102.44 %	0.708			0.69%
Sc RADIAL	56518.2	100 %	1.1			1.05%
Y 371.029	1391534.0	102.87 %	0.668			0.65%
Ag 328.068†	5.9	0.0452 µg/L	0.17741	0.0452 ppb	0.17741	392.45%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-35.0	-24.355 µg/L	3.3414	-24.355 ppb	3.3414	13.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.7	1.2156 µg/L	1.89611	1.2156 ppb	1.89611	155.98%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-20.5	-0.8357 µg/L	0.09366	-0.8357 ppb	0.09366	11.21%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.6	0.0856 µg/L	0.11658	0.0856 ppb	0.11658	136.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	189.5	0.1124 µg/L	0.02848	0.1124 ppb	0.02848	25.34%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.0	-14.536 µg/L	5.5217	-14.536 ppb	5.5217	37.99%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.0	0.0981 µg/L	0.12132	0.0981 ppb	0.12132	123.63%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.9	0.1303 µg/L	0.24215	0.1303 ppb	0.24215	185.83%

QC value within limits	for Co 228.616	Recovery = Not calculated		
Cr 267.716†	8.5	0.1706 µg/L	0.26030	0.1706 ppb
QC value within limits	for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-4.9	-0.0312 µg/L	0.15414	-0.0312 ppb
QC value within limits	for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.5	3.8100 µg/L	7.47451	3.8100 ppb
QC value within limits	for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	54.3	35.478 µg/L	4.0031	35.478 ppb
QC value within limits	for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.2	-10.439 µg/L	18.0534	-10.439 ppb
QC value within limits	for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	50.6	0.1594 µg/L	0.02719	0.1594 ppb
QC value within limits	for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	4.8	0.4696 µg/L	0.07785	0.4696 ppb
QC value within limits	for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	8.4	2.5817 µg/L	10.23739	2.5817 ppb
QC value within limits	for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-8.4	-0.4195 µg/L	0.09366	-0.4195 ppb
QC value within limits	for Ni 231.604	Recovery = Not calculated		
P 214.914†	-6.4	-12.655 µg/L	5.9671	-12.655 ppb
QC value within limits	for P 214.914	Recovery = Not calculated		
Pb 220.353†	-5.8	-1.4013 µg/L	1.72611	-1.4013 ppb
QC value within limits	for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.1	-8.6621 µg/L	3.65257	-8.6621 ppb
QC value within limits	for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-0.3	-0.2640 µg/L	3.15844	-0.2640 ppb
QC value within limits	for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-5.6	-7.9035 µg/L	2.90606	-7.9035 ppb
QC value within limits	for Se 196.026	Recovery = Not calculated		
SiO2†	46.1	9.0923 µg/L	2.19093	9.0923 ppb
QC value within limits	for SiO2	Recovery = Not calculated		
Si 251.611†	61.8	4.6987 µg/L	1.27646	4.6987 ppb
QC value within limits	for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.1	2.1307 µg/L	0.19595	2.1307 ppb
QC value within limits	for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	31.2	0.2877 µg/L	0.13693	0.2877 ppb
QC value within limits	for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	84.3	0.1870 µg/L	0.04366	0.1870 ppb
QC value within limits	for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.6	0.7487 µg/L	4.45745	0.7487 ppb
QC value within limits	for Tl 190.801	Recovery = Not calculated		
U 409.014†	19.2	1.5978 µg/L	3.21889	1.5978 ppb
QC value within limits	for U 409.014	Recovery = Not calculated		
V 292.402†	14.7	0.1493 µg/L	0.32188	0.1493 ppb
QC value within limits	for V 292.402	Recovery = Not calculated		
Zn 213.857†	-1.5	-0.0317 µg/L	0.17777	-0.0317 ppb
QC value within limits	for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 22:28:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58682.4	58682.4	104 %		22:29:23
1	Al 396.153Radial†	7235.9	6958.9	4830.4 µg/L	4830.4 ppb	22:29:23
1	Ca 317.933Radial†	6077.6	5639.8	4817.4 µg/L	4817.4 ppb	22:29:43
1	Fe 238.204 Radial†	662.2	621.0	4908.0 µg/L	4908.0 ppb	22:29:43
1	K 766.490 Radial†	7780.1	7325.2	4784.2 µg/L	4784.2 ppb	22:29:23
1	Mg 279.077 IEC†	583.1	548.5	4906.8 µg/L	4906.8 ppb	22:29:43
1	Na 589.592 Radial†	33228.8	31518.4	9680.7 µg/L	9680.7 ppb	22:29:23
1	Sr 421.552†	53197.3	51186.2	472.20 µg/L	472.20 ppb	22:29:23
1	Sc 361.383	2035190.2	2035190.2	103.67 %		22:30:47
1	Y 371.029	1401651.0	1401651.0	103.61 %		22:30:47
1	Ag 328.068†	68081.1	66071.8	493.02 µg/L	493.02 ppb	22:30:52
1	As 188.979†	298.1	288.0	515.28 µg/L	515.28 ppb	22:31:13
1	B 249.677†	12768.6	11932.3	484.58 µg/L	484.58 ppb	22:30:52
1	Ba 233.527†	21458.8	20716.0	498.23 µg/L	498.23 ppb	22:30:52
1	Be 313.107†	860925.6	833294.1	494.38 µg/L	494.38 ppb	22:30:47
1	Cd 226.502†	20758.8	20165.3	502.89 µg/L	502.89 ppb	22:30:52
1	Co 228.616†	11490.7	11081.9	501.31 µg/L	501.31 ppb	22:30:52
1	Cr 267.716†	25945.3	25076.9	503.99 µg/L	503.99 ppb	22:30:52
1	Cu 324.752†	81109.4	75693.4	494.77 µg/L	494.77 ppb	22:30:52
1	Mn 257.610†	166674.7	161028.4	504.72 µg/L	504.72 ppb	22:30:47
1	Mo 202.031†	5452.5	5264.8	515.74 µg/L	515.74 ppb	22:31:13
1	Ni 231.604†	10771.6	10077.8	501.84 µg/L	501.84 ppb	22:30:52
1	P 214.914†	1361.8	1298.2	2523.1 µg/L	2523.1 ppb	22:31:13
1	Pb 220.353†	2268.4	2097.1	509.99 µg/L	509.99 ppb	22:31:13
1	S 181.975 Axial†	268.9	240.4	997.00 µg/L	997.00 ppb	22:31:13
1	Sb 206.836†	597.4	553.7	510.63 µg/L	510.63 ppb	22:31:13
1	Se 196.026†	391.9	358.7	511.47 µg/L	511.47 ppb	22:31:13
1	SiO2†	29507.1	27070.6	5343.4 µg/L	5343.4 ppb	22:30:52
1	Si 251.611†	34360.3	32832.9	2496.0 µg/L	2496.0 ppb	22:30:52
1	Sn 189.927†	1270.7	1225.3	516.77 µg/L	516.77 ppb	22:31:13
1	Ti 334.940†	231793.7	223410.4	493.92 µg/L	493.92 ppb	22:30:47
1	Tl 190.801†	377.5	386.5	507.97 µg/L	507.97 ppb	22:31:13
1	U 409.014†	6219.6	6076.5	503.89 µg/L	503.89 ppb	22:30:52
1	V 292.402†	52782.3	50957.9	502.84 µg/L	502.84 ppb	22:30:52
1	Zn 213.857†	22807.5	21465.4	500.08 µg/L	500.08 ppb	22:30:52
2	Sc RADIAL	58445.8	58445.8	103 %		22:29:48
2	Al 396.153Radial†	7285.7	7035.2	4883.8 µg/L	4883.8 ppb	22:29:48
2	Ca 317.933Radial†	6104.1	5689.2	4859.6 µg/L	4859.6 ppb	22:30:09
2	Fe 238.204 Radial†	671.9	632.9	5002.2 µg/L	5002.2 ppb	22:30:09
2	K 766.490 Radial†	7782.7	7358.0	4805.7 µg/L	4805.7 ppb	22:29:48
2	Mg 279.077 IEC†	586.2	553.8	4953.4 µg/L	4953.4 ppb	22:30:09
2	Na 589.592 Radial†	33236.1	31654.9	9722.6 µg/L	9722.6 ppb	22:29:48
2	Sr 421.552†	53434.9	51623.1	476.23 µg/L	476.23 ppb	22:29:48
2	Sc 361.383	2040505.4	2040505.4	103.94 %		22:31:20
2	Y 371.029	1405592.5	1405592.5	103.91 %		22:31:20
2	Ag 328.068†	67790.7	65621.3	489.67 µg/L	489.67 ppb	22:31:25
2	As 188.979†	293.5	282.9	506.01 µg/L	506.01 ppb	22:31:46
2	B 249.677†	12709.5	11843.4	480.90 µg/L	480.90 ppb	22:31:25
2	Ba 233.527†	21391.2	20597.0	495.37 µg/L	495.37 ppb	22:31:25
2	Be 313.107†	866523.4	836516.5	496.29 µg/L	496.29 ppb	22:31:20
2	Cd 226.502†	20685.6	20042.8	499.82 µg/L	499.82 ppb	22:31:25
2	Co 228.616†	11439.3	11003.5	497.74 µg/L	497.74 ppb	22:31:25
2	Cr 267.716†	25899.7	24967.8	501.80 µg/L	501.80 ppb	22:31:25
2	Cu 324.752†	80721.9	75116.8	491.02 µg/L	491.02 ppb	22:31:25
2	Mn 257.610†	167447.7	161353.3	505.75 µg/L	505.75 ppb	22:31:20
2	Mo 202.031†	5299.9	5104.2	500.03 µg/L	500.03 ppb	22:31:46
2	Ni 231.604†	10731.8	10012.5	498.59 µg/L	498.59 ppb	22:31:25
2	P 214.914†	1332.5	1266.7	2460.8 µg/L	2460.8 ppb	22:31:46
2	Pb 220.353†	2217.0	2041.9	496.54 µg/L	496.54 ppb	22:31:46

2	S 181.975 Axial†	267.7	238.6	989.64 µg/L	989.64 ppb	22:31:46
2	Sb 206.836†	589.1	544.2	501.70 µg/L	501.70 ppb	22:31:46
2	Se 196.026†	397.6	363.2	517.93 µg/L	517.93 ppb	22:31:46
2	SiO2†	29480.5	26970.9	5323.7 µg/L	5323.7 ppb	22:31:25
2	Si 251.611†	34410.2	32794.6	2493.1 µg/L	2493.1 ppb	22:31:25
2	Sn 189.927†	1238.8	1191.5	502.49 µg/L	502.49 ppb	22:31:46
2	Ti 334.940†	233343.5	224319.0	495.93 µg/L	495.93 ppb	22:31:20
2	Tl 190.801†	367.3	375.8	494.02 µg/L	494.02 ppb	22:31:46
2	U 409.014†	6220.8	6061.9	502.66 µg/L	502.66 ppb	22:31:25
2	V 292.402†	52607.1	50656.7	499.78 µg/L	499.78 ppb	22:31:25
2	Zn 213.857†	22751.7	21354.5	497.50 µg/L	497.50 ppb	22:31:25
3	Sc RADIAL	58365.6	58365.6	103 %		22:30:14
3	Al 396.153Radial†	7315.7	7074.0	4912.7 µg/L	4912.7 ppb	22:30:14
3	Ca 317.933Radial†	6114.6	5707.4	4875.1 µg/L	4875.1 ppb	22:30:35
3	Fe 238.204 Radial†	676.6	638.4	5044.0 µg/L	5044.0 ppb	22:30:35
3	K 766.490 Radial†	7852.7	7436.1	4856.6 µg/L	4856.6 ppb	22:30:14
3	Mg 279.077 IEC†	588.1	556.4	4975.0 µg/L	4975.0 ppb	22:30:35
3	Na 589.592 Radial†	33380.9	31839.2	9779.2 µg/L	9779.2 ppb	22:30:14
3	Sr 421.552†	53545.1	51800.8	477.87 µg/L	477.87 ppb	22:30:14
3	Sc 361.383	2043729.2	2043729.2	104.11 %		22:31:53
3	Y 371.029	1408593.8	1408593.8	104.13 %		22:31:53
3	Ag 328.068†	63043.1	60958.1	454.71 µg/L	454.71 ppb	22:31:59
3	As 188.979†	236.2	227.4	406.78 µg/L	406.78 ppb	22:32:19
3	B 249.677†	11737.4	10890.3	441.92 µg/L	441.92 ppb	22:31:59
3	Ba 233.527†	19144.9	18406.8	442.67 µg/L	442.67 ppb	22:31:59
3	Be 313.107†	787482.0	759277.6	450.47 µg/L	450.47 ppb	22:31:53
3	Cd 226.502†	18429.0	17843.8	444.91 µg/L	444.91 ppb	22:31:59
3	Co 228.616†	10101.0	9700.6	438.75 µg/L	438.75 ppb	22:31:59
3	Cr 267.716†	22032.4	21213.7	426.35 µg/L	426.35 ppb	22:31:59
3	Cu 324.752†	71814.1	66437.9	434.37 µg/L	434.37 ppb	22:31:59
3	Mn 257.610†	153006.9	147227.9	461.52 µg/L	461.52 ppb	22:31:53
3	Mo 202.031†	4291.5	4127.6	404.39 µg/L	404.39 ppb	22:32:19
3	Ni 231.604†	9506.0	8818.7	439.15 µg/L	439.15 ppb	22:31:59
3	P 214.914†	1088.9	1030.6	1997.8 µg/L	1997.8 ppb	22:32:19
3	Pb 220.353†	1879.9	1714.8	416.92 µg/L	416.92 ppb	22:32:19
3	S 181.975 Axial†	233.9	205.7	853.14 µg/L	853.14 ppb	22:32:19
3	Sb 206.836†	487.4	445.7	410.48 µg/L	410.48 ppb	22:32:19
3	Se 196.026†	334.7	302.2	432.42 µg/L	432.42 ppb	22:32:19
3	SiO2†	26915.4	24462.2	4828.5 µg/L	4828.5 ppb	22:31:59
3	Si 251.611†	31276.8	29732.5	2260.3 µg/L	2260.3 ppb	22:31:59
3	Sn 189.927†	992.2	952.7	401.80 µg/L	401.80 ppb	22:32:19
3	Ti 334.940†	210120.3	201657.6	445.80 µg/L	445.80 ppb	22:31:53
3	Tl 190.801†	321.4	331.1	435.55 µg/L	435.55 ppb	22:32:19
3	U 409.014†	5208.6	5080.2	421.09 µg/L	421.09 ppb	22:31:59
3	V 292.402†	46007.3	44237.5	436.24 µg/L	436.24 ppb	22:31:59
3	Zn 213.857†	20128.9	18800.6	437.93 µg/L	437.93 ppb	22:31:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2039808.3	103.91 %	0.220			0.21%
Sc RADIAL	58497.9	104 %	0.3			0.28%
Y 371.029	1405279.1	103.88 %	0.257			0.25%
Ag 328.068†	64217.1	479.13 µg/L	21.214	479.13 ppb	21.214	4.43%
QC value within limits for Ag 328.068 Recovery = 95.83%						
Al 396.153Radial†	7022.7	4875.6 µg/L	41.78	4875.6 ppb	41.78	0.86%
QC value within limits for Al 396.153Radial Recovery = 97.51%						
As 188.979†	266.1	476.03 µg/L	60.144	476.03 ppb	60.144	12.63%
QC value within limits for As 188.979 Recovery = 95.21%						
B 249.677†	11555.3	469.13 µg/L	23.641	469.13 ppb	23.641	5.04%
QC value within limits for B 249.677 Recovery = 93.83%						
Ba 233.527†	19906.6	478.76 µg/L	31.281	478.76 ppb	31.281	6.53%
QC value within limits for Ba 233.527 Recovery = 95.75%						
Be 313.107†	809696.0	480.38 µg/L	25.921	480.38 ppb	25.921	5.40%
QC value within limits for Be 313.107 Recovery = 96.08%						
Ca 317.933Radial†	5678.8	4850.7 µg/L	29.85	4850.7 ppb	29.85	0.62%
QC value within limits for Ca 317.933Radial Recovery = 97.01%						
Cd 226.502†	19350.6	482.54 µg/L	32.625	482.54 ppb	32.625	6.76%
QC value within limits for Cd 226.502 Recovery = 96.51%						
Co 228.616†	10595.3	479.27 µg/L	35.131	479.27 ppb	35.131	7.33%

Cr	267.716†	23752.8	477.38 µg/L	44.202	477.38 ppb	44.202	9.26%
Cu	324.752†	72416.0	473.39 µg/L	33.839	473.39 ppb	33.839	7.15%
Fe	238.204 Radial†	630.7	4984.7 µg/L	69.64	4984.7 ppb	69.64	1.40%
K	766.490 Radial†	7373.1	4815.5 µg/L	37.19	4815.5 ppb	37.19	0.77%
Mg	279.077 IEC†	552.9	4945.1 µg/L	34.85	4945.1 ppb	34.85	0.70%
Mn	257.610†	156536.5	490.66 µg/L	25.244	490.66 ppb	25.244	5.14%
Mo	202.031†	4832.2	473.39 µg/L	60.270	473.39 ppb	60.270	12.73%
Na	589.592 Radial†	31670.8	9727.5 µg/L	49.45	9727.5 ppb	49.45	0.51%
Ni	231.604†	9636.3	479.86 µg/L	35.292	479.86 ppb	35.292	7.35%
P	214.914†	1198.5	2327.3 µg/L	286.98	2327.3 ppb	286.98	12.33%
Pb	220.353†	1951.3	474.48 µg/L	50.304	474.48 ppb	50.304	10.60%
S	181.975 Axial†	228.3	946.59 µg/L	81.017	946.59 ppb	81.017	8.56%
Sb	206.836†	514.5	474.27 µg/L	55.421	474.27 ppb	55.421	11.69%
Se	196.026†	341.4	487.28 µg/L	47.618	487.28 ppb	47.618	9.77%
SiO2†		26167.9	5165.2 µg/L	291.74	5165.2 ppb	291.74	5.65%
Si	251.611†	31786.7	2416.5 µg/L	135.25	2416.5 ppb	135.25	5.60%
Sn	189.927†	1123.2	473.68 µg/L	62.666	473.68 ppb	62.666	13.23%
Sr	421.552†	51536.7	475.43 µg/L	2.918	475.43 ppb	2.918	0.61%
Ti	334.940†	216462.3	478.55 µg/L	28.383	478.55 ppb	28.383	5.93%
Tl	190.801†	364.5	479.18 µg/L	38.424	479.18 ppb	38.424	8.02%
U	409.014†	5739.5	475.88 µg/L	47.453	475.88 ppb	47.453	9.97%
V	292.402†	48617.4	479.62 µg/L	37.602	479.62 ppb	37.602	7.84%
Zn	213.857†	20540.2	478.50 µg/L	35.162	478.50 ppb	35.162	7.35%

QC value within limits for Co 228.616 Recovery = 95.85%
 QC value within limits for Cr 267.716 Recovery = 95.48%
 QC value within limits for Cu 324.752 Recovery = 94.68%
 QC value within limits for Fe 238.204 Radial Recovery = 99.69%
 QC value within limits for K 766.490 Radial Recovery = 96.31%
 QC value within limits for Mg 279.077 IEC Recovery = 98.90%
 QC value within limits for Mn 257.610 Recovery = 98.13%
 QC value within limits for Mo 202.031 Recovery = 94.68%
 QC value within limits for Na 589.592 Radial Recovery = 97.27%
 QC value within limits for Ni 231.604 Recovery = 95.97%
 QC value within limits for P 214.914 Recovery = 93.09%
 QC value within limits for Pb 220.353 Recovery = 94.90%
 QC value within limits for S 181.975 Axial Recovery = 94.66%
 QC value within limits for Sb 206.836 Recovery = 94.85%
 QC value within limits for Se 196.026 Recovery = 97.46%
 QC value within limits for SiO2 Recovery = 96.59%
 QC value within limits for Si 251.611 Recovery = 96.66%
 QC value within limits for Sn 189.927 Recovery = 94.74%
 QC value within limits for Sr 421.552 Recovery = 95.09%
 QC value within limits for Ti 334.940 Recovery = 95.71%
 QC value within limits for Tl 190.801 Recovery = 95.84%
 QC value within limits for U 409.014 Recovery = 95.18%
 QC value within limits for V 292.402 Recovery = 95.92%
 QC value within limits for Zn 213.857 Recovery = 95.70%

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 22:32:28

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	57585.6	57585.6	102 %			22:33:01
1	Al 396.153Radial†	5.3	-2.2	-1.5487 µg/L		-1.5487 ppb	22:33:01
1	Ca 317.933Radial†	199.5	-15.5	-13.282 µg/L		-13.282 ppb	22:33:21
1	Fe 238.204 Radial†	20.4	3.4	26.948 µg/L		26.948 ppb	22:33:21
1	K 766.490 Radial†	158.3	-9.7	-6.3145 µg/L		-6.3145 ppb	22:33:01
1	Mg 279.077 IEC†	8.9	-4.1	-36.991 µg/L		-36.991 ppb	22:33:21
1	Na 589.592 Radial†	494.2	12.6	3.8754 µg/L		3.8754 ppb	22:33:01
1	Sr 421.552†	59.2	29.3	0.2704 µg/L		0.2704 ppb	22:33:01
1	Sc 361.383	2051484.5	2051484.5	104.50 %			22:34:23
1	Y 371.029	1418561.0	1418561.0	104.86 %			22:34:23
1	Ag 328.068†	-445.9	-25.1	-0.1823 µg/L		-0.1823 ppb	22:34:29
1	As 188.979†	-1.0	-0.5	-0.8315 µg/L		-0.8315 ppb	22:34:50
1	B 249.677†	342.4	-56.5	-2.3170 µg/L		-2.3170 ppb	22:34:50
1	Ba 233.527†	-1.6	15.5	0.3732 µg/L		0.3732 ppb	22:34:50
1	Be 313.107†	-2684.5	286.8	0.1700 µg/L		0.1700 ppb	22:34:29
1	Cd 226.502†	-134.7	12.8	0.3141 µg/L		0.3141 ppb	22:34:50
1	Co 228.616†	5.1	3.0	0.1333 µg/L		0.1333 ppb	22:34:50
1	Cr 267.716†	-65.0	-11.8	-0.2372 µg/L		-0.2372 ppb	22:34:29
1	Cu 324.752†	2592.8	-62.6	-0.4051 µg/L		-0.4051 ppb	22:34:29
1	Mn 257.610†	-124.4	137.0	0.4341 µg/L		0.4341 ppb	22:34:50
1	Mo 202.031†	5.4	10.5	1.0332 µg/L		1.0332 ppb	22:34:50
1	Ni 231.604†	295.9	-29.2	-1.4535 µg/L		-1.4535 ppb	22:34:50
1	P 214.914†	14.2	-1.7	-3.4035 µg/L		-3.4035 ppb	22:34:50
1	Pb 220.353†	72.1	-21.9	-5.3315 µg/L		-5.3315 ppb	22:34:50
1	S 181.975 Axial†	15.1	-4.5	-18.600 µg/L		-18.600 ppb	22:34:50
1	Sb 206.836†	20.6	-2.8	-2.5618 µg/L		-2.5618 ppb	22:34:50
1	Se 196.026†	11.2	-8.6	-11.983 µg/L		-11.983 ppb	22:34:50
1	SiO2†	1533.6	76.0	14.992 µg/L		14.992 ppb	22:34:29
1	Si 251.611†	415.1	86.5	6.5795 µg/L		6.5795 ppb	22:34:50
1	Sn 189.927†	6.3	5.6	2.3743 µg/L		2.3743 ppb	22:34:50
1	Ti 334.940†	459.3	264.5	0.5877 µg/L		0.5877 ppb	22:34:29
1	Tl 190.801†	-16.4	6.7	8.6669 µg/L		8.6669 ppb	22:34:50
1	U 409.014†	-23.7	54.4	4.5141 µg/L		4.5141 ppb	22:34:29
1	V 292.402†	-14.3	31.1	0.3185 µg/L		0.3185 ppb	22:34:29
1	Zn 213.857†	548.1	-9.9	-0.2254 µg/L		-0.2254 ppb	22:34:50
2	Sc RADIAL	57789.7	57789.7	102 %			22:33:27
2	Al 396.153Radial†	21.4	13.5	9.3709 µg/L		9.3709 ppb	22:33:27
2	Ca 317.933Radial†	195.9	-19.7	-16.863 µg/L		-16.863 ppb	22:33:47
2	Fe 238.204 Radial†	20.7	3.6	28.742 µg/L		28.742 ppb	22:33:47
2	K 766.490 Radial†	226.2	56.1	36.646 µg/L		36.646 ppb	22:33:27
2	Mg 279.077 IEC†	16.1	2.9	26.324 µg/L		26.324 ppb	22:33:47
2	Na 589.592 Radial†	490.2	7.0	2.1478 µg/L		2.1478 ppb	22:33:27
2	Sr 421.552†	22.7	-6.6	-0.0609 µg/L		-0.0609 ppb	22:33:27
2	Sc 361.383	2059030.4	2059030.4	104.89 %			22:34:56
2	Y 371.029	1423097.5	1423097.5	105.20 %			22:34:56
2	Ag 328.068†	-410.0	10.7	0.0820 µg/L		0.0820 ppb	22:35:01
2	As 188.979†	0.0	0.5	0.8834 µg/L		0.8834 ppb	22:35:22
2	B 249.677†	341.5	-58.6	-2.4029 µg/L		-2.4029 ppb	22:35:22
2	Ba 233.527†	-2.3	14.9	0.3573 µg/L		0.3573 ppb	22:35:22
2	Be 313.107†	-2672.8	307.4	0.1821 µg/L		0.1821 ppb	22:35:01
2	Cd 226.502†	-134.9	13.0	0.3213 µg/L		0.3213 ppb	22:35:22
2	Co 228.616†	2.8	0.8	0.0344 µg/L		0.0344 ppb	22:35:22
2	Cr 267.716†	-81.2	-27.0	-0.5422 µg/L		-0.5422 ppb	22:35:01
2	Cu 324.752†	2590.0	-74.3	-0.4813 µg/L		-0.4813 ppb	22:35:01
2	Mn 257.610†	-125.4	136.4	0.4300 µg/L		0.4300 ppb	22:35:22
2	Mo 202.031†	10.9	15.7	1.5422 µg/L		1.5422 ppb	22:35:22
2	Ni 231.604†	311.0	-15.8	-0.7893 µg/L		-0.7893 ppb	22:35:22
2	P 214.914†	11.5	-4.4	-8.6739 µg/L		-8.6739 ppb	22:35:22
2	Pb 220.353†	84.7	-10.2	-2.4785 µg/L		-2.4785 ppb	22:35:22

2	S 181.975 Axial†	13.6	-5.9	-24.609 µg/L	-24.609 ppb	22:35:22
2	Sb 206.836†	20.6	-2.9	-2.6273 µg/L	-2.6273 ppb	22:35:22
2	Se 196.026†	13.7	-6.2	-8.6858 µg/L	-8.6858 ppb	22:35:22
2	SiO2†	1497.0	35.7	7.0424 µg/L	7.0424 ppb	22:35:01
2	Si 251.611†	415.0	85.0	6.4614 µg/L	6.4614 ppb	22:35:22
2	Sn 189.927†	-0.4	-0.8	-0.3270 µg/L	-0.3270 ppb	22:35:22
2	Ti 334.940†	561.8	360.6	0.7953 µg/L	0.7953 ppb	22:35:01
2	Tl 190.801†	-23.2	0.3	0.4055 µg/L	0.4055 ppb	22:35:22
2	U 409.014†	-36.1	42.7	3.5443 µg/L	3.5443 ppb	22:35:01
2	V 292.402†	-37.1	9.3	0.1087 µg/L	0.1087 ppb	22:35:01
2	Zn 213.857†	547.0	-12.9	-0.3007 µg/L	-0.3007 ppb	22:35:22
3	Sc RADIAL	58397.7	58397.7	103 %		22:33:53
3	Al 396.153Radial†	22.9	14.8	10.265 µg/L	10.265 ppb	22:33:53
3	Ca 317.933Radial†	200.0	-17.8	-15.186 µg/L	-15.186 ppb	22:34:13
3	Fe 238.204 Radial†	19.3	2.1	16.862 µg/L	16.862 ppb	22:34:13
3	K 766.490 Radial†	136.3	-33.1	-21.647 µg/L	-21.647 ppb	22:33:53
3	Mg 279.077 IEC†	14.6	1.3	11.823 µg/L	11.823 ppb	22:34:13
3	Na 589.592 Radial†	421.2	-64.8	-19.889 µg/L	-19.889 ppb	22:33:53
3	Sr 421.552†	64.0	33.2	0.3059 µg/L	0.3059 ppb	22:33:53
3	Sc 361.383	2079286.4	2079286.4	105.92 %		22:35:28
3	Y 371.029	1436370.2	1436370.2	106.18 %		22:35:28
3	Ag 328.068†	-401.1	23.0	0.1715 µg/L	0.1715 ppb	22:35:33
3	As 188.979†	-1.6	-1.1	-1.9606 µg/L	-1.9606 ppb	22:35:54
3	B 249.677†	336.5	-66.4	-2.7154 µg/L	-2.7154 ppb	22:35:54
3	Ba 233.527†	1.7	18.7	0.4487 µg/L	0.4487 ppb	22:35:54
3	Be 313.107†	-2775.1	235.6	0.1396 µg/L	0.1396 ppb	22:35:33
3	Cd 226.502†	-139.5	10.0	0.2455 µg/L	0.2455 ppb	22:35:54
3	Co 228.616†	10.9	8.4	0.3796 µg/L	0.3796 ppb	22:35:54
3	Cr 267.716†	-70.2	-15.9	-0.3195 µg/L	-0.3195 ppb	22:35:33
3	Cu 324.752†	2569.1	-118.2	-0.7690 µg/L	-0.7690 ppb	22:35:33
3	Mn 257.610†	-151.1	113.3	0.3567 µg/L	0.3567 ppb	22:35:54
3	Mo 202.031†	3.0	8.2	0.8026 µg/L	0.8026 ppb	22:35:54
3	Ni 231.604†	308.0	-21.5	-1.0742 µg/L	-1.0742 ppb	22:35:54
3	P 214.914†	13.2	-2.9	-5.5667 µg/L	-5.5667 ppb	22:35:54
3	Pb 220.353†	82.0	-13.5	-3.2847 µg/L	-3.2847 ppb	22:35:54
3	S 181.975 Axial†	14.9	-4.9	-20.286 µg/L	-20.286 ppb	22:35:54
3	Sb 206.836†	22.1	-1.6	-1.4644 µg/L	-1.4644 ppb	22:35:54
3	Se 196.026†	20.9	0.5	0.6738 µg/L	0.6738 ppb	22:35:54
3	SiO2†	1489.3	14.6	2.8738 µg/L	2.8738 ppb	22:35:33
3	Si 251.611†	397.3	64.5	4.9030 µg/L	4.9030 ppb	22:35:54
3	Sn 189.927†	6.3	5.5	2.3325 µg/L	2.3325 ppb	22:35:54
3	Ti 334.940†	437.9	238.4	0.5262 µg/L	0.5262 ppb	22:35:33
3	Tl 190.801†	-21.4	2.1	2.7949 µg/L	2.7949 ppb	22:35:54
3	U 409.014†	-23.5	54.9	4.5578 µg/L	4.5578 ppb	22:35:33
3	V 292.402†	-40.4	6.6	0.0767 µg/L	0.0767 ppb	22:35:33
3	Zn 213.857†	544.4	-20.4	-0.4742 µg/L	-0.4742 ppb	22:35:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2063267.1	105.10 %	0.732			0.70%
Sc RADIAL	57924.4	103 %	0.7			0.73%
Y 371.029	1426009.6	105.42 %	0.684			0.65%
Ag 328.068†	2.9	0.0237 µg/L	0.18398	0.0237 ppb	0.18398	775.03%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.7	6.0290 µg/L	6.57768	6.0290 ppb	6.57768	109.10%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.4	-0.6362 µg/L	1.43200	-0.6362 ppb	1.43200	225.07%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-60.5	-2.4784 µg/L	0.20968	-2.4784 ppb	0.20968	8.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	16.4	0.3931 µg/L	0.04879	0.3931 ppb	0.04879	12.41%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	276.6	0.1639 µg/L	0.02189	0.1639 ppb	0.02189	13.35%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.7	-15.110 µg/L	1.7919	-15.110 ppb	1.7919	11.86%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	11.9	0.2936 µg/L	0.04185	0.2936 ppb	0.04185	14.25%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.0	0.1824 µg/L	0.17774	0.1824 ppb	0.17774	97.43%

Cr	267.716†	-18.2	-0.3663 µg/L	0.15776	-0.3663 ppb	0.15776	43.07%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-85.1	-0.5518 µg/L	0.19193	-0.5518 ppb	0.19193	34.78%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	3.1	24.184 µg/L	6.4042	24.184 ppb	6.4042	26.48%
	QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	4.4	2.8948 µg/L	30.21809	2.8948 ppb	30.21809	>999.9%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	0.0	0.3851 µg/L	33.17092	0.3851 ppb	33.17092	>999.9%
	QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	128.9	0.4069 µg/L	0.04360	0.4069 ppb	0.04360	10.71%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	11.5	1.1260 µg/L	0.37846	1.1260 ppb	0.37846	33.61%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	-15.0	-4.6218 µg/L	13.24967	-4.6218 ppb	13.24967	286.68%
	QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	-22.2	-1.1057 µg/L	0.33322	-1.1057 ppb	0.33322	30.14%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-3.0	-5.8814 µg/L	2.64922	-5.8814 ppb	2.64922	45.04%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-15.2	-3.6982 µg/L	1.47080	-3.6982 ppb	1.47080	39.77%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-5.1	-21.165 µg/L	3.0996	-21.165 ppb	3.0996	14.64%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	-2.4	-2.2178 µg/L	0.65333	-2.2178 ppb	0.65333	29.46%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-4.8	-6.6652 µg/L	6.56608	-6.6652 ppb	6.56608	98.51%
	QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†		42.1	8.3028 µg/L	6.15672	8.3028 ppb	6.15672	74.15%
	QC value within limits for SiO2 Recovery = Not calculated						
Si	251.611†	78.7	5.9813 µg/L	0.93570	5.9813 ppb	0.93570	15.64%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	3.5	1.4599 µg/L	1.54769	1.4599 ppb	1.54769	106.01%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	18.6	0.1718 µg/L	0.20227	0.1718 ppb	0.20227	117.76%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	287.8	0.6364 µg/L	0.14099	0.6364 ppb	0.14099	22.15%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	3.0	3.9558 µg/L	4.25132	3.9558 ppb	4.25132	107.47%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	50.6	4.2054 µg/L	0.57295	4.2054 ppb	0.57295	13.62%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	15.7	0.1680 µg/L	0.13134	0.1680 ppb	0.13134	78.20%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	-14.4	-0.3334 µg/L	0.12760	-0.3334 ppb	0.12760	38.27%
	QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 23:05:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57547.7	57547.7	102 %		23:06:14
1	Al 396.153Radial†	7371.7	7229.5	5018.7 µg/L	5018.7 ppb	23:06:14
1	Ca 317.933Radial†	6105.6	5782.7	4939.5 µg/L	4939.5 ppb	23:06:34
1	Fe 238.204 Radial†	677.8	648.8	5128.1 µg/L	5128.1 ppb	23:06:34
1	K 766.490 Radial†	7884.7	7575.6	4947.8 µg/L	4947.8 ppb	23:06:14
1	Mg 279.077 IEC†	592.4	568.8	5087.4 µg/L	5087.4 ppb	23:06:34
1	Na 589.592 Radial†	33515.4	32430.5	9960.8 µg/L	9960.8 ppb	23:06:14
1	Sr 421.552†	53729.8	52718.8	486.34 µg/L	486.34 ppb	23:06:14
1	Sc 361.383	2017392.3	2017392.3	102.76 %		23:07:38
1	Y 371.029	1390584.4	1390584.4	102.80 %		23:07:38
1	Ag 328.068†	68163.9	66731.8	497.94 µg/L	497.94 ppb	23:07:43
1	As 188.979†	293.3	285.9	511.44 µg/L	511.44 ppb	23:08:04
1	B 249.677†	12721.2	11994.8	487.02 µg/L	487.02 ppb	23:07:43
1	Ba 233.527†	21407.2	20848.3	501.41 µg/L	501.41 ppb	23:07:43
1	Be 313.107†	853098.2	833003.6	494.20 µg/L	494.20 ppb	23:07:38
1	Cd 226.502†	20695.3	20280.2	505.74 µg/L	505.74 ppb	23:07:43
1	Co 228.616†	11453.9	11143.8	504.11 µg/L	504.11 ppb	23:07:43
1	Cr 267.716†	25823.0	25178.7	506.03 µg/L	506.03 ppb	23:07:43
1	Cu 324.752†	81137.5	76410.9	499.48 µg/L	499.48 ppb	23:07:43
1	Mn 257.610†	165189.1	161001.2	504.66 µg/L	504.66 ppb	23:07:38
1	Mo 202.031†	5400.3	5260.4	515.32 µg/L	515.32 ppb	23:08:04
1	Ni 231.604†	10765.7	10163.7	506.12 µg/L	506.12 ppb	23:07:43
1	P 214.914†	1337.7	1286.4	2499.1 µg/L	2499.1 ppb	23:08:04
1	Pb 220.353†	2230.8	2079.9	505.79 µg/L	505.79 ppb	23:08:04
1	S 181.975 Axial†	266.5	240.4	997.09 µg/L	997.09 ppb	23:08:04
1	Sb 206.836†	602.9	564.2	520.17 µg/L	520.17 ppb	23:08:04
1	Se 196.026†	387.5	357.8	510.54 µg/L	510.54 ppb	23:08:04
1	SiO2†	29659.8	27470.3	5422.3 µg/L	5422.3 ppb	23:07:43
1	Si 251.611†	34569.1	33328.5	2533.7 µg/L	2533.7 ppb	23:07:43
1	Sn 189.927†	1265.3	1230.9	519.12 µg/L	519.12 ppb	23:08:04
1	Ti 334.940†	230288.9	223918.6	495.03 µg/L	495.03 ppb	23:07:38
1	Tl 190.801†	382.1	394.2	517.92 µg/L	517.92 ppb	23:08:04
1	U 409.014†	6115.9	6028.5	499.86 µg/L	499.86 ppb	23:07:43
1	V 292.402†	52555.8	51186.7	505.09 µg/L	505.09 ppb	23:07:43
1	Zn 213.857†	22705.6	21560.3	502.26 µg/L	502.26 ppb	23:07:43
2	Sc RADIAL	58133.5	58133.5	103 %		23:06:40
2	Al 396.153Radial†	7400.2	7184.4	4987.5 µg/L	4987.5 ppb	23:06:40
2	Ca 317.933Radial†	6079.1	5696.6	4865.9 µg/L	4865.9 ppb	23:07:00
2	Fe 238.204 Radial†	666.8	631.5	4990.8 µg/L	4990.8 ppb	23:07:00
2	K 766.490 Radial†	7854.7	7468.4	4877.7 µg/L	4877.7 ppb	23:06:40
2	Mg 279.077 IEC†	586.6	557.3	4984.4 µg/L	4984.4 ppb	23:07:00
2	Na 589.592 Radial†	33547.1	32129.7	9868.4 µg/L	9868.4 ppb	23:06:40
2	Sr 421.552†	53696.2	52154.6	481.13 µg/L	481.13 ppb	23:06:40
2	Sc 361.383	2020250.9	2020250.9	102.91 %		23:08:11
2	Y 371.029	1392254.8	1392254.8	102.92 %		23:08:11
2	Ag 328.068†	67963.7	66443.4	495.79 µg/L	495.79 ppb	23:08:17
2	As 188.979†	286.3	278.7	498.54 µg/L	498.54 ppb	23:08:37
2	B 249.677†	12735.8	11991.5	486.95 µg/L	486.95 ppb	23:08:17
2	Ba 233.527†	21372.1	20784.7	499.88 µg/L	499.88 ppb	23:08:17
2	Be 313.107†	852994.2	831727.9	493.45 µg/L	493.45 ppb	23:08:11
2	Cd 226.502†	20623.3	20181.8	503.29 µg/L	503.29 ppb	23:08:17
2	Co 228.616†	11402.9	11078.5	501.14 µg/L	501.14 ppb	23:08:17
2	Cr 267.716†	25758.8	25080.8	504.07 µg/L	504.07 ppb	23:08:17
2	Cu 324.752†	80891.5	76060.2	497.17 µg/L	497.17 ppb	23:08:17
2	Mn 257.610†	165915.6	161479.7	506.14 µg/L	506.14 ppb	23:08:11
2	Mo 202.031†	5271.3	5127.6	502.32 µg/L	502.32 ppb	23:08:37
2	Ni 231.604†	10727.4	10111.7	503.53 µg/L	503.53 ppb	23:08:17
2	P 214.914†	1325.0	1272.2	2471.2 µg/L	2471.2 ppb	23:08:37
2	Pb 220.353†	2215.0	2061.4	501.27 µg/L	501.27 ppb	23:08:37

2	S 181.975 Axial†	262.8	236.5	980.60 µg/L	980.60 ppb	23:08:37
2	Sb 206.836†	582.8	543.8	501.33 µg/L	501.33 ppb	23:08:37
2	Se 196.026†	386.4	356.2	508.06 µg/L	508.06 ppb	23:08:37
2	SiO2†	29491.0	27265.4	5381.8 µg/L	5381.8 ppb	23:08:17
2	Si 251.611†	34394.7	33111.4	2517.2 µg/L	2517.2 ppb	23:08:17
2	Sn 189.927†	1226.1	1191.1	502.33 µg/L	502.33 ppb	23:08:37
2	Ti 334.940†	230974.1	224267.3	495.81 µg/L	495.81 ppb	23:08:11
2	Tl 190.801†	376.6	388.4	510.38 µg/L	510.38 ppb	23:08:37
2	U 409.014†	6158.6	6061.5	502.63 µg/L	502.63 ppb	23:08:17
2	V 292.402†	52563.5	51121.8	504.34 µg/L	504.34 ppb	23:08:17
2	Zn 213.857†	22699.7	21523.3	501.42 µg/L	501.42 ppb	23:08:17
3	Sc RADIAL	58082.9	58082.9	103 %		23:07:06
3	Al 396.153Radial†	7360.7	7152.2	4967.1 µg/L	4967.1 ppb	23:07:06
3	Ca 317.933Radial†	6119.1	5740.6	4903.5 µg/L	4903.5 ppb	23:07:26
3	Fe 238.204 Radial†	671.6	636.7	5030.6 µg/L	5030.6 ppb	23:07:26
3	K 766.490 Radial†	7857.6	7477.9	4883.9 µg/L	4883.9 ppb	23:07:06
3	Mg 279.077 IEC†	592.2	563.2	5035.7 µg/L	5035.7 ppb	23:07:26
3	Na 589.592 Radial†	33558.5	32169.2	9880.5 µg/L	9880.5 ppb	23:07:06
3	Sr 421.552†	53798.8	52299.8	482.47 µg/L	482.47 ppb	23:07:06
3	Sc 361.383	2030492.5	2030492.5	103.43 %		23:08:44
3	Y 371.029	1399481.5	1399481.5	103.45 %		23:08:44
3	Ag 328.068†	61967.1	60312.6	449.89 µg/L	449.89 ppb	23:08:50
3	As 188.979†	236.7	229.3	410.26 µg/L	410.26 ppb	23:09:10
3	B 249.677†	11514.3	10748.1	436.11 µg/L	436.11 ppb	23:08:50
3	Ba 233.527†	18722.2	18118.1	435.73 µg/L	435.73 ppb	23:08:50
3	Be 313.107†	776418.3	753512.1	447.04 µg/L	447.04 ppb	23:08:44
3	Cd 226.502†	17928.8	17475.6	435.72 µg/L	435.72 ppb	23:08:50
3	Co 228.616†	9860.5	9531.4	431.09 µg/L	431.09 ppb	23:08:50
3	Cr 267.716†	21552.8	20888.1	419.81 µg/L	419.81 ppb	23:08:50
3	Cu 324.752†	70553.7	65668.9	429.35 µg/L	429.35 ppb	23:08:50
3	Mn 257.610†	151097.3	146339.8	458.73 µg/L	458.73 ppb	23:08:44
3	Mo 202.031†	4274.6	4138.1	405.42 µg/L	405.42 ppb	23:09:10
3	Ni 231.604†	9262.5	8642.8	430.39 µg/L	430.39 ppb	23:08:50
3	P 214.914†	1088.9	1037.4	2012.0 µg/L	2012.0 ppb	23:09:10
3	Pb 220.353†	1862.8	1710.1	415.78 µg/L	415.78 ppb	23:09:10
3	S 181.975 Axial†	230.4	203.8	845.05 µg/L	845.05 ppb	23:09:10
3	Sb 206.836†	487.9	449.2	413.81 µg/L	413.81 ppb	23:09:10
3	Se 196.026†	331.1	300.8	430.27 µg/L	430.27 ppb	23:09:10
3	SiO2†	26594.8	24320.8	4800.6 µg/L	4800.6 ppb	23:08:50
3	Si 251.611†	30776.4	29444.6	2238.4 µg/L	2238.4 ppb	23:08:50
3	Sn 189.927†	980.5	947.6	399.66 µg/L	399.66 ppb	23:09:10
3	Ti 334.940†	208127.5	201046.7	444.44 µg/L	444.44 ppb	23:08:44
3	Tl 190.801†	323.3	335.0	440.57 µg/L	440.57 ppb	23:09:10
3	U 409.014†	5266.7	5169.0	428.47 µg/L	428.47 ppb	23:08:50
3	V 292.402†	44963.5	43516.4	429.21 µg/L	429.21 ppb	23:08:50
3	Zn 213.857†	19740.8	18551.4	432.13 µg/L	432.13 ppb	23:08:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2022711.9	103.04 %	0.351			0.34%
Sc RADIAL	57921.3	103 %	0.6			0.56%
Y 371.029	1394106.9	103.06 %	0.350			0.34%
Ag 328.068†	64495.9	481.20 µg/L	27.143	481.20 ppb	27.143	5.64%
QC value within limits for Ag 328.068 Recovery = 96.24%						
Al 396.153Radial†	7188.7	4991.1 µg/L	25.95	4991.1 ppb	25.95	0.52%
QC value within limits for Al 396.153Radial Recovery = 99.82%						
As 188.979†	264.6	473.41 µg/L	55.075	473.41 ppb	55.075	11.63%
QC value within limits for As 188.979 Recovery = 94.68%						
B 249.677†	11578.1	470.03 µg/L	29.369	470.03 ppb	29.369	6.25%
QC value within limits for B 249.677 Recovery = 94.01%						
Ba 233.527†	19917.0	479.01 µg/L	37.487	479.01 ppb	37.487	7.83%
QC value within limits for Ba 233.527 Recovery = 95.80%						
Be 313.107†	806081.2	478.23 µg/L	27.011	478.23 ppb	27.011	5.65%
QC value within limits for Be 313.107 Recovery = 95.65%						
Ca 317.933Radial†	5740.0	4903.0 µg/L	36.79	4903.0 ppb	36.79	0.75%
QC value within limits for Ca 317.933Radial Recovery = 98.06%						
Cd 226.502†	19312.5	481.58 µg/L	39.737	481.58 ppb	39.737	8.25%
QC value within limits for Cd 226.502 Recovery = 96.32%						
Co 228.616†	10584.5	478.78 µg/L	41.325	478.78 ppb	41.325	8.63%

Cr	267.716†	23715.8	476.64 µg/L	49.224	476.64 ppb	49.224	10.33%
Cu	324.752†	72713.4	475.34 µg/L	39.841	475.34 ppb	39.841	8.38%
Fe	238.204 Radial†	639.0	5049.9 µg/L	70.60	5049.9 ppb	70.60	1.40%
K	766.490 Radial†	7507.3	4903.1 µg/L	38.76	4903.1 ppb	38.76	0.79%
Mg	279.077 IEC†	563.1	5035.8 µg/L	51.50	5035.8 ppb	51.50	1.02%
Mn	257.610†	156273.5	489.84 µg/L	26.952	489.84 ppb	26.952	5.50%
Mo	202.031†	4842.0	474.35 µg/L	60.048	474.35 ppb	60.048	12.66%
Na	589.592 Radial†	32243.1	9903.3 µg/L	50.20	9903.3 ppb	50.20	0.51%
Ni	231.604†	9639.4	480.01 µg/L	42.993	480.01 ppb	42.993	8.96%
P	214.914†	1198.7	2327.4 µg/L	273.57	2327.4 ppb	273.57	11.75%
Pb	220.353†	1950.4	474.28 µg/L	50.715	474.28 ppb	50.715	10.69%
S	181.975 Axial†	226.9	940.92 µg/L	83.427	940.92 ppb	83.427	8.87%
Sb	206.836†	519.1	478.43 µg/L	56.755	478.43 ppb	56.755	11.86%
Se	196.026†	338.2	482.96 µg/L	45.644	482.96 ppb	45.644	9.45%
SiO2†		26352.2	5201.6 µg/L	347.84	5201.6 ppb	347.84	6.69%
Si	251.611†	31961.5	2429.8 µg/L	165.91	2429.8 ppb	165.91	6.83%
Sn	189.927†	1123.2	473.71 µg/L	64.673	473.71 ppb	64.673	13.65%
Sr	421.552†	52391.1	483.32 µg/L	2.703	483.32 ppb	2.703	0.56%
Ti	334.940†	216410.9	478.43 µg/L	29.438	478.43 ppb	29.438	6.15%
Tl	190.801†	372.5	489.62 µg/L	42.649	489.62 ppb	42.649	8.71%
U	409.014†	5753.0	476.99 µg/L	42.039	476.99 ppb	42.039	8.81%
V	292.402†	48608.3	479.54 µg/L	43.595	479.54 ppb	43.595	9.09%
Zn	213.857†	20545.0	478.60 µg/L	40.255	478.60 ppb	40.255	8.41%

QC value within limits for Co 228.616 Recovery = 95.76%

QC value within limits for Cr 267.716 Recovery = 95.33%

QC value within limits for Cu 324.752 Recovery = 95.07%

QC value within limits for Fe 238.204 Radial Recovery = 101.00%

QC value within limits for K 766.490 Radial Recovery = 98.06%

QC value within limits for Mg 279.077 IEC Recovery = 100.72%

QC value within limits for Mn 257.610 Recovery = 97.97%

QC value within limits for Mo 202.031 Recovery = 94.87%

QC value within limits for Na 589.592 Radial Recovery = 99.03%

QC value within limits for Ni 231.604 Recovery = 96.00%

QC value within limits for P 214.914 Recovery = 93.10%

QC value within limits for Pb 220.353 Recovery = 94.86%

QC value within limits for S 181.975 Axial Recovery = 94.09%

QC value within limits for Sb 206.836 Recovery = 95.69%

QC value within limits for Se 196.026 Recovery = 96.59%

QC value within limits for SiO2 Recovery = 97.27%

QC value within limits for Si 251.611 Recovery = 97.19%

QC value within limits for Sn 189.927 Recovery = 94.74%

QC value within limits for Sr 421.552 Recovery = 96.66%

QC value within limits for Ti 334.940 Recovery = 95.69%

QC value within limits for Tl 190.801 Recovery = 97.92%

QC value within limits for U 409.014 Recovery = 95.40%

QC value within limits for V 292.402 Recovery = 95.91%

QC value within limits for Zn 213.857 Recovery = 95.72%

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 23:09:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57057.7	57057.7	101 %		23:09:52
1	Al 396.153Radial†	16.4	8.9	6.1575 µg/L	6.1575 ppb	23:09:52
1	Ca 317.933Radial†	206.6	-6.7	-5.7540 µg/L	-5.7540 ppb	23:10:13
1	Fe 238.204 Radial†	21.4	4.6	36.351 µg/L	36.351 ppb	23:10:13
1	K 766.490 Radial†	188.9	22.0	14.383 µg/L	14.383 ppb	23:09:52
1	Mg 279.077 IEC†	12.9	-0.0	-0.3283 µg/L	-0.3283 ppb	23:10:13
1	Na 589.592 Radial†	447.3	-29.3	-8.9850 µg/L	-8.9850 ppb	23:09:52
1	Sr 421.552†	72.3	42.8	0.3950 µg/L	0.3950 ppb	23:09:52
1	Sc 361.383	2009889.0	2009889.0	102.38 %		23:11:15
1	Y 371.029	1389446.2	1389446.2	102.71 %		23:11:15
1	Ag 328.068†	-351.8	58.0	0.4309 µg/L	0.4309 ppb	23:11:20
1	As 188.979†	-0.6	-0.1	-0.1425 µg/L	-0.1425 ppb	23:11:41
1	B 249.677†	354.2	-38.1	-1.5742 µg/L	-1.5742 ppb	23:11:41
1	Ba 233.527†	3.5	20.5	0.4911 µg/L	0.4911 ppb	23:11:41
1	Be 313.107†	-2657.6	259.9	0.1538 µg/L	0.1538 ppb	23:11:20
1	Cd 226.502†	-137.1	7.8	0.1907 µg/L	0.1907 ppb	23:11:41
1	Co 228.616†	3.7	1.7	0.0748 µg/L	0.0748 ppb	23:11:41
1	Cr 267.716†	-72.7	-20.6	-0.4139 µg/L	-0.4139 ppb	23:11:20
1	Cu 324.752†	2570.7	-32.8	-0.2093 µg/L	-0.2093 ppb	23:11:20
1	Mn 257.610†	-93.2	165.0	0.5214 µg/L	0.5214 ppb	23:11:41
1	Mo 202.031†	3.5	8.8	0.8615 µg/L	0.8615 ppb	23:11:41
1	Ni 231.604†	315.5	-4.1	-0.2065 µg/L	-0.2065 ppb	23:11:41
1	P 214.914†	6.9	-8.6	-17.030 µg/L	-17.030 ppb	23:11:41
1	Pb 220.353†	80.2	-12.6	-3.0691 µg/L	-3.0691 ppb	23:11:41
1	S 181.975 Axial†	13.9	-5.3	-22.180 µg/L	-22.180 ppb	23:11:41
1	Sb 206.836†	21.7	-1.3	-1.1333 µg/L	-1.1333 ppb	23:11:41
1	Se 196.026†	18.3	-1.4	-1.9095 µg/L	-1.9095 ppb	23:11:41
1	SiO2†	1515.1	88.3	17.432 µg/L	17.432 ppb	23:11:20
1	Si 251.611†	427.0	106.4	8.0899 µg/L	8.0899 ppb	23:11:41
1	Sn 189.927†	4.7	4.2	1.7607 µg/L	1.7607 ppb	23:11:41
1	Ti 334.940†	771.1	578.1	1.2789 µg/L	1.2789 ppb	23:11:20
1	Tl 190.801†	-21.8	1.1	1.4577 µg/L	1.4577 ppb	23:11:41
1	U 409.014†	-16.0	61.5	5.1011 µg/L	5.1011 ppb	23:11:20
1	V 292.402†	-58.9	-12.8	-0.1096 µg/L	-0.1096 ppb	23:11:20
1	Zn 213.857†	542.3	-4.8	-0.1123 µg/L	-0.1123 ppb	23:11:41
2	Sc RADIAL	57071.4	57071.4	101 %		23:10:18
2	Al 396.153Radial†	8.3	0.9	0.5821 µg/L	0.5821 ppb	23:10:18
2	Ca 317.933Radial†	214.5	1.1	0.8983 µg/L	0.8983 ppb	23:10:39
2	Fe 238.204 Radial†	18.1	1.4	10.777 µg/L	10.777 ppb	23:10:39
2	K 766.490 Radial†	267.4	99.8	65.151 µg/L	65.151 ppb	23:10:18
2	Mg 279.077 IEC†	10.1	-2.8	-24.932 µg/L	-24.932 ppb	23:10:39
2	Na 589.592 Radial†	432.3	-44.2	-13.583 µg/L	-13.583 ppb	23:10:18
2	Sr 421.552†	50.5	21.2	0.1956 µg/L	0.1956 ppb	23:10:18
2	Sc 361.383	2020781.7	2020781.7	102.94 %		23:11:47
2	Y 371.029	1396749.0	1396749.0	103.25 %		23:11:47
2	Ag 328.068†	-396.9	16.1	0.1175 µg/L	0.1175 ppb	23:11:52
2	As 188.979†	0.7	1.2	2.0940 µg/L	2.0940 ppb	23:12:13
2	B 249.677†	344.3	-49.7	-2.0296 µg/L	-2.0296 ppb	23:12:13
2	Ba 233.527†	10.9	27.7	0.6639 µg/L	0.6639 ppb	23:12:13
2	Be 313.107†	-2676.0	256.0	0.1515 µg/L	0.1515 ppb	23:11:52
2	Cd 226.502†	-146.1	-0.3	-0.0086 µg/L	-0.0086 ppb	23:12:13
2	Co 228.616†	4.5	2.5	0.1093 µg/L	0.1093 ppb	23:12:13
2	Cr 267.716†	-64.9	-12.7	-0.2549 µg/L	-0.2549 ppb	23:11:52
2	Cu 324.752†	2583.3	-34.1	-0.2211 µg/L	-0.2211 ppb	23:11:52
2	Mn 257.610†	33.5	288.6	0.9061 µg/L	0.9061 ppb	23:12:13
2	Mo 202.031†	-0.1	5.2	0.5097 µg/L	0.5097 ppb	23:12:13
2	Ni 231.604†	310.4	-10.8	-0.5376 µg/L	-0.5376 ppb	23:12:13
2	P 214.914†	14.3	-1.5	-2.8930 µg/L	-2.8930 ppb	23:12:13
2	Pb 220.353†	90.6	-3.0	-0.7206 µg/L	-0.7206 ppb	23:12:13

2	S 181.975 Axial†	16.0	-3.4	-13.920 µg/L	-13.920 ppb	23:12:13
2	Sb 206.836†	23.1	-0.0	-0.0297 µg/L	-0.0297 ppb	23:12:13
2	Se 196.026†	15.7	-4.0	-5.6316 µg/L	-5.6316 ppb	23:12:13
2	SiO2†	1556.9	120.9	23.873 µg/L	23.873 ppb	23:11:52
2	Si 251.611†	460.7	136.9	10.406 µg/L	10.406 ppb	23:12:13
2	Sn 189.927†	-0.9	-1.2	-0.5120 µg/L	-0.5120 ppb	23:12:13
2	Ti 334.940†	740.4	544.2	1.2058 µg/L	1.2058 ppb	23:11:52
2	Tl 190.801†	-24.4	-1.3	-1.6505 µg/L	-1.6505 ppb	23:12:13
2	U 409.014†	-55.3	23.4	1.9414 µg/L	1.9414 ppb	23:11:52
2	V 292.402†	-83.3	-36.2	-0.3461 µg/L	-0.3461 ppb	23:11:52
2	Zn 213.857†	542.3	-7.6	-0.1746 µg/L	-0.1746 ppb	23:12:13
3	Sc RADIAL	57024.4	57024.4	101 %		23:10:44
3	Al 396.153Radial†	28.2	20.6	14.312 µg/L	14.312 ppb	23:10:44
3	Ca 317.933Radial†	203.6	-9.6	-8.1744 µg/L	-8.1744 ppb	23:11:04
3	Fe 238.204 Radial†	19.9	3.1	24.715 µg/L	24.715 ppb	23:11:04
3	K 766.490 Radial†	255.2	87.8	57.354 µg/L	57.354 ppb	23:10:44
3	Mg 279.077 IEC†	13.0	0.1	0.7509 µg/L	0.7509 ppb	23:11:04
3	Na 589.592 Radial†	480.3	3.7	1.1222 µg/L	1.1222 ppb	23:10:44
3	Sr 421.552†	41.1	11.9	0.1098 µg/L	0.1098 ppb	23:10:44
3	Sc 361.383	2015035.0	2015035.0	102.64 %		23:12:19
3	Y 371.029	1393345.2	1393345.2	103.00 %		23:12:19
3	Ag 328.068†	-399.3	12.6	0.0933 µg/L	0.0933 ppb	23:12:25
3	As 188.979†	1.9	2.3	4.1656 µg/L	4.1656 ppb	23:12:45
3	B 249.677†	334.7	-58.0	-2.3782 µg/L	-2.3782 ppb	23:12:45
3	Ba 233.527†	-4.7	12.5	0.2988 µg/L	0.2988 ppb	23:12:45
3	Be 313.107†	-2569.3	352.6	0.2090 µg/L	0.2090 ppb	23:12:25
3	Cd 226.502†	-138.5	6.8	0.1657 µg/L	0.1657 ppb	23:12:45
3	Co 228.616†	7.6	5.5	0.2480 µg/L	0.2480 ppb	23:12:45
3	Cr 267.716†	-72.8	-20.5	-0.4127 µg/L	-0.4127 ppb	23:12:25
3	Cu 324.752†	2608.3	-2.6	-0.0135 µg/L	-0.0135 ppb	23:12:25
3	Mn 257.610†	-109.2	149.6	0.4717 µg/L	0.4717 ppb	23:12:45
3	Mo 202.031†	8.3	13.4	1.3150 µg/L	1.3150 ppb	23:12:45
3	Ni 231.604†	307.9	-12.4	-0.6185 µg/L	-0.6185 ppb	23:12:45
3	P 214.914†	9.6	-6.0	-11.945 µg/L	-11.945 ppb	23:12:45
3	Pb 220.353†	89.3	-3.9	-0.9624 µg/L	-0.9624 ppb	23:12:45
3	S 181.975 Axial†	17.3	-2.1	-8.6936 µg/L	-8.6936 ppb	23:12:45
3	Sb 206.836†	27.2	4.0	3.6685 µg/L	3.6685 ppb	23:12:45
3	Se 196.026†	14.5	-5.2	-7.2537 µg/L	-7.2537 ppb	23:12:45
3	SiO2†	1511.8	81.3	16.045 µg/L	16.045 ppb	23:12:25
3	Si 251.611†	407.9	86.8	6.5981 µg/L	6.5981 ppb	23:12:45
3	Sn 189.927†	1.5	1.1	0.4522 µg/L	0.4522 ppb	23:12:45
3	Ti 334.940†	528.4	339.7	0.7514 µg/L	0.7514 ppb	23:12:25
3	Tl 190.801†	-23.3	-0.4	-0.4507 µg/L	-0.4507 ppb	23:12:45
3	U 409.014†	10.8	87.6	7.2739 µg/L	7.2739 ppb	23:12:25
3	V 292.402†	-68.0	-21.5	-0.1901 µg/L	-0.1901 ppb	23:12:25
3	Zn 213.857†	544.0	-4.4	-0.1013 µg/L	-0.1013 ppb	23:12:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2015235.2	102.65 %	0.278			0.27%
Sc RADIAL	57051.2	101 %	0.0			0.04%
Y 371.029	1393180.1	102.99 %	0.270			0.26%
Ag 328.068†	28.9	0.2139 µg/L	0.18832	0.2139 ppb	0.18832	88.05%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	10.1	7.0174 µg/L	6.90546	7.0174 ppb	6.90546	98.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.1	2.0390 µg/L	2.15458	2.0390 ppb	2.15458	105.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-48.6	-1.9940 µg/L	0.40322	-1.9940 ppb	0.40322	20.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	20.2	0.4846 µg/L	0.18261	0.4846 ppb	0.18261	37.68%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	289.5	0.1714 µg/L	0.03254	0.1714 ppb	0.03254	18.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-5.1	-4.3434 µg/L	4.69799	-4.3434 ppb	4.69799	108.16%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.8	0.1159 µg/L	0.10856	0.1159 ppb	0.10856	93.64%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.2	0.1440 µg/L	0.09170	0.1440 ppb	0.09170	63.66%

QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-17.9	-0.3605 µg/L	0.09147	-0.3605 ppb	0.09147	25.37%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-23.2	-0.1480 µg/L	0.11660	-0.1480 ppb	0.11660	78.79%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	3.0	23.948 µg/L	12.8041	23.948 ppb	12.8041	53.47%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	69.9	45.629 µg/L	27.3393	45.629 ppb	27.3393	59.92%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.9	-8.1699 µg/L	14.52675	-8.1699 ppb	14.52675	177.81%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	201.0	0.6331 µg/L	0.23777	0.6331 ppb	0.23777	37.56%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.1	0.8954 µg/L	0.40369	0.8954 ppb	0.40369	45.08%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-23.3	-7.1485 µg/L	7.52241	-7.1485 ppb	7.52241	105.23%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-9.1	-0.4542 µg/L	0.21833	-0.4542 ppb	0.21833	48.07%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-5.4	-10.623 µg/L	7.1608	-10.623 ppb	7.1608	67.41%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-6.5	-1.5841 µg/L	1.29178	-1.5841 ppb	1.29178	81.55%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-3.6	-14.931 µg/L	6.7999	-14.931 ppb	6.7999	45.54%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	0.9	0.8352 µg/L	2.51500	0.8352 ppb	2.51500	301.14%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.6	-4.9316 µg/L	2.73998	-4.9316 ppb	2.73998	55.56%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	96.8	19.116 µg/L	4.1770	19.116 ppb	4.1770	21.85%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	110.0	8.3647 µg/L	1.91884	8.3647 ppb	1.91884	22.94%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.4	0.5669 µg/L	1.14067	0.5669 ppb	1.14067	201.20%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	25.3	0.2335 µg/L	0.14633	0.2335 ppb	0.14633	62.68%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	487.4	1.0787 µg/L	0.28581	1.0787 ppb	0.28581	26.50%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.2145 µg/L	1.56752	-0.2145 ppb	1.56752	730.70%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	57.5	4.7722 µg/L	2.68141	4.7722 ppb	2.68141	56.19%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-23.5	-0.2153 µg/L	0.12024	-0.2153 ppb	0.12024	55.85%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-5.6	-0.1294 µg/L	0.03957	-0.1294 ppb	0.03957	30.58%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 23:38:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58933.2	58933.2	104 %		23:38:44
1	Al 396.153Radial†	7172.7	6868.7	4768.0 µg/L	4768.0 ppb	23:38:44
1	Ca 317.933Radial†	6050.3	5588.8	4773.8 µg/L	4773.8 ppb	23:39:05
1	Fe 238.204 Radial†	660.6	616.7	4874.3 µg/L	4874.3 ppb	23:39:05
1	K 766.490 Radial†	7705.1	7221.5	4716.5 µg/L	4716.5 ppb	23:38:44
1	Mg 279.077 IEC†	575.7	539.0	4821.5 µg/L	4821.5 ppb	23:39:05
1	Na 589.592 Radial†	32864.9	31033.3	9531.7 µg/L	9531.7 ppb	23:38:44
1	Sr 421.552†	52837.3	50623.1	467.01 µg/L	467.01 ppb	23:38:44
1	Sc 361.383	2065679.1	2065679.1	105.22 %		23:40:08
1	Y 371.029	1422719.1	1422719.1	105.17 %		23:40:08
1	Ag 328.068†	67697.4	64737.9	483.06 µg/L	483.06 ppb	23:40:14
1	As 188.979†	294.5	280.3	501.52 µg/L	501.52 ppb	23:40:34
1	B 249.677†	12750.6	11733.4	476.47 µg/L	476.47 ppb	23:40:14
1	Ba 233.527†	21308.0	20267.1	487.43 µg/L	487.43 ppb	23:40:14
1	Be 313.107†	854737.7	815156.4	483.62 µg/L	483.62 ppb	23:40:08
1	Cd 226.502†	20617.6	19735.6	492.16 µg/L	492.16 ppb	23:40:14
1	Co 228.616†	11380.5	10813.6	489.17 µg/L	489.17 ppb	23:40:14
1	Cr 267.716†	25607.5	24386.5	490.11 µg/L	490.11 ppb	23:40:14
1	Cu 324.752†	80271.0	73741.8	482.03 µg/L	482.03 ppb	23:40:14
1	Mn 257.610†	165524.3	157562.1	493.86 µg/L	493.86 ppb	23:40:08
1	Mo 202.031†	5363.7	5102.7	499.88 µg/L	499.88 ppb	23:40:34
1	Ni 231.604†	10686.1	9843.2	490.16 µg/L	490.16 ppb	23:40:14
1	P 214.914†	1327.8	1246.5	2422.0 µg/L	2422.0 ppb	23:40:34
1	Pb 220.353†	2236.8	2034.8	494.83 µg/L	494.83 ppb	23:40:34
1	S 181.975 Axial†	262.8	230.9	957.37 µg/L	957.37 ppb	23:40:34
1	Sb 206.836†	589.0	537.3	495.44 µg/L	495.44 ppb	23:40:34
1	Se 196.026†	400.2	361.0	514.73 µg/L	514.73 ppb	23:40:34
1	SiO2†	29290.4	26444.6	5219.8 µg/L	5219.8 ppb	23:40:14
1	Si 251.611†	34183.1	32175.3	2446.0 µg/L	2446.0 ppb	23:40:14
1	Sn 189.927†	1265.3	1202.1	506.97 µg/L	506.97 ppb	23:40:34
1	Ti 334.940†	230200.3	218596.0	483.28 µg/L	483.28 ppb	23:40:08
1	Tl 190.801†	374.1	377.9	496.67 µg/L	496.67 ppb	23:40:34
1	U 409.014†	6143.3	5915.4	490.51 µg/L	490.51 ppb	23:40:14
1	V 292.402†	52287.8	49736.5	490.76 µg/L	490.76 ppb	23:40:14
1	Zn 213.857†	22608.6	20951.7	488.11 µg/L	488.11 ppb	23:40:14
2	Sc RADIAL	58655.2	58655.2	104 %		23:39:10
2	Al 396.153Radial†	7191.3	6919.2	4803.2 µg/L	4803.2 ppb	23:39:10
2	Ca 317.933Radial†	6069.1	5634.4	4812.8 µg/L	4812.8 ppb	23:39:31
2	Fe 238.204 Radial†	666.1	625.0	4940.0 µg/L	4940.0 ppb	23:39:31
2	K 766.490 Radial†	7748.2	7298.0	4766.4 µg/L	4766.4 ppb	23:39:10
2	Mg 279.077 IEC†	586.1	551.7	4934.9 µg/L	4934.9 ppb	23:39:31
2	Na 589.592 Radial†	32986.9	31300.2	9613.6 µg/L	9613.6 ppb	23:39:10
2	Sr 421.552†	52917.2	50940.1	469.93 µg/L	469.93 ppb	23:39:10
2	Sc 361.383	2055118.2	2055118.2	104.69 %		23:40:41
2	Y 371.029	1414341.2	1414341.2	104.55 %		23:40:41
2	Ag 328.068†	67915.5	65276.8	487.08 µg/L	487.08 ppb	23:40:47
2	As 188.979†	287.6	275.2	492.28 µg/L	492.28 ppb	23:41:07
2	B 249.677†	12834.8	11876.1	482.26 µg/L	482.26 ppb	23:40:47
2	Ba 233.527†	21308.2	20371.4	489.94 µg/L	489.94 ppb	23:40:47
2	Be 313.107†	849714.5	814532.3	483.24 µg/L	483.24 ppb	23:40:41
2	Cd 226.502†	20625.5	19843.8	494.86 µg/L	494.86 ppb	23:40:47
2	Co 228.616†	11438.4	10924.5	494.18 µg/L	494.18 ppb	23:40:47
2	Cr 267.716†	25732.1	24630.5	495.02 µg/L	495.02 ppb	23:40:47
2	Cu 324.752†	80507.6	74359.9	486.07 µg/L	486.07 ppb	23:40:47
2	Mn 257.610†	164393.1	157290.0	493.02 µg/L	493.02 ppb	23:40:41
2	Mo 202.031†	5257.3	5027.3	492.49 µg/L	492.49 ppb	23:41:07
2	Ni 231.604†	10714.5	9922.5	494.11 µg/L	494.11 ppb	23:40:47
2	P 214.914†	1313.8	1239.6	2407.7 µg/L	2407.7 ppb	23:41:07
2	Pb 220.353†	2207.0	2017.3	490.55 µg/L	490.55 ppb	23:41:07

2	S 181.975 Axial†	267.9	237.0	982.86 µg/L	982.86 ppb	23:41:07
2	Sb 206.836†	582.2	533.6	491.91 µg/L	491.91 ppb	23:41:07
2	Se 196.026†	397.8	360.7	514.34 µg/L	514.34 ppb	23:41:07
2	SiO2†	29503.7	26791.4	5288.3 µg/L	5288.3 ppb	23:40:47
2	Si 251.611†	34392.7	32542.5	2473.9 µg/L	2473.9 ppb	23:40:47
2	Sn 189.927†	1234.4	1178.7	497.12 µg/L	497.12 ppb	23:41:07
2	Ti 334.940†	228997.4	218571.2	483.22 µg/L	483.22 ppb	23:40:41
2	Tl 190.801†	370.8	376.5	494.87 µg/L	494.87 ppb	23:41:07
2	U 409.014†	6076.5	5881.5	487.69 µg/L	487.69 ppb	23:40:47
2	V 292.402†	52388.9	50088.4	494.15 µg/L	494.15 ppb	23:40:47
2	Zn 213.857†	22671.2	21121.9	492.07 µg/L	492.07 ppb	23:40:47
3	Sc RADIAL	58551.8	58551.8	104 %		23:39:36
3	Al 396.153Radial†	7184.9	6925.2	4809.2 µg/L	4809.2 ppb	23:39:36
3	Ca 317.933Radial†	6057.4	5633.4	4811.9 µg/L	4811.9 ppb	23:39:56
3	Fe 238.204 Radial†	667.5	627.4	4957.8 µg/L	4957.8 ppb	23:39:56
3	K 766.490 Radial†	7791.0	7352.4	4802.0 µg/L	4802.0 ppb	23:39:36
3	Mg 279.077 IEC†	578.1	545.0	4873.1 µg/L	4873.1 ppb	23:39:56
3	Na 589.592 Radial†	32965.6	31335.8	9624.6 µg/L	9624.6 ppb	23:39:36
3	Sr 421.552†	53009.1	51118.7	471.58 µg/L	471.58 ppb	23:39:36
3	Sc 361.383	2030006.9	2030006.9	103.41 %		23:41:15
3	Y 371.029	1398396.5	1398396.5	103.37 %		23:41:15
3	Ag 328.068†	62848.2	61179.0	456.33 µg/L	456.33 ppb	23:41:20
3	As 188.979†	242.8	235.2	420.85 µg/L	420.85 ppb	23:41:41
3	B 249.677†	11717.7	10947.4	444.28 µg/L	444.28 ppb	23:41:20
3	Ba 233.527†	19024.3	18414.6	442.86 µg/L	442.86 ppb	23:41:20
3	Be 313.107†	777937.3	755160.5	448.02 µg/L	448.02 ppb	23:41:15
3	Cd 226.502†	18249.9	17790.3	443.59 µg/L	443.59 ppb	23:41:20
3	Co 228.616†	9984.8	9653.8	436.64 µg/L	436.64 ppb	23:41:20
3	Cr 267.716†	21785.9	21118.4	424.44 µg/L	424.44 ppb	23:41:20
3	Cu 324.752†	71113.2	66226.3	432.98 µg/L	432.98 ppb	23:41:20
3	Mn 257.610†	151288.3	146559.5	459.42 µg/L	459.42 ppb	23:41:15
3	Mo 202.031†	4272.3	4136.8	405.29 µg/L	405.29 ppb	23:41:41
3	Ni 231.604†	9405.6	8783.4	437.39 µg/L	437.39 ppb	23:41:20
3	P 214.914†	1080.9	1030.0	1996.9 µg/L	1996.9 ppb	23:41:41
3	Pb 220.353†	1868.0	1715.5	417.08 µg/L	417.08 ppb	23:41:41
3	S 181.975 Axial†	230.6	204.1	846.44 µg/L	846.44 ppb	23:41:41
3	Sb 206.836†	482.8	444.4	409.38 µg/L	409.38 ppb	23:41:41
3	Se 196.026†	339.5	309.0	441.86 µg/L	441.86 ppb	23:41:41
3	SiO2†	26761.7	24488.4	4833.7 µg/L	4833.7 ppb	23:41:20
3	Si 251.611†	31061.3	29727.3	2259.9 µg/L	2259.9 ppb	23:41:20
3	Sn 189.927†	989.8	956.8	403.51 µg/L	403.51 ppb	23:41:41
3	Ti 334.940†	208298.2	201259.9	444.92 µg/L	444.92 ppb	23:41:15
3	Tl 190.801†	325.8	337.5	443.78 µg/L	443.78 ppb	23:41:41
3	U 409.014†	5294.0	5196.7	430.78 µg/L	430.78 ppb	23:41:20
3	V 292.402†	45485.4	44031.4	434.23 µg/L	434.23 ppb	23:41:20
3	Zn 213.857†	19944.3	18752.8	436.83 µg/L	436.83 ppb	23:41:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2050268.1	104.44 %	0.933			0.89%
Sc RADIAL	58713.4	104 %	0.3			0.34%
Y 371.029	1411818.9	104.37 %	0.913			0.88%
Ag 328.068†	63731.2	475.49 µg/L	16.711	475.49 ppb	16.711	3.51%
QC value within limits for Ag 328.068 Recovery = 95.10%						
Al 396.153Radial†	6904.4	4793.5 µg/L	22.30	4793.5 ppb	22.30	0.47%
QC value within limits for Al 396.153Radial Recovery = 95.87%						
As 188.979†	263.6	471.55 µg/L	44.146	471.55 ppb	44.146	9.36%
QC value within limits for As 188.979 Recovery = 94.31%						
B 249.677†	11519.0	467.67 µg/L	20.459	467.67 ppb	20.459	4.37%
QC value within limits for B 249.677 Recovery = 93.53%						
Ba 233.527†	19684.4	473.41 µg/L	26.489	473.41 ppb	26.489	5.60%
QC value within limits for Ba 233.527 Recovery = 94.68%						
Be 313.107†	794949.7	471.63 µg/L	20.444	471.63 ppb	20.444	4.33%
QC value within limits for Be 313.107 Recovery = 94.33%						
Ca 317.933Radial†	5618.9	4799.5 µg/L	22.25	4799.5 ppb	22.25	0.46%
QC value within limits for Ca 317.933Radial Recovery = 95.99%						
Cd 226.502†	19123.2	476.87 µg/L	28.857	476.87 ppb	28.857	6.05%
QC value within limits for Cd 226.502 Recovery = 95.37%						
Co 228.616†	10464.0	473.33 µg/L	31.873	473.33 ppb	31.873	6.73%

QC value within limits for Co 228.616	Recovery = 94.67%				
Cr 267.716†	23378.5	469.86 µg/L	39.409	469.86 ppb	39.409 8.39%
QC value within limits for Cr 267.716	Recovery = 93.97%				
Cu 324.752†	71442.7	467.02 µg/L	29.553	467.02 ppb	29.553 6.33%
QC value within limits for Cu 324.752	Recovery = 93.40%				
Fe 238.204 Radial†	623.1	4924.0 µg/L	44.00	4924.0 ppb	44.00 0.89%
QC value within limits for Fe 238.204 Radial	Recovery = 98.48%				
K 766.490 Radial†	7290.6	4761.6 µg/L	42.97	4761.6 ppb	42.97 0.90%
QC value within limits for K 766.490 Radial	Recovery = 95.23%				
Mg 279.077 IEC†	545.2	4876.5 µg/L	56.74	4876.5 ppb	56.74 1.16%
QC value within limits for Mg 279.077 IEC	Recovery = 97.53%				
Mn 257.610†	153803.9	482.10 µg/L	19.647	482.10 ppb	19.647 4.08%
QC value within limits for Mn 257.610	Recovery = 96.42%				
Mo 202.031†	4755.6	465.89 µg/L	52.605	465.89 ppb	52.605 11.29%
QC value within limits for Mo 202.031	Recovery = 93.18%				
Na 589.592 Radial†	31223.1	9590.0 µg/L	50.77	9590.0 ppb	50.77 0.53%
QC value within limits for Na 589.592 Radial	Recovery = 95.90%				
Ni 231.604†	9516.4	473.89 µg/L	31.667	473.89 ppb	31.667 6.68%
QC value within limits for Ni 231.604	Recovery = 94.78%				
P 214.914†	1172.0	2275.5 µg/L	241.44	2275.5 ppb	241.44 10.61%
QC value within limits for P 214.914	Recovery = 91.02%				
Pb 220.353†	1922.5	467.49 µg/L	43.705	467.49 ppb	43.705 9.35%
QC value within limits for Pb 220.353	Recovery = 93.50%				
S 181.975 Axial†	224.0	928.89 µg/L	72.531	928.89 ppb	72.531 7.81%
QC value within limits for S 181.975 Axial	Recovery = 92.89%				
Sb 206.836†	505.1	465.58 µg/L	48.696	465.58 ppb	48.696 10.46%
QC value within limits for Sb 206.836	Recovery = 93.12%				
Se 196.026†	343.6	490.31 µg/L	41.963	490.31 ppb	41.963 8.56%
QC value within limits for Se 196.026	Recovery = 98.06%				
SiO2†	25908.1	5113.9 µg/L	245.09	5113.9 ppb	245.09 4.79%
QC value within limits for SiO2	Recovery = 95.63%				
Si 251.611†	31481.7	2393.3 µg/L	116.35	2393.3 ppb	116.35 4.86%
QC value within limits for Si 251.611	Recovery = 95.73%				
Sn 189.927†	1112.5	469.20 µg/L	57.103	469.20 ppb	57.103 12.17%
QC value within limits for Sn 189.927	Recovery = 93.84%				
Sr 421.552†	50894.0	469.50 µg/L	2.316	469.50 ppb	2.316 0.49%
QC value within limits for Sr 421.552	Recovery = 93.90%				
Ti 334.940†	212809.0	470.47 µg/L	22.126	470.47 ppb	22.126 4.70%
QC value within limits for Ti 334.940	Recovery = 94.09%				
Tl 190.801†	364.0	478.44 µg/L	30.031	478.44 ppb	30.031 6.28%
QC value within limits for Tl 190.801	Recovery = 95.69%				
U 409.014†	5664.5	469.66 µg/L	33.698	469.66 ppb	33.698 7.17%
QC value within limits for U 409.014	Recovery = 93.93%				
V 292.402†	47952.1	473.05 µg/L	33.659	473.05 ppb	33.659 7.12%
QC value within limits for V 292.402	Recovery = 94.61%				
Zn 213.857†	20275.5	472.34 µg/L	30.816	472.34 ppb	30.816 6.52%
QC value within limits for Zn 213.857	Recovery = 94.47%				

All analyte(s) passed QC.

Sequence No.: 40

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 23:41:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57547.6	57547.6	102 %		23:42:23
1	Al 396.153Radial†	-1.4	-8.7	-6.0778 µg/L	-6.0778 ppb	23:42:23
1	Ca 317.933Radial†	191.7	-23.1	-19.737 µg/L	-19.737 ppb	23:42:44
1	Fe 238.204 Radial†	21.1	4.1	32.654 µg/L	32.654 ppb	23:42:44
1	K 766.490 Radial†	165.3	-2.7	-1.7690 µg/L	-1.7690 ppb	23:42:23
1	Mg 279.077 IEC†	11.7	-1.3	-11.537 µg/L	-11.537 ppb	23:42:44
1	Na 589.592 Radial†	440.0	-40.2	-12.347 µg/L	-12.347 ppb	23:42:23
1	Sr 421.552†	45.4	15.8	0.1455 µg/L	0.1455 ppb	23:42:23
1	Sc 361.383	2025376.1	2025376.1	103.17 %		23:43:46
1	Y 371.029	1400619.9	1400619.9	103.54 %		23:43:46
1	Ag 328.068†	-387.9	25.6	0.1905 µg/L	0.1905 ppb	23:43:52
1	As 188.979†	3.0	3.4	6.1195 µg/L	6.1195 ppb	23:44:12
1	B 249.677†	384.0	-11.9	-0.5018 µg/L	-0.5018 ppb	23:44:12
1	Ba 233.527†	-6.8	10.5	0.2521 µg/L	0.2521 ppb	23:44:12
1	Be 313.107†	-2612.9	323.1	0.1915 µg/L	0.1915 ppb	23:43:52
1	Cd 226.502†	-141.9	4.1	0.0989 µg/L	0.0989 ppb	23:44:12
1	Co 228.616†	3.8	1.7	0.0784 µg/L	0.0784 ppb	23:44:12
1	Cr 267.716†	-41.3	10.3	0.2069 µg/L	0.2069 ppb	23:43:52
1	Cu 324.752†	2636.8	12.0	0.0831 µg/L	0.0831 ppb	23:43:52
1	Mn 257.610†	-183.1	78.6	0.2509 µg/L	0.2509 ppb	23:44:12
1	Mo 202.031†	1.9	7.2	0.7037 µg/L	0.7037 ppb	23:44:12
1	Ni 231.604†	312.1	-9.8	-0.4894 µg/L	-0.4894 ppb	23:44:12
1	P 214.914†	15.4	-0.4	-0.8055 µg/L	-0.8055 ppb	23:44:12
1	Pb 220.353†	81.0	-12.4	-3.0222 µg/L	-3.0222 ppb	23:44:12
1	S 181.975 Axial†	19.0	-0.6	-2.3481 µg/L	-2.3481 ppb	23:44:12
1	Sb 206.836†	24.9	1.6	1.5059 µg/L	1.5059 ppb	23:44:12
1	Se 196.026†	12.4	-7.3	-10.123 µg/L	-10.123 ppb	23:44:12
1	SiO2†	1526.4	87.9	17.344 µg/L	17.344 ppb	23:43:52
1	Si 251.611†	435.0	111.0	8.4402 µg/L	8.4402 ppb	23:44:12
1	Sn 189.927†	-0.2	-0.5	-0.2289 µg/L	-0.2289 ppb	23:44:12
1	Ti 334.940†	503.8	313.2	0.6936 µg/L	0.6936 ppb	23:43:52
1	Tl 190.801†	-22.9	0.2	0.2896 µg/L	0.2896 ppb	23:44:12
1	U 409.014†	-102.1	-21.9	-1.8209 µg/L	-1.8209 ppb	23:43:52
1	V 292.402†	-63.4	-16.7	-0.1546 µg/L	-0.1546 ppb	23:43:52
1	Zn 213.857†	538.6	-12.3	-0.2886 µg/L	-0.2886 ppb	23:44:12
2	Sc RADIAL	57798.1	57798.1	102 %		23:42:49
2	Al 396.153Radial†	5.4	-2.1	-1.4497 µg/L	-1.4497 ppb	23:42:49
2	Ca 317.933Radial†	194.8	-20.8	-17.777 µg/L	-17.777 ppb	23:43:10
2	Fe 238.204 Radial†	20.3	3.3	25.779 µg/L	25.779 ppb	23:43:10
2	K 766.490 Radial†	162.9	-5.7	-3.7508 µg/L	-3.7508 ppb	23:42:49
2	Mg 279.077 IEC†	8.4	-4.6	-41.335 µg/L	-41.335 ppb	23:43:10
2	Na 589.592 Radial†	457.2	-25.3	-7.7599 µg/L	-7.7599 ppb	23:42:49
2	Sr 421.552†	36.3	6.7	0.0620 µg/L	0.0620 ppb	23:42:49
2	Sc 361.383	2035896.6	2035896.6	103.71 %		23:44:18
2	Y 371.029	1407783.4	1407783.4	104.07 %		23:44:18
2	Ag 328.068†	-402.1	13.9	0.1050 µg/L	0.1050 ppb	23:44:24
2	As 188.979†	-1.1	-0.6	-1.0482 µg/L	-1.0482 ppb	23:44:44
2	B 249.677†	374.8	-22.8	-0.9407 µg/L	-0.9407 ppb	23:44:44
2	Ba 233.527†	-9.4	8.0	0.1913 µg/L	0.1913 ppb	23:44:44
2	Be 313.107†	-2792.0	163.5	0.0968 µg/L	0.0968 ppb	23:44:24
2	Cd 226.502†	-137.1	9.5	0.2331 µg/L	0.2331 ppb	23:44:44
2	Co 228.616†	1.5	-0.5	-0.0215 µg/L	-0.0215 ppb	23:44:44
2	Cr 267.716†	-40.1	11.7	0.2356 µg/L	0.2356 ppb	23:44:24
2	Cu 324.752†	2541.9	-92.7	-0.6013 µg/L	-0.6013 ppb	23:44:24
2	Mn 257.610†	-190.3	72.5	0.2320 µg/L	0.2320 ppb	23:44:44
2	Mo 202.031†	5.7	10.8	1.0589 µg/L	1.0589 ppb	23:44:44
2	Ni 231.604†	305.7	-17.6	-0.8764 µg/L	-0.8764 ppb	23:44:44
2	P 214.914†	12.5	-3.3	-6.5291 µg/L	-6.5291 ppb	23:44:44
2	Pb 220.353†	85.8	-8.2	-1.9875 µg/L	-1.9875 ppb	23:44:44

2	S 181.975 Axial†	16.3	-3.2	-13.230 µg/L	-13.230 ppb	23:44:44
2	Sb 206.836†	26.4	3.0	2.7276 µg/L	2.7276 ppb	23:44:44
2	Se 196.026†	20.4	0.4	0.6560 µg/L	0.6560 ppb	23:44:44
2	SiO2†	1530.3	84.0	16.587 µg/L	16.587 ppb	23:44:24
2	Si 251.611†	449.2	122.5	9.3160 µg/L	9.3160 ppb	23:44:44
2	Sn 189.927†	-1.2	-1.5	-0.6475 µg/L	-0.6475 ppb	23:44:44
2	Ti 334.940†	469.3	277.5	0.6169 µg/L	0.6169 ppb	23:44:24
2	Tl 190.801†	-24.4	-1.2	-1.5053 µg/L	-1.5053 ppb	23:44:44
2	U 409.014†	-67.9	11.6	0.9594 µg/L	0.9594 ppb	23:44:24
2	V 292.402†	-41.5	4.7	0.0586 µg/L	0.0586 ppb	23:44:24
2	Zn 213.857†	546.7	-7.3	-0.1650 µg/L	-0.1650 ppb	23:44:44
3	Sc RADIAL	57486.1	57486.1	102 %		23:43:15
3	Al 396.153Radial†	2.0	-5.4	-3.7529 µg/L	-3.7529 ppb	23:43:15
3	Ca 317.933Radial†	200.6	-14.1	-12.036 µg/L	-12.036 ppb	23:43:35
3	Fe 238.204 Radial†	17.7	0.8	6.3556 µg/L	6.3556 ppb	23:43:35
3	K 766.490 Radial†	216.4	47.7	31.167 µg/L	31.167 ppb	23:43:15
3	Mg 279.077 IEC†	6.5	-6.4	-57.568 µg/L	-57.568 ppb	23:43:35
3	Na 589.592 Radial†	420.3	-59.2	-18.174 µg/L	-18.174 ppb	23:43:15
3	Sr 421.552†	30.1	0.8	0.0074 µg/L	0.0074 ppb	23:43:15
3	Sc 361.383	1964292.0	1964292.0	100.06 %		23:44:51
3	Y 371.029	1357553.0	1357553.0	100.35 %		23:44:51
3	Ag 328.068†	-383.4	18.4	0.1374 µg/L	0.1374 ppb	23:44:56
3	As 188.979†	-5.4	-5.0	-8.9160 µg/L	-8.9160 ppb	23:45:17
3	B 249.677†	373.9	-10.5	-0.4295 µg/L	-0.4295 ppb	23:45:17
3	Ba 233.527†	-7.1	10.0	0.2394 µg/L	0.2394 ppb	23:45:17
3	Be 313.107†	-2709.5	147.8	0.0874 µg/L	0.0874 ppb	23:44:56
3	Cd 226.502†	-142.4	-0.7	-0.0174 µg/L	-0.0174 ppb	23:45:17
3	Co 228.616†	-3.1	-5.1	-0.2307 µg/L	-0.2307 ppb	23:45:17
3	Cr 267.716†	-49.1	1.3	0.0253 µg/L	0.0253 ppb	23:44:56
3	Cu 324.752†	2593.7	48.4	0.3169 µg/L	0.3169 ppb	23:44:56
3	Mn 257.610†	-207.6	48.5	0.1551 µg/L	0.1551 ppb	23:45:17
3	Mo 202.031†	1.3	6.7	0.6547 µg/L	0.6547 ppb	23:45:17
3	Ni 231.604†	309.4	-3.1	-0.1565 µg/L	-0.1565 ppb	23:45:17
3	P 214.914†	5.6	-9.8	-19.330 µg/L	-19.330 ppb	23:45:17
3	Pb 220.353†	81.6	-9.4	-2.2754 µg/L	-2.2754 ppb	23:45:17
3	S 181.975 Axial†	12.5	-6.4	-26.518 µg/L	-26.518 ppb	23:45:17
3	Sb 206.836†	22.0	-0.5	-0.4249 µg/L	-0.4249 ppb	23:45:17
3	Se 196.026†	18.6	-0.7	-0.9267 µg/L	-0.9267 ppb	23:45:17
3	SiO2†	1531.7	139.2	27.479 µg/L	27.479 ppb	23:44:56
3	Si 251.611†	452.1	141.2	10.737 µg/L	10.737 ppb	23:45:17
3	Sn 189.927†	7.1	6.7	2.8200 µg/L	2.8200 ppb	23:45:17
3	Ti 334.940†	532.4	357.1	0.7943 µg/L	0.7943 ppb	23:44:56
3	Tl 190.801†	-22.2	0.2	0.2118 µg/L	0.2118 ppb	23:45:17
3	U 409.014†	-79.2	-2.0	-0.1697 µg/L	-0.1697 ppb	23:44:56
3	V 292.402†	-34.8	10.0	0.1029 µg/L	0.1029 ppb	23:44:56
3	Zn 213.857†	540.4	5.7	0.1371 µg/L	0.1371 ppb	23:45:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008521.6	102.31 %		1.969			1.92%
Sc RADIAL	57610.6	102 %		0.3			0.29%
Y 371.029	1388652.1	102.65 %		2.008			1.96%
Ag 328.068†	19.3	0.1443 µg/L		0.04319	0.1443 ppb	0.04319	29.93%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.4	-3.7601 µg/L		2.31405	-3.7601 ppb	2.31405	61.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.7	-1.2816 µg/L		7.52046	-1.2816 ppb	7.52046	586.80%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-15.0	-0.6240 µg/L		0.27664	-0.6240 ppb	0.27664	44.33%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	9.5	0.2276 µg/L		0.03206	0.2276 ppb	0.03206	14.09%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	211.5	0.1252 µg/L		0.05757	0.1252 ppb	0.05757	45.96%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-19.3	-16.516 µg/L		4.0022	-16.516 ppb	4.0022	24.23%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	4.3	0.1049 µg/L		0.12539	0.1049 ppb	0.12539	119.56%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-1.3	-0.0580 µg/L		0.15776	-0.0580 ppb	0.15776	272.20%

Cr	267.716†	7.8	0.1559 µg/L	0.11402	0.1559 ppb	0.11402	73.11%
	QC value within limits for Cr 267.716	Recovery = Not calculated					
Cu	324.752†	-10.7	-0.0671 µg/L	0.47717	-0.0671 ppb	0.47717	711.16%
	QC value within limits for Cu 324.752	Recovery = Not calculated					
Fe	238.204 Radial†	2.7	21.596 µg/L	13.6390	21.596 ppb	13.6390	63.15%
	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated					
K	766.490 Radial†	13.1	8.5489 µg/L	19.61253	8.5489 ppb	19.61253	229.41%
	QC value within limits for K 766.490 Radial	Recovery = Not calculated					
Mg	279.077 IEC†	-4.1	-36.813 µg/L	23.3462	-36.813 ppb	23.3462	63.42%
	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated					
Mn	257.610†	66.5	0.2127 µg/L	0.05073	0.2127 ppb	0.05073	23.85%
	QC value within limits for Mn 257.610	Recovery = Not calculated					
Mo	202.031†	8.2	0.8058 µg/L	0.22057	0.8058 ppb	0.22057	27.37%
	QC value within limits for Mo 202.031	Recovery = Not calculated					
Na	589.592 Radial†	-41.5	-12.761 µg/L	5.2196	-12.761 ppb	5.2196	40.90%
	QC value within limits for Na 589.592 Radial	Recovery = Not calculated					
Ni	231.604†	-10.2	-0.5074 µg/L	0.36031	-0.5074 ppb	0.36031	71.01%
	QC value within limits for Ni 231.604	Recovery = Not calculated					
P	214.914†	-4.5	-8.8883 µg/L	9.48496	-8.8883 ppb	9.48496	106.71%
	QC value within limits for P 214.914	Recovery = Not calculated					
Pb	220.353†	-10.0	-2.4284 µg/L	0.53406	-2.4284 ppb	0.53406	21.99%
	QC value within limits for Pb 220.353	Recovery = Not calculated					
S	181.975 Axial†	-3.4	-14.032 µg/L	12.1051	-14.032 ppb	12.1051	86.27%
	QC value within limits for S 181.975 Axial	Recovery = Not calculated					
Sb	206.836†	1.4	1.2695 µg/L	1.58945	1.2695 ppb	1.58945	125.20%
	QC value within limits for Sb 206.836	Recovery = Not calculated					
Se	196.026†	-2.5	-3.4645 µg/L	5.82027	-3.4645 ppb	5.82027	168.00%
	QC value within limits for Se 196.026	Recovery = Not calculated					
SiO2†		103.7	20.470 µg/L	6.0817	20.470 ppb	6.0817	29.71%
	QC value within limits for SiO2	Recovery = Not calculated					
Si	251.611†	124.9	9.4978 µg/L	1.15926	9.4978 ppb	1.15926	12.21%
	QC value within limits for Si 251.611	Recovery = Not calculated					
Sn	189.927†	1.6	0.6479 µg/L	1.89274	0.6479 ppb	1.89274	292.15%
	QC value within limits for Sn 189.927	Recovery = Not calculated					
Sr	421.552†	7.8	0.0716 µg/L	0.06954	0.0716 ppb	0.06954	97.07%
	QC value within limits for Sr 421.552	Recovery = Not calculated					
Ti	334.940†	315.9	0.7016 µg/L	0.08900	0.7016 ppb	0.08900	12.69%
	QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl	190.801†	-0.3	-0.3347 µg/L	1.01457	-0.3347 ppb	1.01457	303.15%
	QC value within limits for Tl 190.801	Recovery = Not calculated					
U	409.014†	-4.1	-0.3437 µg/L	1.39832	-0.3437 ppb	1.39832	406.81%
	QC value within limits for U 409.014	Recovery = Not calculated					
V	292.402†	-0.7	0.0023 µg/L	0.13766	0.0023 ppb	0.13766	>999.9%
	QC value within limits for V 292.402	Recovery = Not calculated					
Zn	213.857†	-4.6	-0.1055 µg/L	0.21899	-0.1055 ppb	0.21899	207.61%
	QC value within limits for Zn 213.857	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 00:11:19

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	58495.3	58495.3	104 %		00:11:57
1	Al 396.153Radial†	7275.8	7019.8	4872.8 µg/L	4872.8 ppb	00:11:57
1	Ca 317.933Radial†	6094.1	5674.5	4847.1 µg/L	4847.1 ppb	00:12:17
1	Fe 238.204 Radial†	674.0	634.4	5014.2 µg/L	5014.2 ppb	00:12:17
1	K 766.490 Radial†	7834.8	7402.0	4834.4 µg/L	4834.4 ppb	00:11:57
1	Mg 279.077 IEC†	587.5	554.6	4960.6 µg/L	4960.6 ppb	00:12:17
1	Na 589.592 Radial†	33367.7	31754.9	9753.3 µg/L	9753.3 ppb	00:11:57
1	Sr 421.552†	53573.5	51713.3	477.06 µg/L	477.06 ppb	00:11:57
1	Sc 361.383	2020504.2	2020504.2	102.92 %		00:13:20
1	Y 371.029	1392503.8	1392503.8	102.94 %		00:13:20
1	Ag 328.068†	67829.9	66305.1	494.76 µg/L	494.76 ppb	00:13:26
1	As 188.979†	291.8	283.9	507.92 µg/L	507.92 ppb	00:13:46
1	B 249.677†	12705.1	11960.1	485.66 µg/L	485.66 ppb	00:13:26
1	Ba 233.527†	21334.1	20745.3	498.93 µg/L	498.93 ppb	00:13:26
1	Be 313.107†	855250.3	833816.1	494.69 µg/L	494.69 ppb	00:13:20
1	Cd 226.502†	20577.0	20134.3	502.11 µg/L	502.11 ppb	00:13:26
1	Co 228.616†	11416.8	11090.6	501.70 µg/L	501.70 ppb	00:13:26
1	Cr 267.716†	25735.9	25055.4	503.56 µg/L	503.56 ppb	00:13:26
1	Cu 324.752†	80726.9	75890.5	496.07 µg/L	496.07 ppb	00:13:26
1	Mn 257.610†	165547.7	161102.0	504.96 µg/L	504.96 ppb	00:13:20
1	Mo 202.031†	5395.3	5247.4	514.05 µg/L	514.05 ppb	00:13:46
1	Ni 231.604†	10712.3	10095.7	502.74 µg/L	502.74 ppb	00:13:26
1	P 214.914†	1349.5	1295.8	2518.2 µg/L	2518.2 ppb	00:13:46
1	Pb 220.353†	2240.4	2085.9	507.24 µg/L	507.24 ppb	00:13:46
1	S 181.975 Axial†	268.4	241.8	1002.8 µg/L	1002.8 ppb	00:13:46
1	Sb 206.836†	592.4	553.1	510.01 µg/L	510.01 ppb	00:13:46
1	Se 196.026†	394.8	364.3	519.55 µg/L	519.55 ppb	00:13:46
1	SiO2†	29413.1	27186.2	5366.2 µg/L	5366.2 ppb	00:13:26
1	Si 251.611†	34213.2	32930.9	2503.5 µg/L	2503.5 ppb	00:13:26
1	Sn 189.927†	1263.6	1227.4	517.63 µg/L	517.63 ppb	00:13:46
1	Ti 334.940†	230295.2	223579.5	494.29 µg/L	494.29 ppb	00:13:20
1	Tl 190.801†	373.5	385.3	506.39 µg/L	506.39 ppb	00:13:46
1	U 409.014†	6182.0	6083.5	504.45 µg/L	504.45 ppb	00:13:26
1	V 292.402†	52430.3	50986.0	503.11 µg/L	503.11 ppb	00:13:26
1	Zn 213.857†	22695.0	21516.0	501.26 µg/L	501.26 ppb	00:13:26
2	Sc RADIAL	58164.1	58164.1	103 %		00:12:22
2	Al 396.153Radial†	7244.5	7029.4	4879.7 µg/L	4879.7 ppb	00:12:22
2	Ca 317.933Radial†	6067.7	5682.4	4853.7 µg/L	4853.7 ppb	00:12:43
2	Fe 238.204 Radial†	667.4	631.7	4992.7 µg/L	4992.7 ppb	00:12:43
2	K 766.490 Radial†	7786.9	7398.6	4832.1 µg/L	4832.1 ppb	00:12:22
2	Mg 279.077 IEC†	580.9	551.4	4931.8 µg/L	4931.8 ppb	00:12:43
2	Na 589.592 Radial†	33199.0	31774.5	9759.3 µg/L	9759.3 ppb	00:12:22
2	Sr 421.552†	53351.0	51791.8	477.79 µg/L	477.79 ppb	00:12:22
2	Sc 361.383	2017307.7	2017307.7	102.76 %		00:13:54
2	Y 371.029	1389972.7	1389972.7	102.75 %		00:13:54
2	Ag 328.068†	67617.4	66202.7	493.99 µg/L	493.99 ppb	00:13:59
2	As 188.979†	286.9	279.6	500.24 µg/L	500.24 ppb	00:14:20
2	B 249.677†	12631.0	11907.6	483.52 µg/L	483.52 ppb	00:13:59
2	Ba 233.527†	21192.2	20640.0	496.40 µg/L	496.40 ppb	00:13:59
2	Be 313.107†	854328.0	834235.2	494.93 µg/L	494.93 ppb	00:13:54
2	Cd 226.502†	20477.0	20068.6	500.47 µg/L	500.47 ppb	00:13:59
2	Co 228.616†	11357.5	11050.5	499.87 µg/L	499.87 ppb	00:13:59
2	Cr 267.716†	25604.8	24967.4	501.79 µg/L	501.79 ppb	00:13:59
2	Cu 324.752†	80320.9	75619.6	494.30 µg/L	494.30 ppb	00:13:59
2	Mn 257.610†	165128.0	160948.4	504.48 µg/L	504.48 ppb	00:13:54
2	Mo 202.031†	5230.2	5095.1	499.13 µg/L	499.13 ppb	00:14:20
2	Ni 231.604†	10662.1	10063.4	501.12 µg/L	501.12 ppb	00:13:59
2	P 214.914†	1301.8	1251.5	2430.4 µg/L	2430.4 ppb	00:14:20
2	Pb 220.353†	2192.9	2043.0	496.80 µg/L	496.80 ppb	00:14:20

2	S 181.975 Axial†	268.0	241.9	1003.0 µg/L	1003.0 ppb	00:14:20
2	Sb 206.836†	578.4	540.3	498.09 µg/L	498.09 ppb	00:14:20
2	Se 196.026†	399.2	369.2	526.33 µg/L	526.33 ppb	00:14:20
2	SiO2†	29319.7	27140.6	5357.2 µg/L	5357.2 ppb	00:13:59
2	Si 251.611†	34159.9	32931.7	2503.5 µg/L	2503.5 ppb	00:13:59
2	Sn 189.927†	1221.8	1188.6	501.28 µg/L	501.28 ppb	00:14:20
2	Ti 334.940†	230062.0	223707.1	494.58 µg/L	494.58 ppb	00:13:54
2	Tl 190.801†	373.6	386.0	507.26 µg/L	507.26 ppb	00:14:20
2	U 409.014†	6125.2	6037.8	500.65 µg/L	500.65 ppb	00:13:59
2	V 292.402†	52229.4	50871.2	501.86 µg/L	501.86 ppb	00:13:59
2	Zn 213.857†	22546.9	21406.9	498.71 µg/L	498.71 ppb	00:13:59
3	Sc RADIAL	58068.4	58068.4	103 %		00:12:48
3	Al 396.153Radial†	7248.7	7045.1	4892.5 µg/L	4892.5 ppb	00:12:48
3	Ca 317.933Radial†	6088.4	5712.2	4879.3 µg/L	4879.3 ppb	00:13:09
3	Fe 238.204 Radial†	668.4	633.7	5007.6 µg/L	5007.6 ppb	00:13:09
3	K 766.490 Radial†	7806.9	7430.5	4853.0 µg/L	4853.0 ppb	00:12:48
3	Mg 279.077 IEC†	584.4	555.8	4969.8 µg/L	4969.8 ppb	00:13:09
3	Na 589.592 Radial†	33245.1	31872.5	9789.4 µg/L	9789.4 ppb	00:12:48
3	Sr 421.552†	53412.1	51936.7	479.12 µg/L	479.12 ppb	00:12:48
3	Sc 361.383	2011218.9	2011218.9	102.45 %		00:14:27
3	Y 371.029	1385879.0	1385879.0	102.45 %		00:14:27
3	Ag 328.068†	62228.2	61141.6	456.06 µg/L	456.06 ppb	00:14:32
3	As 188.979†	237.7	232.5	415.86 µg/L	415.86 ppb	00:14:53
3	B 249.677†	11569.4	10908.5	442.67 µg/L	442.67 ppb	00:14:32
3	Ba 233.527†	18816.1	18383.2	442.10 µg/L	442.10 ppb	00:14:32
3	Be 313.107†	768494.1	752971.0	446.72 µg/L	446.72 ppb	00:14:27
3	Cd 226.502†	18036.8	17747.1	442.50 µg/L	442.50 ppb	00:14:32
3	Co 228.616†	9906.3	9667.5	437.26 µg/L	437.26 ppb	00:14:32
3	Cr 267.716†	21624.7	21157.9	425.23 µg/L	425.23 ppb	00:14:32
3	Cu 324.752†	70588.2	66356.3	433.84 µg/L	433.84 ppb	00:14:32
3	Mn 257.610†	149342.5	146027.0	457.75 µg/L	457.75 ppb	00:14:27
3	Mo 202.031†	4263.9	4167.3	408.28 µg/L	408.28 ppb	00:14:53
3	Ni 231.604†	9345.6	8809.8	438.71 µg/L	438.71 ppb	00:14:32
3	P 214.914†	1086.2	1044.9	2026.3 µg/L	2026.3 ppb	00:14:53
3	Pb 220.353†	1863.8	1728.2	420.19 µg/L	420.19 ppb	00:14:53
3	S 181.975 Axial†	229.4	205.0	850.21 µg/L	850.21 ppb	00:14:53
3	Sb 206.836†	484.1	450.0	414.58 µg/L	414.58 ppb	00:14:53
3	Se 196.026†	338.7	311.3	445.02 µg/L	445.02 ppb	00:14:53
3	SiO2†	26542.8	24516.4	4839.2 µg/L	4839.2 ppb	00:14:32
3	Si 251.611†	30699.8	29655.0	2254.4 µg/L	2254.4 ppb	00:14:32
3	Sn 189.927†	978.7	954.9	402.73 µg/L	402.73 ppb	00:14:53
3	Ti 334.940†	205585.5	200493.8	443.22 µg/L	443.22 ppb	00:14:27
3	Tl 190.801†	326.8	341.4	448.83 µg/L	448.83 ppb	00:14:53
3	U 409.014†	5206.1	5158.7	427.62 µg/L	427.62 ppb	00:14:32
3	V 292.402†	45148.9	44113.9	435.06 µg/L	435.06 ppb	00:14:32
3	Zn 213.857†	19811.4	18803.2	438.00 µg/L	438.00 ppb	00:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2016343.6	102.71 %	0.240			0.23%
Sc RADIAL	58242.6	103 %	0.4			0.38%
Y 371.029	1389451.8	102.71 %	0.247			0.24%
Ag 328.068†	64549.8	481.60 µg/L	22.120	481.60 ppb	22.120	4.59%
QC value within limits for Ag 328.068 Recovery = 96.32%						
Al 396.153Radial†	7031.4	4881.7 µg/L	10.03	4881.7 ppb	10.03	0.21%
QC value within limits for Al 396.153Radial Recovery = 97.63%						
As 188.979†	265.3	474.68 µg/L	51.082	474.68 ppb	51.082	10.76%
QC value within limits for As 188.979 Recovery = 94.94%						
B 249.677†	11592.1	470.62 µg/L	24.223	470.62 ppb	24.223	5.15%
QC value within limits for B 249.677 Recovery = 94.12%						
Ba 233.527†	19922.8	479.15 µg/L	32.105	479.15 ppb	32.105	6.70%
QC value within limits for Ba 233.527 Recovery = 95.83%						
Be 313.107†	807007.4	478.78 µg/L	27.763	478.78 ppb	27.763	5.80%
QC value within limits for Be 313.107 Recovery = 95.76%						
Ca 317.933Radial†	5689.7	4860.0 µg/L	17.00	4860.0 ppb	17.00	0.35%
QC value within limits for Ca 317.933Radial Recovery = 97.20%						
Cd 226.502†	19316.7	481.69 µg/L	33.948	481.69 ppb	33.948	7.05%
QC value within limits for Cd 226.502 Recovery = 96.34%						
Co 228.616†	10602.9	479.61 µg/L	36.687	479.61 ppb	36.687	7.65%

Cr	267.716†	23726.9	476.86 µg/L	44.718	9.38%
QC value within limits for Co 228.616 Recovery = 95.92%					
Cu	324.752†	72622.1	474.73 µg/L	35.431	7.46%
QC value within limits for Cu 324.752 Recovery = 94.95%					
Fe	238.204 Radial†	633.3	5004.8 µg/L	11.00	0.22%
QC value within limits for Fe 238.204 Radial Recovery = 100.10%					
K	766.490 Radial†	7410.4	4839.8 µg/L	11.44	0.24%
QC value within limits for K 766.490 Radial Recovery = 96.80%					
Mg	279.077 IEC†	553.9	4954.1 µg/L	19.83	0.40%
QC value within limits for Mg 279.077 IEC Recovery = 99.08%					
Mn	257.610†	156025.8	489.06 µg/L	27.118	5.54%
QC value within limits for Mn 257.610 Recovery = 97.81%					
Mo	202.031†	4836.6	473.82 µg/L	57.249	12.08%
QC value within limits for Mo 202.031 Recovery = 94.76%					
Na	589.592 Radial†	31800.6	9767.3 µg/L	19.36	0.20%
QC value within limits for Na 589.592 Radial Recovery = 97.67%					
Ni	231.604†	9656.3	480.86 µg/L	36.510	7.59%
QC value within limits for Ni 231.604 Recovery = 96.17%					
P	214.914†	1197.4	2325.0 µg/L	262.35	11.28%
QC value within limits for P 214.914 Recovery = 93.00%					
Pb	220.353†	1952.4	474.75 µg/L	47.533	10.01%
QC value within limits for Pb 220.353 Recovery = 94.95%					
S	181.975 Axial†	229.6	952.01 µg/L	88.159	9.26%
QC value within limits for S 181.975 Axial Recovery = 95.20%					
Sb	206.836†	514.5	474.22 µg/L	51.996	10.96%
QC value within limits for Sb 206.836 Recovery = 94.84%					
Se	196.026†	348.2	496.97 µg/L	45.117	9.08%
QC value within limits for Se 196.026 Recovery = 99.39%					
SiO2†		26281.1	5187.5 µg/L	301.68	5.82%
QC value within limits for SiO2 Recovery = 97.01%					
Si	251.611†	31839.2	2420.5 µg/L	143.80	5.94%
QC value within limits for Si 251.611 Recovery = 96.82%					
Sn	189.927†	1123.6	473.88 µg/L	62.160	13.12%
QC value within limits for Sn 189.927 Recovery = 94.78%					
Sr	421.552†	51813.9	477.99 µg/L	1.046	0.22%
QC value within limits for Sr 421.552 Recovery = 95.60%					
Ti	334.940†	215926.8	477.36 µg/L	29.568	6.19%
QC value within limits for Ti 334.940 Recovery = 95.47%					
Tl	190.801†	370.9	487.50 µg/L	33.487	6.87%
QC value within limits for Tl 190.801 Recovery = 97.50%					
U	409.014†	5760.0	477.57 µg/L	43.307	9.07%
QC value within limits for U 409.014 Recovery = 95.51%					
V	292.402†	48657.0	480.01 µg/L	38.933	8.11%
QC value within limits for V 292.402 Recovery = 96.00%					
Zn	213.857†	20575.4	479.32 µg/L	35.812	7.47%
QC value within limits for Zn 213.857 Recovery = 95.86%					

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 00:15:03

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	57056.3	57056.3	101 %		00:15:35
1	Al 396.153Radial†	-5.7	-13.0	-9.0953 µg/L	-9.0953 ppb	00:15:35
1	Ca 317.933Radial†	199.5	-13.7	-11.700 µg/L	-11.700 ppb	00:15:56
1	Fe 238.204 Radial†	14.5	-2.2	-17.610 µg/L	-17.610 ppb	00:15:56
1	K 766.490 Radial†	191.3	24.5	15.994 µg/L	15.994 ppb	00:15:35
1	Mg 279.077 IEC†	9.0	-4.0	-35.339 µg/L	-35.339 ppb	00:15:56
1	Na 589.592 Radial†	412.2	-64.1	-19.680 µg/L	-19.680 ppb	00:15:35
1	Sr 421.552†	75.5	46.0	0.4243 µg/L	0.4243 ppb	00:15:35
1	Sc 361.383	2008840.8	2008840.8	102.33 %		00:16:58
1	Y 371.029	1388623.1	1388623.1	102.65 %		00:16:58
1	Ag 328.068†	-495.1	-82.3	-0.6122 µg/L	-0.6122 ppb	00:17:03
1	As 188.979†	1.4	1.8	3.2409 µg/L	3.2409 ppb	00:17:24
1	B 249.677†	357.5	-34.8	-1.4084 µg/L	-1.4084 ppb	00:17:24
1	Ba 233.527†	-3.8	13.4	0.3201 µg/L	0.3201 ppb	00:17:24
1	Be 313.107†	-2686.9	229.9	0.1363 µg/L	0.1363 ppb	00:17:03
1	Cd 226.502†	-151.5	-6.3	-0.1567 µg/L	-0.1567 ppb	00:17:24
1	Co 228.616†	6.7	4.7	0.2106 µg/L	0.2106 ppb	00:17:24
1	Cr 267.716†	-69.9	-17.9	-0.3598 µg/L	-0.3598 ppb	00:17:03
1	Cu 324.752†	2549.4	-52.3	-0.3440 µg/L	-0.3440 ppb	00:17:03
1	Mn 257.610†	-144.8	114.5	0.3577 µg/L	0.3577 ppb	00:17:24
1	Mo 202.031†	5.0	10.2	0.9987 µg/L	0.9987 ppb	00:17:24
1	Ni 231.604†	311.5	-7.9	-0.3967 µg/L	-0.3967 ppb	00:17:24
1	P 214.914†	18.1	2.3	4.6226 µg/L	4.6226 ppb	00:17:24
1	Pb 220.353†	83.5	-9.3	-2.2681 µg/L	-2.2681 ppb	00:17:24
1	S 181.975 Axial†	18.6	-0.8	-3.3405 µg/L	-3.3405 ppb	00:17:24
1	Sb 206.836†	18.3	-4.6	-4.2360 µg/L	-4.2360 ppb	00:17:24
1	Se 196.026†	16.5	-3.2	-4.5054 µg/L	-4.5054 ppb	00:17:24
1	SiO2†	1509.7	83.8	16.538 µg/L	16.538 ppb	00:17:03
1	Si 251.611†	412.2	92.2	7.0101 µg/L	7.0101 ppb	00:17:24
1	Sn 189.927†	-2.7	-3.0	-1.2771 µg/L	-1.2771 ppb	00:17:24
1	Ti 334.940†	427.2	242.5	0.5390 µg/L	0.5390 ppb	00:17:03
1	Tl 190.801†	-23.5	-0.6	-0.7502 µg/L	-0.7502 ppb	00:17:24
1	U 409.014†	-41.7	36.3	3.0222 µg/L	3.0222 ppb	00:17:03
1	V 292.402†	-73.7	-27.3	-0.2578 µg/L	-0.2578 ppb	00:17:03
1	Zn 213.857†	537.9	-8.8	-0.2008 µg/L	-0.2008 ppb	00:17:24
2	Sc RADIAL	56628.6	56628.6	100 %		00:16:01
2	Al 396.153Radial†	-23.8	-31.1	-21.684 µg/L	-21.684 ppb	00:16:01
2	Ca 317.933Radial†	190.0	-21.7	-18.526 µg/L	-18.526 ppb	00:16:22
2	Fe 238.204 Radial†	16.6	0.0	0.0975 µg/L	0.0975 ppb	00:16:22
2	K 766.490 Radial†	188.5	23.1	15.080 µg/L	15.080 ppb	00:16:01
2	Mg 279.077 IEC†	14.7	1.8	16.142 µg/L	16.142 ppb	00:16:22
2	Na 589.592 Radial†	445.7	-27.5	-8.4523 µg/L	-8.4523 ppb	00:16:01
2	Sr 421.552†	15.4	-13.4	-0.1235 µg/L	-0.1235 ppb	00:16:01
2	Sc 361.383	1991140.0	1991140.0	101.43 %		00:17:30
2	Y 371.029	1378067.0	1378067.0	101.87 %		00:17:30
2	Ag 328.068†	-374.9	32.0	0.2384 µg/L	0.2384 ppb	00:17:36
2	As 188.979†	-3.9	-3.4	-6.0385 µg/L	-6.0385 ppb	00:17:56
2	B 249.677†	366.4	-22.9	-0.9328 µg/L	-0.9328 ppb	00:17:56
2	Ba 233.527†	-6.8	10.4	0.2489 µg/L	0.2489 ppb	00:17:56
2	Be 313.107†	-2761.1	133.5	0.0790 µg/L	0.0790 ppb	00:17:36
2	Cd 226.502†	-138.2	5.4	0.1343 µg/L	0.1343 ppb	00:17:56
2	Co 228.616†	14.9	12.8	0.5784 µg/L	0.5784 ppb	00:17:56
2	Cr 267.716†	-45.7	5.3	0.1061 µg/L	0.1061 ppb	00:17:36
2	Cu 324.752†	2564.5	-15.4	-0.1003 µg/L	-0.1003 ppb	00:17:36
2	Mn 257.610†	-172.2	86.3	0.2696 µg/L	0.2696 ppb	00:17:56
2	Mo 202.031†	4.0	9.3	0.9125 µg/L	0.9125 ppb	00:17:56
2	Ni 231.604†	306.1	-10.5	-0.5258 µg/L	-0.5258 ppb	00:17:56
2	P 214.914†	17.2	1.7	3.2781 µg/L	3.2781 ppb	00:17:56
2	Pb 220.353†	79.4	-12.7	-3.0846 µg/L	-3.0846 ppb	00:17:56

2	S 181.975 Axial†	22.9	3.7	15.206 µg/L	15.206 ppb	00:17:56
2	Sb 206.836†	25.4	2.6	2.3565 µg/L	2.3565 ppb	00:17:56
2	Se 196.026†	16.1	-3.4	-4.8007 µg/L	-4.8007 ppb	00:17:56
2	SiO2†	1536.5	123.4	24.348 µg/L	24.348 ppb	00:17:36
2	Si 251.611†	406.5	90.2	6.8569 µg/L	6.8569 ppb	00:17:56
2	Sn 189.927†	-2.0	-2.3	-0.9755 µg/L	-0.9755 ppb	00:17:56
2	Ti 334.940†	398.9	218.2	0.4812 µg/L	0.4812 ppb	00:17:36
2	Tl 190.801†	-17.7	5.0	6.4456 µg/L	6.4456 ppb	00:17:56
2	U 409.014†	-11.0	66.2	5.5016 µg/L	5.5016 ppb	00:17:36
2	V 292.402†	-26.4	18.7	0.1952 µg/L	0.1952 ppb	00:17:36
2	Zn 213.857†	540.6	-1.4	-0.0317 µg/L	-0.0317 ppb	00:17:56
3	Sc RADIAL	56386.6	56386.6	99.8 %		00:16:27
3	Al 396.153Radial†	-18.3	-25.7	-17.898 µg/L	-17.898 ppb	00:16:27
3	Ca 317.933Radial†	197.1	-13.7	-11.741 µg/L	-11.741 ppb	00:16:48
3	Fe 238.204 Radial†	19.4	2.9	22.756 µg/L	22.756 ppb	00:16:48
3	K 766.490 Radial†	199.6	35.1	22.894 µg/L	22.894 ppb	00:16:27
3	Mg 279.077 IEC†	15.6	2.8	24.950 µg/L	24.950 ppb	00:16:48
3	Na 589.592 Radial†	462.1	-9.2	-2.8236 µg/L	-2.8236 ppb	00:16:27
3	Sr 421.552†	51.7	23.0	0.2125 µg/L	0.2125 ppb	00:16:27
3	Sc 361.383	1995333.6	1995333.6	101.64 %		00:18:02
3	Y 371.029	1380514.8	1380514.8	102.05 %		00:18:02
3	Ag 328.068†	-373.2	34.4	0.2561 µg/L	0.2561 ppb	00:18:08
3	As 188.979†	-0.3	0.2	0.3744 µg/L	0.3744 ppb	00:18:28
3	B 249.677†	338.5	-51.1	-2.0934 µg/L	-2.0934 ppb	00:18:28
3	Ba 233.527†	-17.0	0.3	0.0083 µg/L	0.0083 ppb	00:18:28
3	Be 313.107†	-2731.8	168.0	0.0995 µg/L	0.0995 ppb	00:18:08
3	Cd 226.502†	-130.2	13.6	0.3366 µg/L	0.3366 ppb	00:18:28
3	Co 228.616†	7.4	5.3	0.2410 µg/L	0.2410 ppb	00:18:28
3	Cr 267.716†	-49.5	1.6	0.0327 µg/L	0.0327 ppb	00:18:08
3	Cu 324.752†	2599.8	14.1	0.0952 µg/L	0.0952 ppb	00:18:08
3	Mn 257.610†	-188.3	70.8	0.2236 µg/L	0.2236 ppb	00:18:28
3	Mo 202.031†	4.4	9.6	0.9457 µg/L	0.9457 ppb	00:18:28
3	Ni 231.604†	301.9	-15.3	-0.7614 µg/L	-0.7614 ppb	00:18:28
3	P 214.914†	17.4	1.7	3.4379 µg/L	3.4379 ppb	00:18:28
3	Pb 220.353†	92.5	0.1	0.0084 µg/L	0.0084 ppb	00:18:28
3	S 181.975 Axial†	14.4	-4.7	-19.657 µg/L	-19.657 ppb	00:18:28
3	Sb 206.836†	16.6	-6.2	-5.6848 µg/L	-5.6848 ppb	00:18:28
3	Se 196.026†	17.0	-2.6	-3.6602 µg/L	-3.6602 ppb	00:18:28
3	SiO2†	1524.8	108.6	21.436 µg/L	21.436 ppb	00:18:08
3	Si 251.611†	420.8	103.3	7.8556 µg/L	7.8556 ppb	00:18:28
3	Sn 189.927†	3.5	3.0	1.2790 µg/L	1.2790 ppb	00:18:28
3	Ti 334.940†	371.5	190.5	0.4192 µg/L	0.4192 ppb	00:18:08
3	Tl 190.801†	-23.3	-0.5	-0.6374 µg/L	-0.6374 ppb	00:18:28
3	U 409.014†	4.2	81.2	6.7421 µg/L	6.7421 ppb	00:18:08
3	V 292.402†	-47.4	-1.9	-0.0016 µg/L	-0.0016 ppb	00:18:08
3	Zn 213.857†	527.4	-15.5	-0.3632 µg/L	-0.3632 ppb	00:18:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1998438.2	101.80 %	0.471			0.46%
Sc RADIAL	56690.5	100 %	0.6			0.60%
Y 371.029	1382401.7	102.19 %	0.408			0.40%
Ag 328.068†	-5.3	-0.0392 µg/L	0.49630	-0.0392 ppb	0.49630	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-23.3	-16.226 µg/L	6.4588	-16.226 ppb	6.4588	39.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.5	-0.8077 µg/L	4.75129	-0.8077 ppb	4.75129	588.24%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-36.2	-1.4782 µg/L	0.58347	-1.4782 ppb	0.58347	39.47%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	8.0	0.1924 µg/L	0.16342	0.1924 ppb	0.16342	84.92%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	177.1	0.1049 µg/L	0.02898	0.1049 ppb	0.02898	27.62%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-16.4	-13.989 µg/L	3.9293	-13.989 ppb	3.9293	28.09%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.2	0.1047 µg/L	0.24795	0.1047 ppb	0.24795	236.74%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	7.6	0.3433 µg/L	0.20414	0.3433 ppb	0.20414	59.46%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-3.7	-0.0736 µg/L	0.25050	-0.0736 ppb	0.25050 340.13%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-17.9	-0.1164 µg/L	0.22003	-0.1164 ppb	0.22003 189.10%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.2	1.7476 µg/L	20.23351	1.7476 ppb	20.23351 >999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	27.5	17.989 µg/L	4.2723	17.989 ppb	4.2723 23.75%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.2	1.9176 µg/L	32.56432	1.9176 ppb	32.56432 >999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	90.5	0.2836 µg/L	0.06812	0.2836 ppb	0.06812 24.02%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	9.7	0.9523 µg/L	0.04345	0.9523 ppb	0.04345 4.56%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-33.6	-10.319 µg/L	8.5817	-10.319 ppb	8.5817 83.17%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-11.3	-0.5613 µg/L	0.18493	-0.5613 ppb	0.18493 32.95%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	1.9	3.7795 µg/L	0.73449	3.7795 ppb	0.73449 19.43%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-7.3	-1.7814 µg/L	1.60289	-1.7814 ppb	1.60289 89.98%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-0.6	-2.5970 µg/L	17.44338	-2.5970 ppb	17.44338 671.68%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-2.8	-2.5214 µg/L	4.28609	-2.5214 ppb	4.28609 169.99%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-3.1	-4.3221 µg/L	0.59194	-4.3221 ppb	0.59194 13.70%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	105.2	20.774 µg/L	3.9468	20.774 ppb	3.9468 19.00%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	95.2	7.2409 µg/L	0.53785	7.2409 ppb	0.53785 7.43%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.8	-0.3245 µg/L	1.39688	-0.3245 ppb	1.39688 430.43%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	18.5	0.1711 µg/L	0.27628	0.1711 ppb	0.27628 161.48%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	217.1	0.4798 µg/L	0.05992	0.4798 ppb	0.05992 12.49%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	1.3	1.6860 µg/L	4.12231	1.6860 ppb	4.12231 244.50%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	61.2	5.0886 µg/L	1.89405	5.0886 ppb	1.89405 37.22%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-3.5	-0.0214 µg/L	0.22712	-0.0214 ppb	0.22712 >999.9%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-8.6	-0.1986 µg/L	0.16575	-0.1986 ppb	0.16575 83.47%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 58
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/20/2010 00:47:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57680.8	57680.8	102 %		00:48:39
1	Al 396.153Radial†	7133.8	6979.9	4845.1 µg/L	4845.1 ppb	00:48:39
1	Ca 317.933Radial†	5914.0	5581.2	4767.4 µg/L	4767.4 ppb	00:48:59
1	Fe 238.204 Radial†	654.8	624.7	4937.8 µg/L	4937.8 ppb	00:48:59
1	K 766.490 Radial†	7645.5	7323.4	4783.0 µg/L	4783.0 ppb	00:48:39
1	Mg 279.077 IEC†	575.8	551.2	4930.2 µg/L	4930.2 ppb	00:48:59
1	Na 589.592 Radial†	32886.8	31738.9	9748.4 µg/L	9748.4 ppb	00:48:39
1	Sr 421.552†	52443.7	51337.3	473.59 µg/L	473.59 ppb	00:48:39
1	Sc 361.383	1998798.8	1998798.8	101.82 %		00:50:03
1	Y 371.029	1378207.5	1378207.5	101.88 %		00:50:03
1	Ag 328.068†	66637.6	65849.7	491.34 µg/L	491.34 ppb	00:50:09
1	As 188.979†	282.6	278.0	497.33 µg/L	497.33 ppb	00:50:29
1	B 249.677†	12419.9	11814.0	479.73 µg/L	479.73 ppb	00:50:09
1	Ba 233.527†	20853.3	20498.1	492.99 µg/L	492.99 ppb	00:50:09
1	Be 313.107†	838271.9	826164.3	490.15 µg/L	490.15 ppb	00:50:03
1	Cd 226.502†	20064.0	19847.5	494.95 µg/L	494.95 ppb	00:50:09
1	Co 228.616†	11129.1	10928.5	494.36 µg/L	494.36 ppb	00:50:09
1	Cr 267.716†	25151.7	24753.2	497.48 µg/L	497.48 ppb	00:50:09
1	Cu 324.752†	79271.1	75312.4	492.29 µg/L	492.29 ppb	00:50:09
1	Mn 257.610†	162448.2	159804.4	500.89 µg/L	500.89 ppb	00:50:03
1	Mo 202.031†	5294.5	5205.3	509.92 µg/L	509.92 ppb	00:50:29
1	Ni 231.604†	10454.5	9955.6	495.75 µg/L	495.75 ppb	00:50:09
1	P 214.914†	1305.3	1266.6	2460.9 µg/L	2460.9 ppb	00:50:29
1	Pb 220.353†	2196.1	2066.0	502.42 µg/L	502.42 ppb	00:50:29
1	S 181.975 Axial†	267.3	243.6	1010.3 µg/L	1010.3 ppb	00:50:29
1	Sb 206.836†	581.4	548.5	505.86 µg/L	505.86 ppb	00:50:29
1	Se 196.026†	385.1	358.9	511.83 µg/L	511.83 ppb	00:50:29
1	SiO2†	28708.0	26803.9	5290.7 µg/L	5290.7 ppb	00:50:09
1	Si 251.611†	33429.9	32522.5	2472.4 µg/L	2472.4 ppb	00:50:09
1	Sn 189.927†	1243.8	1221.2	515.04 µg/L	515.04 ppb	00:50:29
1	Ti 334.940†	226045.2	221835.2	490.44 µg/L	490.44 ppb	00:50:03
1	Tl 190.801†	368.0	383.9	504.49 µg/L	504.49 ppb	00:50:29
1	U 409.014†	6013.1	5982.8	496.10 µg/L	496.10 ppb	00:50:09
1	V 292.402†	51239.9	50370.0	497.04 µg/L	497.04 ppb	00:50:09
1	Zn 213.857†	22107.9	21178.9	493.39 µg/L	493.39 ppb	00:50:09
2	Sc RADIAL	57446.6	57446.6	102 %		00:49:05
2	Al 396.153Radial†	7123.3	6998.0	4858.0 µg/L	4858.0 ppb	00:49:05
2	Ca 317.933Radial†	5925.8	5616.4	4797.4 µg/L	4797.4 ppb	00:49:25
2	Fe 238.204 Radial†	661.1	633.6	5007.9 µg/L	5007.9 ppb	00:49:25
2	K 766.490 Radial†	7669.9	7377.9	4818.6 µg/L	4818.6 ppb	00:49:05
2	Mg 279.077 IEC†	576.8	554.4	4959.0 µg/L	4959.0 ppb	00:49:25
2	Na 589.592 Radial†	32906.4	31889.5	9794.6 µg/L	9794.6 ppb	00:49:05
2	Sr 421.552†	52430.7	51534.0	475.41 µg/L	475.41 ppb	00:49:05
2	Sc 361.383	2011817.0	2011817.0	102.48 %		00:50:36
2	Y 371.029	1386935.5	1386935.5	102.53 %		00:50:36
2	Ag 328.068†	66849.6	65633.1	489.73 µg/L	489.73 ppb	00:50:42
2	As 188.979†	282.7	276.3	494.28 µg/L	494.28 ppb	00:51:02
2	B 249.677†	12474.1	11788.0	478.63 µg/L	478.63 ppb	00:50:42
2	Ba 233.527†	20922.4	20433.0	491.42 µg/L	491.42 ppb	00:50:42
2	Be 313.107†	842885.5	825338.6	489.66 µg/L	489.66 ppb	00:50:36
2	Cd 226.502†	20129.6	19784.0	493.36 µg/L	493.36 ppb	00:50:42
2	Co 228.616†	11190.9	10918.1	493.88 µg/L	493.88 ppb	00:50:42
2	Cr 267.716†	25222.6	24662.5	495.66 µg/L	495.66 ppb	00:50:42
2	Cu 324.752†	79511.5	75043.1	490.54 µg/L	490.54 ppb	00:50:42
2	Mn 257.610†	163207.5	159513.0	499.98 µg/L	499.98 ppb	00:50:36
2	Mo 202.031†	5169.2	5049.4	494.66 µg/L	494.66 ppb	00:51:02
2	Ni 231.604†	10507.6	9940.9	495.03 µg/L	495.03 ppb	00:50:42
2	P 214.914†	1281.4	1235.1	2398.2 µg/L	2398.2 ppb	00:51:02
2	Pb 220.353†	2169.3	2025.8	492.61 µg/L	492.61 ppb	00:51:02

2	S 181.975 Axial†	262.8	237.5	984.82 µg/L	984.82 ppb	00:51:02
2	Sb 206.836†	574.2	537.8	495.81 µg/L	495.81 ppb	00:51:02
2	Se 196.026†	380.5	352.0	502.22 µg/L	502.22 ppb	00:51:02
2	SiO2†	28844.1	26754.4	5281.0 µg/L	5281.0 ppb	00:50:42
2	Si 251.611†	33597.6	32473.7	2468.7 µg/L	2468.7 ppb	00:50:42
2	Sn 189.927†	1203.8	1174.3	495.24 µg/L	495.24 ppb	00:51:02
2	Ti 334.940†	227246.5	221570.9	489.85 µg/L	489.85 ppb	00:50:36
2	Tl 190.801†	367.9	381.4	501.31 µg/L	501.31 ppb	00:51:02
2	U 409.014†	6070.9	6001.1	497.61 µg/L	497.61 ppb	00:50:42
2	V 292.402†	51518.3	50316.0	496.40 µg/L	496.40 ppb	00:50:42
2	Zn 213.857†	22203.3	21131.5	492.28 µg/L	492.28 ppb	00:50:42
3	Sc RADIAL	57389.7	57389.7	102 %		00:49:31
3	Al 396.153Radial†	7091.9	6974.1	4843.3 µg/L	4843.3 ppb	00:49:31
3	Ca 317.933Radial†	5913.0	5609.6	4791.6 µg/L	4791.6 ppb	00:49:51
3	Fe 238.204 Radial†	660.4	633.5	5005.4 µg/L	5005.4 ppb	00:49:51
3	K 766.490 Radial†	7625.7	7341.9	4795.1 µg/L	4795.1 ppb	00:49:31
3	Mg 279.077 IEC†	577.2	555.4	4965.8 µg/L	4965.8 ppb	00:49:51
3	Na 589.592 Radial†	32787.2	31804.2	9768.4 µg/L	9768.4 ppb	00:49:31
3	Sr 421.552†	52453.5	51607.5	476.09 µg/L	476.09 ppb	00:49:31
3	Sc 361.383	2005009.8	2005009.8	102.13 %		00:51:09
3	Y 371.029	1382509.8	1382509.8	102.20 %		00:51:09
3	Ag 328.068†	61434.7	60552.8	451.66 µg/L	451.66 ppb	00:51:15
3	As 188.979†	236.3	231.8	414.69 µg/L	414.69 ppb	00:51:35
3	B 249.677†	11353.7	10732.4	435.49 µg/L	435.49 ppb	00:51:15
3	Ba 233.527†	18464.6	18095.9	435.19 µg/L	435.19 ppb	00:51:15
3	Be 313.107†	758877.8	745878.5	442.52 µg/L	442.52 ppb	00:51:09
3	Cd 226.502†	17660.6	17433.4	434.67 µg/L	434.67 ppb	00:51:15
3	Co 228.616†	9736.6	9531.2	431.09 µg/L	431.09 ppb	00:51:15
3	Cr 267.716†	21236.0	20842.7	418.90 µg/L	418.90 ppb	00:51:15
3	Cu 324.752†	69572.6	65575.3	428.74 µg/L	428.74 ppb	00:51:15
3	Mn 257.610†	147391.1	144567.7	453.18 µg/L	453.18 ppb	00:51:09
3	Mo 202.031†	4191.8	4109.6	402.63 µg/L	402.63 ppb	00:51:35
3	Ni 231.604†	9146.6	8643.2	430.41 µg/L	430.41 ppb	00:51:15
3	P 214.914†	1064.5	1026.9	1991.2 µg/L	1991.2 ppb	00:51:35
3	Pb 220.353†	1834.2	1705.0	414.53 µg/L	414.53 ppb	00:51:35
3	S 181.975 Axial†	225.9	202.2	838.51 µg/L	838.51 ppb	00:51:35
3	Sb 206.836†	475.8	443.4	408.45 µg/L	408.45 ppb	00:51:35
3	Se 196.026†	322.7	296.7	424.53 µg/L	424.53 ppb	00:51:35
3	SiO2†	26010.4	24075.4	4752.2 µg/L	4752.2 ppb	00:51:15
3	Si 251.611†	30176.9	29235.7	2222.6 µg/L	2222.6 ppb	00:51:15
3	Sn 189.927†	963.9	943.4	397.88 µg/L	397.88 ppb	00:51:35
3	Ti 334.940†	203236.7	198815.5	439.51 µg/L	439.51 ppb	00:51:09
3	Tl 190.801†	315.2	331.0	435.27 µg/L	435.27 ppb	00:51:35
3	U 409.014†	5104.0	5074.4	420.62 µg/L	420.62 ppb	00:51:15
3	V 292.402†	44361.2	43479.1	428.81 µg/L	428.81 ppb	00:51:15
3	Zn 213.857†	19393.6	18454.0	429.85 µg/L	429.85 ppb	00:51:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2005208.6	102.14 %	0.332			0.32%
Sc RADIAL	57505.7	102 %	0.3			0.27%
Y 371.029	1382550.9	102.20 %	0.323			0.32%
Ag 328.068†	64011.9	477.58 µg/L	22.458	477.58 ppb	22.458	4.70%
QC value within limits for Ag 328.068 Recovery = 95.52%						
Al 396.153Radial†	6984.0	4848.8 µg/L	8.02	4848.8 ppb	8.02	0.17%
QC value within limits for Al 396.153Radial Recovery = 96.98%						
As 188.979†	262.0	468.77 µg/L	46.859	468.77 ppb	46.859	10.00%
QC value within limits for As 188.979 Recovery = 93.75%						
B 249.677†	11444.8	464.62 µg/L	25.234	464.62 ppb	25.234	5.43%
QC value within limits for B 249.677 Recovery = 92.92%						
Ba 233.527†	19675.7	473.20 µg/L	32.924	473.20 ppb	32.924	6.96%
QC value within limits for Ba 233.527 Recovery = 94.64%						
Be 313.107†	799127.1	474.11 µg/L	27.359	474.11 ppb	27.359	5.77%
QC value within limits for Be 313.107 Recovery = 94.82%						
Ca 317.933Radial†	5602.4	4785.5 µg/L	15.94	4785.5 ppb	15.94	0.33%
QC value within limits for Ca 317.933Radial Recovery = 95.71%						
Cd 226.502†	19021.6	474.33 µg/L	34.355	474.33 ppb	34.355	7.24%
QC value within limits for Cd 226.502 Recovery = 94.87%						
Co 228.616†	10459.3	473.11 µg/L	36.391	473.11 ppb	36.391	7.69%

Cr	267.716†	23419.4	470.68 µg/L	44.854	470.68 ppb	44.854	9.53%
Cu	324.752†	71976.9	470.52 µg/L	36.196	470.52 ppb	36.196	7.69%
Fe	238.204 Radial†	630.6	4983.7 µg/L	39.75	4983.7 ppb	39.75	0.80%
K	766.490 Radial†	7347.8	4798.9 µg/L	18.10	4798.9 ppb	18.10	0.38%
Mg	279.077 IEC†	553.6	4951.7 µg/L	18.91	4951.7 ppb	18.91	0.38%
Mn	257.610†	154628.4	484.69 µg/L	27.286	484.69 ppb	27.286	5.63%
Mo	202.031†	4788.1	469.07 µg/L	58.045	469.07 ppb	58.045	12.37%
Na	589.592 Radial†	31810.9	9770.5 µg/L	23.19	9770.5 ppb	23.19	0.24%
Ni	231.604†	9513.2	473.73 µg/L	37.519	473.73 ppb	37.519	7.92%
P	214.914†	1176.2	2283.4 µg/L	255.03	2283.4 ppb	255.03	11.17%
Pb	220.353†	1932.3	469.85 µg/L	48.159	469.85 ppb	48.159	10.25%
S	181.975 Axial†	227.8	944.55 µg/L	92.712	944.55 ppb	92.712	9.82%
Sb	206.836†	509.9	470.04 µg/L	53.574	470.04 ppb	53.574	11.40%
Se	196.026†	335.8	479.53 µg/L	47.869	479.53 ppb	47.869	9.98%
SiO2†		25877.9	5108.0 µg/L	308.17	5108.0 ppb	308.17	6.03%
Si	251.611†	31410.7	2387.9 µg/L	143.20	2387.9 ppb	143.20	6.00%
Sn	189.927†	1113.0	469.39 µg/L	62.710	469.39 ppb	62.710	13.36%
Sr	421.552†	51492.9	475.03 µg/L	1.289	475.03 ppb	1.289	0.27%
Ti	334.940†	214073.8	473.26 µg/L	29.235	473.26 ppb	29.235	6.18%
Tl	190.801†	365.4	480.35 µg/L	39.078	480.35 ppb	39.078	8.14%
U	409.014†	5686.1	471.44 µg/L	44.023	471.44 ppb	44.023	9.34%
V	292.402†	48055.1	474.09 µg/L	39.211	474.09 ppb	39.211	8.27%
Zn	213.857†	20254.8	471.84 µg/L	36.370	471.84 ppb	36.370	7.71%

QC value within limits for Co 228.616 Recovery = 94.62%
 QC value within limits for Cr 267.716 Recovery = 94.14%
 QC value within limits for Cu 324.752 Recovery = 94.10%
 QC value within limits for Fe 238.204 Radial Recovery = 99.67%
 QC value within limits for K 766.490 Radial Recovery = 95.98%
 QC value within limits for Mg 279.077 IEC Recovery = 99.03%
 QC value within limits for Mn 257.610 Recovery = 96.94%
 QC value within limits for Mo 202.031 Recovery = 93.81%
 QC value within limits for Na 589.592 Radial Recovery = 97.70%
 QC value within limits for Ni 231.604 Recovery = 94.75%
 QC value within limits for P 214.914 Recovery = 91.34%
 QC value within limits for Pb 220.353 Recovery = 93.97%
 QC value within limits for S 181.975 Axial Recovery = 94.45%
 QC value within limits for Sb 206.836 Recovery = 94.01%
 QC value within limits for Se 196.026 Recovery = 95.91%
 QC value within limits for SiO2 Recovery = 95.52%
 QC value within limits for Si 251.611 Recovery = 95.52%
 QC value within limits for Sn 189.927 Recovery = 93.88%
 QC value within limits for Sr 421.552 Recovery = 95.01%
 QC value within limits for Ti 334.940 Recovery = 94.65%
 QC value within limits for Tl 190.801 Recovery = 96.07%
 QC value within limits for U 409.014 Recovery = 94.29%
 QC value within limits for V 292.402 Recovery = 94.82%
 QC value within limits for Zn 213.857 Recovery = 94.37%

All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 00:51:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56488.2	56488.2	100.0 %		00:52:18
1	Al 396.153Radial†	-18.6	-26.0	-18.107 µg/L	-18.107 ppb	00:52:18
1	Ca 317.933Radial†	192.4	-18.9	-16.133 µg/L	-16.133 ppb	00:52:38
1	Fe 238.204 Radial†	16.4	-0.2	-1.6233 µg/L	-1.6233 ppb	00:52:38
1	K 766.490 Radial†	221.8	56.9	37.153 µg/L	37.153 ppb	00:52:18
1	Mg 279.077 IEC†	8.8	-4.0	-35.707 µg/L	-35.707 ppb	00:52:38
1	Na 589.592 Radial†	433.2	-39.0	-11.968 µg/L	-11.968 ppb	00:52:18
1	Sr 421.552†	40.3	11.5	0.1064 µg/L	0.1064 ppb	00:52:18
1	Sc 361.383	2011763.6	2011763.6	102.48 %		00:53:40
1	Y 371.029	1389612.5	1389612.5	102.72 %		00:53:40
1	Ag 328.068†	-405.0	6.4	0.0485 µg/L	0.0485 ppb	00:53:46
1	As 188.979†	-2.6	-2.1	-3.6986 µg/L	-3.6986 ppb	00:54:07
1	B 249.677†	338.6	-53.8	-2.1896 µg/L	-2.1896 ppb	00:54:07
1	Ba 233.527†	-17.8	-0.3	-0.0074 µg/L	-0.0074 ppb	00:54:07
1	Be 313.107†	-2736.0	185.9	0.1102 µg/L	0.1102 ppb	00:53:46
1	Cd 226.502†	-129.0	15.8	0.3934 µg/L	0.3934 ppb	00:54:07
1	Co 228.616†	3.6	1.6	0.0719 µg/L	0.0719 ppb	00:54:07
1	Cr 267.716†	-27.0	24.0	0.4825 µg/L	0.4825 ppb	00:53:46
1	Cu 324.752†	2575.9	-30.1	-0.1968 µg/L	-0.1968 ppb	00:53:46
1	Mn 257.610†	-211.1	50.0	0.1578 µg/L	0.1578 ppb	00:54:07
1	Mo 202.031†	3.9	9.1	0.8918 µg/L	0.8918 ppb	00:54:07
1	Ni 231.604†	299.2	-20.4	-1.0177 µg/L	-1.0177 ppb	00:54:07
1	P 214.914†	16.5	0.8	1.5471 µg/L	1.5471 ppb	00:54:07
1	Pb 220.353†	89.4	-3.7	-0.9118 µg/L	-0.9118 ppb	00:54:07
1	S 181.975 Axial†	16.3	-3.0	-12.644 µg/L	-12.644 ppb	00:54:07
1	Sb 206.836†	16.5	-6.4	-5.8254 µg/L	-5.8254 ppb	00:54:07
1	Se 196.026†	19.5	-0.3	-0.4212 µg/L	-0.4212 ppb	00:54:07
1	SiO2†	1433.8	7.5	1.4845 µg/L	1.4845 ppb	00:53:46
1	Si 251.611†	372.9	53.3	4.0520 µg/L	4.0520 ppb	00:54:07
1	Sn 189.927†	5.9	5.4	2.2728 µg/L	2.2728 ppb	00:54:07
1	Ti 334.940†	341.2	157.9	0.3518 µg/L	0.3518 ppb	00:53:46
1	Tl 190.801†	-19.9	3.0	3.8843 µg/L	3.8843 ppb	00:54:07
1	U 409.014†	-22.2	55.4	4.6027 µg/L	4.6027 ppb	00:53:46
1	V 292.402†	-31.2	14.3	0.1517 µg/L	0.1517 ppb	00:53:46
1	Zn 213.857†	529.8	-17.4	-0.4012 µg/L	-0.4012 ppb	00:54:07
2	Sc RADIAL	56775.7	56775.7	100 %		00:52:44
2	Al 396.153Radial†	-27.8	-35.0	-24.366 µg/L	-24.366 ppb	00:52:44
2	Ca 317.933Radial†	192.4	-19.9	-16.957 µg/L	-16.957 ppb	00:53:04
2	Fe 238.204 Radial†	16.1	-0.6	-4.4224 µg/L	-4.4224 ppb	00:53:04
2	K 766.490 Radial†	175.7	9.8	6.4327 µg/L	6.4327 ppb	00:52:44
2	Mg 279.077 IEC†	7.4	-5.5	-48.709 µg/L	-48.709 ppb	00:53:04
2	Na 589.592 Radial†	453.4	-21.0	-6.4575 µg/L	-6.4575 ppb	00:52:44
2	Sr 421.552†	44.2	15.2	0.1399 µg/L	0.1399 ppb	00:52:44
2	Sc 361.383	2015962.5	2015962.5	102.69 %		00:54:13
2	Y 371.029	1393418.5	1393418.5	103.01 %		00:54:13
2	Ag 328.068†	-401.2	10.9	0.0831 µg/L	0.0831 ppb	00:54:18
2	As 188.979†	0.0	0.5	0.8602 µg/L	0.8602 ppb	00:54:39
2	B 249.677†	354.8	-38.6	-1.5728 µg/L	-1.5728 ppb	00:54:39
2	Ba 233.527†	-18.1	-0.5	-0.0119 µg/L	-0.0119 ppb	00:54:39
2	Be 313.107†	-2690.3	235.9	0.1399 µg/L	0.1399 ppb	00:54:18
2	Cd 226.502†	-130.3	14.8	0.3705 µg/L	0.3705 ppb	00:54:39
2	Co 228.616†	-6.6	-8.4	-0.3796 µg/L	-0.3796 ppb	00:54:39
2	Cr 267.716†	-46.8	4.9	0.0977 µg/L	0.0977 ppb	00:54:18
2	Cu 324.752†	2528.8	-81.2	-0.5308 µg/L	-0.5308 ppb	00:54:18
2	Mn 257.610†	-226.2	35.7	0.1133 µg/L	0.1133 ppb	00:54:39
2	Mo 202.031†	4.6	9.8	0.9608 µg/L	0.9608 ppb	00:54:39
2	Ni 231.604†	319.0	-1.7	-0.0830 µg/L	-0.0830 ppb	00:54:39
2	P 214.914†	9.1	-6.5	-12.859 µg/L	-12.859 ppb	00:54:39
2	Pb 220.353†	88.2	-5.0	-1.2233 µg/L	-1.2233 ppb	00:54:39

2	S 181.975 Axial†	16.9	-2.4	-10.103 µg/L	-10.103 ppb	00:54:39
2	Sb 206.836†	17.9	-5.1	-4.6769 µg/L	-4.6769 ppb	00:54:39
2	Se 196.026†	19.1	-0.7	-1.0024 µg/L	-1.0024 ppb	00:54:39
2	SiO2†	1449.7	20.2	3.9814 µg/L	3.9814 ppb	00:54:18
2	Si 251.611†	376.1	55.6	4.2260 µg/L	4.2260 ppb	00:54:39
2	Sn 189.927†	1.7	1.3	0.5477 µg/L	0.5477 ppb	00:54:39
2	Ti 334.940†	343.0	159.0	0.3552 µg/L	0.3552 ppb	00:54:18
2	Tl 190.801†	-24.1	-1.1	-1.4493 µg/L	-1.4493 ppb	00:54:39
2	U 409.014†	10.4	87.2	7.2508 µg/L	7.2508 ppb	00:54:18
2	V 292.402†	-4.1	40.8	0.4119 µg/L	0.4119 ppb	00:54:18
2	Zn 213.857†	527.1	-21.2	-0.4921 µg/L	-0.4921 ppb	00:54:39
3	Sc RADIAL	56920.7	56920.7	101 %		00:53:10
3	Al 396.153Radial†	-15.3	-22.6	-15.701 µg/L	-15.701 ppb	00:53:10
3	Ca 317.933Radial†	197.5	-15.2	-12.988 µg/L	-12.988 ppb	00:53:30
3	Fe 238.204 Radial†	18.8	2.1	16.556 µg/L	16.556 ppb	00:53:30
3	K 766.490 Radial†	185.2	18.8	12.279 µg/L	12.279 ppb	00:53:10
3	Mg 279.077 IEC†	8.5	-4.4	-39.105 µg/L	-39.105 ppb	00:53:30
3	Na 589.592 Radial†	423.4	-52.0	-15.967 µg/L	-15.967 ppb	00:53:10
3	Sr 421.552†	41.9	12.7	0.1176 µg/L	0.1176 ppb	00:53:10
3	Sc 361.383	2014852.2	2014852.2	102.64 %		00:54:45
3	Y 371.029	1393456.2	1393456.2	103.01 %		00:54:45
3	Ag 328.068†	-422.8	-10.3	-0.0785 µg/L	-0.0785 ppb	00:54:50
3	As 188.979†	-1.5	-1.0	-1.7460 µg/L	-1.7460 ppb	00:55:11
3	B 249.677†	333.7	-59.0	-2.4128 µg/L	-2.4128 ppb	00:55:11
3	Ba 233.527†	-13.4	4.0	0.0947 µg/L	0.0947 ppb	00:55:11
3	Be 313.107†	-2699.8	225.2	0.1336 µg/L	0.1336 ppb	00:54:50
3	Cd 226.502†	-145.5	-0.0	-0.0031 µg/L	-0.0031 ppb	00:55:11
3	Co 228.616†	6.4	4.3	0.1940 µg/L	0.1940 ppb	00:55:11
3	Cr 267.716†	-55.0	-3.2	-0.0651 µg/L	-0.0651 ppb	00:54:50
3	Cu 324.752†	2622.6	11.6	0.0778 µg/L	0.0778 ppb	00:54:50
3	Mn 257.610†	-221.2	40.5	0.1307 µg/L	0.1307 ppb	00:55:11
3	Mo 202.031†	-7.2	-1.7	-0.1630 µg/L	-0.1630 ppb	00:55:11
3	Ni 231.604†	311.0	-9.4	-0.4674 µg/L	-0.4674 ppb	00:55:11
3	P 214.914†	6.6	-8.9	-17.650 µg/L	-17.650 ppb	00:55:11
3	Pb 220.353†	81.8	-11.3	-2.7554 µg/L	-2.7554 ppb	00:55:11
3	S 181.975 Axial†	13.5	-5.8	-23.870 µg/L	-23.870 ppb	00:55:11
3	Sb 206.836†	20.6	-2.4	-2.2216 µg/L	-2.2216 ppb	00:55:11
3	Se 196.026†	20.8	1.0	1.4345 µg/L	1.4345 ppb	00:55:11
3	SiO2†	1432.2	3.9	0.7640 µg/L	0.7640 ppb	00:54:50
3	Si 251.611†	389.1	68.5	5.2078 µg/L	5.2078 ppb	00:55:11
3	Sn 189.927†	1.8	1.4	0.5816 µg/L	0.5816 ppb	00:55:11
3	Ti 334.940†	265.2	83.4	0.1873 µg/L	0.1873 ppb	00:54:50
3	Tl 190.801†	-21.9	1.1	1.4257 µg/L	1.4257 ppb	00:55:11
3	U 409.014†	48.0	123.8	10.285 µg/L	10.285 ppb	00:54:50
3	V 292.402†	-96.7	-49.4	-0.4704 µg/L	-0.4704 ppb	00:54:50
3	Zn 213.857†	520.4	-27.3	-0.6376 µg/L	-0.6376 ppb	00:55:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2014192.7	102.60 %	0.111			0.11%
Sc RADIAL	56728.2	100 %	0.4			0.39%
Y 371.029	1392162.4	102.91 %	0.163			0.16%
Ag 328.068†	2.3	0.0177 µg/L	0.08511	0.0177 ppb	0.08511	481.20%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-27.9	-19.391 µg/L	4.4734	-19.391 ppb	4.4734	23.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.9	-1.5281 µg/L	2.28722	-1.5281 ppb	2.28722	149.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-50.5	-2.0584 µg/L	0.43510	-2.0584 ppb	0.43510	21.14%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.0	0.0252 µg/L	0.06031	0.0252 ppb	0.06031	239.74%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	215.7	0.1279 µg/L	0.01565	0.1279 ppb	0.01565	12.24%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-18.0	-15.359 µg/L	2.0946	-15.359 ppb	2.0946	13.64%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.2	0.2536 µg/L	0.22259	0.2536 ppb	0.22259	87.77%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0379 µg/L	0.30216	-0.0379 ppb	0.30216	797.93%

Cr	267.716†	8.5	0.1717 µg/L	0.28121	0.1717 ppb	0.28121	163.77%
	QC value within limits for Cr 267.716			Recovery = Not calculated			
Cu	324.752†	-33.3	-0.2166 µg/L	0.30479	-0.2166 ppb	0.30479	140.71%
	QC value within limits for Cu 324.752			Recovery = Not calculated			
Fe	238.204 Radial†	0.4	3.5035 µg/L	11.39025	3.5035 ppb	11.39025	325.11%
	QC value within limits for Fe 238.204 Radial			Recovery = Not calculated			
K	766.490 Radial†	28.5	18.621 µg/L	16.3129	18.621 ppb	16.3129	87.60%
	QC value within limits for K 766.490 Radial			Recovery = Not calculated			
Mg	279.077 IEC†	-4.6	-41.174 µg/L	6.7433	-41.174 ppb	6.7433	16.38%
	QC value within limits for Mg 279.077 IEC			Recovery = Not calculated			
Mn	257.610†	42.1	0.1339 µg/L	0.02244	0.1339 ppb	0.02244	16.76%
	QC value within limits for Mn 257.610			Recovery = Not calculated			
Mo	202.031†	5.7	0.5632 µg/L	0.62984	0.5632 ppb	0.62984	111.84%
	QC value within limits for Mo 202.031			Recovery = Not calculated			
Na	589.592 Radial†	-37.3	-11.464 µg/L	4.7748	-11.464 ppb	4.7748	41.65%
	QC value within limits for Na 589.592 Radial			Recovery = Not calculated			
Ni	231.604†	-10.5	-0.5227 µg/L	0.46980	-0.5227 ppb	0.46980	89.88%
	QC value within limits for Ni 231.604			Recovery = Not calculated			
P	214.914†	-4.9	-9.6539 µg/L	9.99179	-9.6539 ppb	9.99179	103.50%
	QC value within limits for P 214.914			Recovery = Not calculated			
Pb	220.353†	-6.7	-1.6302 µg/L	0.98682	-1.6302 ppb	0.98682	60.54%
	QC value within limits for Pb 220.353			Recovery = Not calculated			
S	181.975 Axial†	-3.7	-15.539 µg/L	7.3261	-15.539 ppb	7.3261	47.15%
	QC value within limits for S 181.975 Axial			Recovery = Not calculated			
Sb	206.836†	-4.6	-4.2413 µg/L	1.84093	-4.2413 ppb	1.84093	43.40%
	QC value within limits for Sb 206.836			Recovery = Not calculated			
Se	196.026†	-0.0	0.0037 µg/L	1.27280	0.0037 ppb	1.27280	>999.9%
	QC value within limits for Se 196.026			Recovery = Not calculated			
SiO2†		10.5	2.0766 µg/L	1.68846	2.0766 ppb	1.68846	81.31%
	QC value within limits for SiO2			Recovery = Not calculated			
Si	251.611†	59.1	4.4953 µg/L	0.62314	4.4953 ppb	0.62314	13.86%
	QC value within limits for Si 251.611			Recovery = Not calculated			
Sn	189.927†	2.7	1.1340 µg/L	0.98634	1.1340 ppb	0.98634	86.98%
	QC value within limits for Sn 189.927			Recovery = Not calculated			
Sr	421.552†	13.1	0.1213 µg/L	0.01704	0.1213 ppb	0.01704	14.05%
	QC value within limits for Sr 421.552			Recovery = Not calculated			
Ti	334.940†	133.4	0.2981 µg/L	0.09597	0.2981 ppb	0.09597	32.19%
	QC value within limits for Ti 334.940			Recovery = Not calculated			
Tl	190.801†	1.0	1.2869 µg/L	2.66947	1.2869 ppb	2.66947	207.44%
	QC value within limits for Tl 190.801			Recovery = Not calculated			
U	409.014†	88.8	7.3795 µg/L	2.84332	7.3795 ppb	2.84332	38.53%
	QC value within limits for U 409.014			Recovery = Not calculated			
V	292.402†	1.9	0.0311 µg/L	0.45339	0.0311 ppb	0.45339	>999.9%
	QC value within limits for V 292.402			Recovery = Not calculated			
Zn	213.857†	-22.0	-0.5103 µg/L	0.11927	-0.5103 ppb	0.11927	23.37%
	QC value within limits for Zn 213.857			Recovery = Not calculated			

All analyte(s) passed QC.

=====

Analysis Begun

Start Time: 2/20/2010 01:03:24

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\022010.SIF

Batch ID:

Results Data Set: 021910A

Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 201

Sample ID: 1202032633|948776|1

Date Collected: 2/20/2010 01:03:26

Analyst: JWJ

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

=====

Replicate Data: 1202032633|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56227.4	56227.4	99.5 %		01:04:04
1	Al 396.153Radial†	-13.0	-20.4	-14.234 µg/L	-14.234 ppb	01:04:04
1	Ca 317.933Radial†	216.9	6.7	5.6955 µg/L	5.6955 ppb	01:04:25
1	Fe 238.204 Radial†	26.2	9.8	77.083 µg/L	77.083 ppb	01:04:25
1	K 766.490 Radial†	228.2	64.3	41.995 µg/L	41.995 ppb	01:04:04
1	Mg 279.077 IEC†	10.3	-2.5	-22.146 µg/L	-22.146 ppb	01:04:25
1	Na 589.592 Radial†	485.9	16.1	4.9365 µg/L	4.9365 ppb	01:04:04
1	Sr 421.552†	47.2	18.6	0.1716 µg/L	0.1716 ppb	01:04:04
1	Sc 361.383	2001236.5	2001236.5	101.94 %		01:05:27
1	Y 371.029	1380611.8	1380611.8	102.06 %		01:05:27
1	Ag 328.068†	-417.9	-8.4	-0.0576 µg/L	-0.0576 ppb	01:05:32
1	As 188.979†	4.7	5.1	9.0604 µg/L	9.0604 ppb	01:05:53
1	B 249.677†	335.4	-55.2	-2.2879 µg/L	-2.2879 ppb	01:05:53
1	Ba 233.527†	-3.1	14.0	0.3362 µg/L	0.3362 ppb	01:05:53
1	Be 313.107†	-2689.2	217.7	0.1289 µg/L	0.1289 ppb	01:05:32
1	Cd 226.502†	-137.3	7.0	0.1647 µg/L	0.1647 ppb	01:05:53
1	Co 228.616†	2.5	0.5	0.0202 µg/L	0.0202 ppb	01:05:53
1	Cr 267.716†	-44.9	6.3	0.1264 µg/L	0.1264 ppb	01:05:32
1	Cu 324.752†	2679.3	84.5	0.5625 µg/L	0.5625 ppb	01:05:32
1	Mn 257.610†	125.0	378.6	1.1967 µg/L	1.1967 ppb	01:05:53
1	Mo 202.031†	-1.1	4.3	0.4210 µg/L	0.4210 ppb	01:05:53
1	Ni 231.604†	311.2	-7.0	-0.3500 µg/L	-0.3500 ppb	01:05:53
1	P 214.914†	19.9	4.2	8.2147 µg/L	8.2147 ppb	01:05:53
1	Pb 220.353†	76.2	-16.2	-3.9420 µg/L	-3.9420 ppb	01:05:53
1	S 181.975 Axial†	15.0	-4.2	-17.399 µg/L	-17.399 ppb	01:05:53
1	Sb 206.836†	20.2	-2.7	-2.4703 µg/L	-2.4703 ppb	01:05:53
1	Se 196.026†	12.8	-6.7	-9.1981 µg/L	-9.1981 ppb	01:05:53
1	SiO2†	1764.8	339.6	67.036 µg/L	67.036 ppb	01:05:32
1	Si 251.611†	692.1	368.3	28.001 µg/L	28.001 ppb	01:05:53
1	Sn 189.927†	7.6	7.1	2.9733 µg/L	2.9733 ppb	01:05:53
1	Ti 334.940†	522.5	337.5	0.7485 µg/L	0.7485 ppb	01:05:32
1	Tl 190.801†	-21.6	1.2	1.5807 µg/L	1.5807 ppb	01:05:53
1	U 409.014†	-76.9	1.7	0.1269 µg/L	0.1269 ppb	01:05:32
1	V 292.402†	-53.6	-7.8	-0.0635 µg/L	-0.0635 ppb	01:05:32
1	Zn 213.857†	674.2	127.0	2.9769 µg/L	2.9769 ppb	01:05:53
2	Sc RADIAL	56465.5	56465.5	99.9 %		01:04:30
2	Al 396.153Radial†	-14.5	-21.8	-15.194 µg/L	-15.194 ppb	01:04:30
2	Ca 317.933Radial†	209.3	-1.9	-1.6116 µg/L	-1.6116 ppb	01:04:51
2	Fe 238.204 Radial†	26.7	10.1	79.946 µg/L	79.946 ppb	01:04:51
2	K 766.490 Radial†	226.1	61.3	40.014 µg/L	40.014 ppb	01:04:30
2	Mg 279.077 IEC†	13.3	0.5	4.5661 µg/L	4.5661 ppb	01:04:51
2	Na 589.592 Radial†	482.3	10.4	3.1815 µg/L	3.1815 ppb	01:04:30
2	Sr 421.552†	21.5	-7.3	-0.0670 µg/L	-0.0670 ppb	01:04:30
2	Sc 361.383	1991708.4	1991708.4	101.46 %		01:05:59
2	Y 371.029	1374633.9	1374633.9	101.62 %		01:05:59
2	Ag 328.068†	-369.0	38.0	0.2860 µg/L	0.2860 ppb	01:06:04
2	As 188.979†	1.0	1.4	2.5240 µg/L	2.5240 ppb	01:06:25

2	B 249.677†	334.9	-54.1	-2.2447 µg/L	-2.2447 ppb	01:06:25
2	Ba 233.527†	-4.6	12.5	0.3010 µg/L	0.3010 ppb	01:06:25
2	Be 313.107†	-2753.2	142.0	0.0840 µg/L	0.0840 ppb	01:06:04
2	Cd 226.502†	-134.5	9.1	0.2188 µg/L	0.2188 ppb	01:06:25
2	Co 228.616†	10.7	8.6	0.3863 µg/L	0.3863 ppb	01:06:25
2	Cr 267.716†	-21.1	29.6	0.5951 µg/L	0.5951 ppb	01:06:04
2	Cu 324.752†	2603.9	22.8	0.1600 µg/L	0.1600 ppb	01:06:04
2	Mn 257.610†	128.4	382.6	1.2086 µg/L	1.2086 ppb	01:06:25
2	Mo 202.031†	-4.7	0.7	0.0687 µg/L	0.0687 ppb	01:06:25
2	Ni 231.604†	313.0	-3.9	-0.1925 µg/L	-0.1925 ppb	01:06:25
2	P 214.914†	19.2	3.6	6.9557 µg/L	6.9557 ppb	01:06:25
2	Pb 220.353†	90.7	-1.5	-0.3693 µg/L	-0.3693 ppb	01:06:25
2	S 181.975 Axial†	19.7	0.5	1.8928 µg/L	1.8928 ppb	01:06:25
2	Sb 206.836†	21.4	-1.4	-1.3073 µg/L	-1.3073 ppb	01:06:25
2	Se 196.026†	10.7	-8.8	-12.154 µg/L	-12.154 ppb	01:06:25
2	SiO2†	1800.7	383.3	75.661 µg/L	75.661 ppb	01:06:04
2	Si 251.611†	709.0	388.2	29.509 µg/L	29.509 ppb	01:06:25
2	Sn 189.927†	2.1	1.7	0.7008 µg/L	0.7008 ppb	01:06:25
2	Ti 334.940†	565.9	382.8	0.8464 µg/L	0.8464 ppb	01:06:04
2	Tl 190.801†	-24.8	-2.1	-2.6678 µg/L	-2.6678 ppb	01:06:25
2	U 409.014†	-80.0	-1.8	-0.1610 µg/L	-0.1610 ppb	01:06:04
2	V 292.402†	-48.3	-2.8	-0.0162 µg/L	-0.0162 ppb	01:06:04
2	Zn 213.857†	678.4	134.2	3.1459 µg/L	3.1459 ppb	01:06:25
3	Sc RADIAL	56736.8	56736.8	100 %		01:04:56
3	Al 396.153Radial†	-18.0	-25.3	-17.581 µg/L	-17.581 ppb	01:04:56
3	Ca 317.933Radial†	216.6	4.4	3.7797 µg/L	3.7797 ppb	01:05:16
3	Fe 238.204 Radial†	28.6	11.9	94.204 µg/L	94.204 ppb	01:05:16
3	K 766.490 Radial†	241.7	75.7	49.452 µg/L	49.452 ppb	01:04:56
3	Mg 279.077 IEC†	8.7	-4.2	-37.617 µg/L	-37.617 ppb	01:05:16
3	Na 589.592 Radial†	446.3	-27.8	-8.5420 µg/L	-8.5420 ppb	01:04:56
3	Sr 421.552†	42.9	13.9	0.1285 µg/L	0.1285 ppb	01:04:56
3	Sc 361.383	1990237.2	1990237.2	101.38 %		01:06:31
3	Y 371.029	1374439.4	1374439.4	101.60 %		01:06:31
3	Ag 328.068†	-386.9	20.0	0.1531 µg/L	0.1531 ppb	01:06:36
3	As 188.979†	0.5	1.0	1.7525 µg/L	1.7525 ppb	01:06:57
3	B 249.677†	344.4	-44.4	-1.8604 µg/L	-1.8604 ppb	01:06:57
3	Ba 233.527†	-5.2	11.9	0.2860 µg/L	0.2860 ppb	01:06:57
3	Be 313.107†	-2675.3	216.8	0.1284 µg/L	0.1284 ppb	01:06:36
3	Cd 226.502†	-131.7	11.8	0.2830 µg/L	0.2830 ppb	01:06:57
3	Co 228.616†	3.0	1.0	0.0427 µg/L	0.0427 ppb	01:06:57
3	Cr 267.716†	-60.9	-9.7	-0.1939 µg/L	-0.1939 ppb	01:06:36
3	Cu 324.752†	2665.0	85.0	0.5678 µg/L	0.5678 ppb	01:06:36
3	Mn 257.610†	106.9	361.5	1.1461 µg/L	1.1461 ppb	01:06:57
3	Mo 202.031†	-5.7	-0.3	-0.0214 µg/L	-0.0214 ppb	01:06:57
3	Ni 231.604†	314.0	-2.6	-0.1280 µg/L	-0.1280 ppb	01:06:57
3	P 214.914†	16.2	0.7	1.1707 µg/L	1.1707 ppb	01:06:57
3	Pb 220.353†	75.5	-16.5	-4.0181 µg/L	-4.0181 ppb	01:06:57
3	S 181.975 Axial†	18.6	-0.6	-2.3578 µg/L	-2.3578 ppb	01:06:57
3	Sb 206.836†	19.9	-2.8	-2.6113 µg/L	-2.6113 ppb	01:06:57
3	Se 196.026†	7.5	-12.0	-16.506 µg/L	-16.506 ppb	01:06:57
3	SiO2†	1784.4	368.5	72.738 µg/L	72.738 ppb	01:06:36
3	Si 251.611†	707.2	386.9	29.412 µg/L	29.412 ppb	01:06:57
3	Sn 189.927†	1.5	1.1	0.4667 µg/L	0.4667 ppb	01:06:57
3	Ti 334.940†	525.7	343.5	0.7630 µg/L	0.7630 ppb	01:06:36
3	Tl 190.801†	-24.3	-1.6	-2.0107 µg/L	-2.0107 ppb	01:06:57
3	U 409.014†	-99.0	-20.6	-1.7260 µg/L	-1.7260 ppb	01:06:36
3	V 292.402†	-61.7	-16.1	-0.1482 µg/L	-0.1482 ppb	01:06:36
3	Zn 213.857†	659.8	116.4	2.7281 µg/L	2.7281 ppb	01:06:57

Mean Data: 1202032633|948776|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1994394.0	101.59 %		0.304			0.30%
Sc RADIAL	56476.6	100.0 %		0.45			0.45%
Y 371.029	1376561.7	101.76 %		0.259			0.25%
Ag 328.068†	16.5	0.1272 µg/L		0.17325	0.1272 ppb	0.17325	136.24%
Al 396.153Radial†	-22.5	-15.670 µg/L		1.7237	-15.670 ppb	1.7237	11.00%
As 188.979†	2.5	4.4456 µg/L		4.01510	4.4456 ppb	4.01510	90.32%
B 249.677†	-51.2	-2.1310 µg/L		0.23536	-2.1310 ppb	0.23536	11.04%
Ba 233.527†	12.8	0.3077 µg/L		0.02577	0.3077 ppb	0.02577	8.38%

Be 313.107†	192.2	0.1138 µg/L	0.02581	0.1138 ppb	0.02581	22.69%
Ca 317.933 Radial†	3.1	2.6212 µg/L	3.78880	2.6212 ppb	3.78880	144.54%
Cd 226.502†	9.3	0.2222 µg/L	0.05924	0.2222 ppb	0.05924	26.66%
Co 228.616†	3.3	0.1497 µg/L	0.20519	0.1497 ppb	0.20519	137.02%
Cr 267.716†	8.8	0.1758 µg/L	0.39682	0.1758 ppb	0.39682	225.70%
Cu 324.752†	64.1	0.4301 µg/L	0.23392	0.4301 ppb	0.23392	54.38%
Fe 238.204 Radial†	10.6	83.744 µg/L	9.1709	83.744 ppb	9.1709	10.95%
K 766.490 Radial†	67.1	43.820 µg/L	4.9764	43.820 ppb	4.9764	11.36%
Mg 279.077 IEC†	-2.0	-18.399 µg/L	21.3398	-18.399 ppb	21.3398	115.98%
Mn 257.610†	374.2	1.1838 µg/L	0.03319	1.1838 ppb	0.03319	2.80%
Mo 202.031†	1.6	0.1561 µg/L	0.23379	0.1561 ppb	0.23379	149.77%
Na 589.592 Radial†	-0.5	-0.1413 µg/L	7.32790	-0.1413 ppb	7.32790	>999.9%
Ni 231.604†	-4.5	-0.2235 µg/L	0.11421	-0.2235 ppb	0.11421	51.09%
P 214.914†	2.8	5.4470 µg/L	3.75651	5.4470 ppb	3.75651	68.96%
Pb 220.353†	-11.4	-2.7765 µg/L	2.08503	-2.7765 ppb	2.08503	75.10%
S 181.975 Axial†	-1.4	-5.9547 µg/L	10.13640	-5.9547 ppb	10.13640	170.23%
Sb 206.836†	-2.3	-2.1296 µg/L	0.71561	-2.1296 ppb	0.71561	33.60%
Se 196.026†	-9.2	-12.619 µg/L	3.6761	-12.619 ppb	3.6761	29.13%
SiO2†	363.8	71.812 µg/L	4.3862	71.812 ppb	4.3862	6.11%
Si 251.611†	381.1	28.974 µg/L	0.8439	28.974 ppb	0.8439	2.91%
Sn 189.927†	3.3	1.3802 µg/L	1.38455	1.3802 ppb	1.38455	100.31%
Sr 421.552†	8.4	0.0777 µg/L	0.12715	0.0777 ppb	0.12715	163.68%
Ti 334.940†	354.6	0.7860 µg/L	0.05282	0.7860 ppb	0.05282	6.72%
Tl 190.801†	-0.8	-1.0326 µg/L	2.28690	-1.0326 ppb	2.28690	221.47%
U 409.014†	-6.9	-0.5867 µg/L	0.99706	-0.5867 ppb	0.99706	169.94%
V 292.402†	-8.9	-0.0760 µg/L	0.06687	-0.0760 ppb	0.06687	87.98%
Zn 213.857†	125.9	2.9503 µg/L	0.21019	2.9503 ppb	0.21019	7.12%

Sequence No.: 2

Sample ID: 1202032638|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 202

Date Collected: 2/20/2010 01:07:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032638|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57418.0	57418.0	102 %		01:07:45
1	Al 396.153Radial†	134722.7	132551.1	92198 µg/L	92198 ppb	01:07:40
1	Ca 317.933Radial†	126977.5	124726.4	106540 µg/L	106540 ppb	01:07:40
1	Fe 238.204 Radial†	25604.7	25176.8	198590 µg/L	198590 ppb	01:07:45
1	K 766.490 Radial†	64638.3	63434.9	41430 µg/L	41430 ppb	01:07:40
1	Mg 279.077 IEC†	4529.5	4444.0	39521 µg/L	39521 ppb	01:07:45
1	Na 589.592 Radial†	34974.8	33940.8	10425 µg/L	10425 ppb	01:07:40
1	Sr 421.552†	258778.6	254592.7	2348.7 µg/L	2348.7 ppb	01:07:40
1	Sc 361.383	1990435.4	1990435.4	101.39 %		01:08:20
1	Y 371.029	1404365.9	1404365.9	103.82 %		01:08:20
1	Ag 328.068†	40927.8	40767.7	322.80 µg/L	322.80 ppb	01:08:26
1	As 188.979†	628.8	620.7	1117.3 µg/L	1117.3 ppb	01:08:47
1	B 249.677†	39515.7	38589.2	1473.2 µg/L	1473.2 ppb	01:08:26
1	Ba 233.527†	83914.9	82780.4	1989.6 µg/L	1989.6 ppb	01:08:26
1	Be 313.107†	1415195.5	1398629.9	827.92 µg/L	827.92 ppb	01:08:20
1	Cd 226.502†	26140.0	25923.0	625.54 µg/L	625.54 ppb	01:08:26
1	Co 228.616†	22156.3	21850.3	978.14 µg/L	978.14 ppb	01:08:26
1	Cr 267.716†	127039.6	125346.6	2518.4 µg/L	2518.4 ppb	01:08:26
1	Cu 324.752†	297996.1	291362.8	1929.5 µg/L	1929.5 ppb	01:08:26
1	Mn 257.610†	1844076.0	1819025.0	5721.1 µg/L	5721.1 ppb	01:08:20
1	Mo 202.031†	5605.4	5533.8	549.45 µg/L	549.45 ppb	01:08:47
1	Ni 231.604†	29549.1	28831.3	1438.6 µg/L	1438.6 ppb	01:08:26
1	P 214.914†	4525.1	4447.6	8487.4 µg/L	8487.4 ppb	01:08:47
1	Pb 220.353†	3761.0	3618.5	875.62 µg/L	875.62 ppb	01:08:47
1	S 181.975 Axial†	1011.4	978.5	4058.0 µg/L	4058.0 ppb	01:08:47
1	Sb 206.836†	1600.9	1556.5	1400.0 µg/L	1400.0 ppb	01:08:47
1	Se 196.026†	2179.2	2130.0	3469.1 µg/L	3469.1 ppb	01:08:47
1	SiO2†	336183.8	330178.6	65173 µg/L	65173 ppb	01:08:26
1	Si 251.611†	407852.3	401944.6	30557 µg/L	30557 ppb	01:08:20
1	Sn 189.927†	2799.3	2760.6	1147.1 µg/L	1147.1 ppb	01:08:47
1	Ti 334.940†	2613284.1	2577245.9	5700.0 µg/L	5700.0 ppb	01:08:20
1	Tl 190.801†	928.1	937.7	1312.5 µg/L	1312.5 ppb	01:08:47
1	U 409.014†	-1572.8	-1474.2	-156.58 µg/L	-156.58 ppb	01:08:26
1	V 292.402†	130887.7	129136.2	1291.7 µg/L	1291.7 ppb	01:08:26
1	Zn 213.857†	265708.7	261527.9	6114.7 µg/L	6114.7 ppb	01:08:26
2	Sc RADIAL	57152.2	57152.2	101 %		01:07:56
2	Al 396.153Radial†	133917.4	132371.6	92074 µg/L	92074 ppb	01:07:51
2	Ca 317.933Radial†	125798.4	124142.0	106040 µg/L	106040 ppb	01:07:51
2	Fe 238.204 Radial†	25563.7	25253.5	199190 µg/L	199190 ppb	01:07:56
2	K 766.490 Radial†	64116.6	63215.1	41287 µg/L	41287 ppb	01:07:51
2	Mg 279.077 IEC†	4516.2	4451.5	39587 µg/L	39587 ppb	01:07:56
2	Na 589.592 Radial†	34774.3	33902.6	10413 µg/L	10413 ppb	01:07:51
2	Sr 421.552†	256705.7	253727.9	2340.7 µg/L	2340.7 ppb	01:07:51
2	Sc 361.383	2006259.0	2006259.0	102.20 %		01:08:54
2	Y 371.029	1414586.0	1414586.0	104.57 %		01:08:54
2	Ag 328.068†	41081.6	40599.8	321.55 µg/L	321.55 ppb	01:09:00
2	As 188.979†	631.3	618.2	1112.9 µg/L	1112.9 ppb	01:09:20
2	B 249.677†	39696.8	38459.1	1467.6 µg/L	1467.6 ppb	01:09:00
2	Ba 233.527†	84008.6	82219.3	1976.1 µg/L	1976.1 ppb	01:09:00
2	Be 313.107†	1432781.3	1404829.0	831.59 µg/L	831.59 ppb	01:08:54
2	Cd 226.502†	26181.9	25760.7	621.41 µg/L	621.41 ppb	01:09:00
2	Co 228.616†	22171.7	21693.0	970.97 µg/L	970.97 ppb	01:09:00
2	Cr 267.716†	127365.4	124677.1	2505.0 µg/L	2505.0 ppb	01:09:00
2	Cu 324.752†	298852.3	289882.5	1919.9 µg/L	1919.9 ppb	01:09:00
2	Mn 257.610†	1869757.5	1829809.5	5755.0 µg/L	5755.0 ppb	01:08:54
2	Mo 202.031†	5618.9	5503.4	546.49 µg/L	546.49 ppb	01:09:20
2	Ni 231.604†	29563.3	28615.3	1427.9 µg/L	1427.9 ppb	01:09:00
2	P 214.914†	4526.8	4414.1	8421.5 µg/L	8421.5 ppb	01:09:20
2	Pb 220.353†	3761.5	3589.6	868.57 µg/L	868.57 ppb	01:09:20

2	S 181.975 Axial†	1012.1	971.4	4028.2 µg/L	4028.2 ppb	01:09:20
2	Sb 206.836†	1591.8	1535.1	1380.5 µg/L	1380.5 ppb	01:09:20
2	Se 196.026†	2175.3	2109.2	3441.7 µg/L	3441.7 ppb	01:09:20
2	SiO2†	336666.2	328035.5	64750 µg/L	64750 ppb	01:09:00
2	Si 251.611†	412637.1	403453.9	30671 µg/L	30671 ppb	01:08:54
2	Sn 189.927†	2810.8	2750.0	1142.6 µg/L	1142.6 ppb	01:09:20
2	Ti 334.940†	2644807.2	2587762.8	5723.3 µg/L	5723.3 ppb	01:08:54
2	Tl 190.801†	930.3	932.7	1306.5 µg/L	1306.5 ppb	01:09:20
2	U 409.014†	-1396.8	-1289.6	-141.30 µg/L	-141.30 ppb	01:09:00
2	V 292.402†	131123.1	128348.4	1284.0 µg/L	1284.0 ppb	01:09:00
2	Zn 213.857†	266279.1	260019.1	6079.4 µg/L	6079.4 ppb	01:09:00
3	Sc RADIAL	57281.2	57281.2	101 %		01:08:07
3	Al 396.153Radial†	134374.1	132523.8	92180 µg/L	92180 ppb	01:08:02
3	Ca 317.933Radial†	126172.4	124230.7	106120 µg/L	106120 ppb	01:08:02
3	Fe 238.204 Radial†	25512.1	25145.6	198340 µg/L	198340 ppb	01:08:07
3	K 766.490 Radial†	64337.3	63290.0	41336 µg/L	41336 ppb	01:08:02
3	Mg 279.077 IEC†	4544.0	4468.9	39744 µg/L	39744 ppb	01:08:07
3	Na 589.592 Radial†	34912.7	33961.6	10431 µg/L	10431 ppb	01:08:02
3	Sr 421.552†	257452.9	253893.1	2342.2 µg/L	2342.2 ppb	01:08:02
3	Sc 361.383	1988874.3	1988874.3	101.31 %		01:09:28
3	Y 371.029	1403302.3	1403302.3	103.74 %		01:09:28
3	Ag 328.068†	40939.3	40810.8	323.11 µg/L	323.11 ppb	01:09:34
3	As 188.979†	626.2	618.5	1113.5 µg/L	1113.5 ppb	01:09:54
3	B 249.677†	39650.1	38752.5	1480.0 µg/L	1480.0 ppb	01:09:34
3	Ba 233.527†	83841.9	82773.3	1989.4 µg/L	1989.4 ppb	01:09:34
3	Be 313.107†	1426086.4	1410475.3	834.93 µg/L	834.93 ppb	01:09:28
3	Cd 226.502†	26075.7	25879.7	624.49 µg/L	624.49 ppb	01:09:34
3	Co 228.616†	22066.5	21778.8	974.80 µg/L	974.80 ppb	01:09:34
3	Cr 267.716†	127019.5	125425.1	2520.0 µg/L	2520.0 ppb	01:09:34
3	Cu 324.752†	298166.4	291761.6	1932.0 µg/L	1932.0 ppb	01:09:34
3	Mn 257.610†	1857406.6	1833610.6	5766.8 µg/L	5766.8 ppb	01:09:28
3	Mo 202.031†	5559.5	5492.9	545.43 µg/L	545.43 ppb	01:09:54
3	Ni 231.604†	29479.5	28785.5	1436.3 µg/L	1436.3 ppb	01:09:34
3	P 214.914†	4495.1	4421.5	8435.5 µg/L	8435.5 ppb	01:09:54
3	Pb 220.353†	3749.0	3609.5	873.41 µg/L	873.41 ppb	01:09:54
3	S 181.975 Axial†	1004.3	972.4	4032.4 µg/L	4032.4 ppb	01:09:54
3	Sb 206.836†	1587.7	1544.7	1389.1 µg/L	1389.1 ppb	01:09:54
3	Se 196.026†	2163.9	2116.6	3449.5 µg/L	3449.5 ppb	01:09:54
3	SiO2†	336155.5	330411.0	65219 µg/L	65219 ppb	01:09:34
3	Si 251.611†	410898.5	405267.1	30809 µg/L	30809 ppb	01:09:28
3	Sn 189.927†	2778.6	2742.3	1139.5 µg/L	1139.5 ppb	01:09:54
3	Ti 334.940†	2634056.5	2599772.4	5749.8 µg/L	5749.8 ppb	01:09:28
3	Tl 190.801†	923.1	933.6	1307.7 µg/L	1307.7 ppb	01:09:54
3	U 409.014†	-1466.0	-1369.9	-147.86 µg/L	-147.86 ppb	01:09:34
3	V 292.402†	130757.4	129108.9	1291.4 µg/L	1291.4 ppb	01:09:34
3	Zn 213.857†	265798.3	261822.0	6121.6 µg/L	6121.6 ppb	01:09:34

Mean Data: 1202032638|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1995189.5	101.63 %	0.490			0.48%
Sc RADIAL	57283.8	101 %	0.2			0.23%
Y 371.029	1407418.1	104.04 %	0.461			0.44%
Ag 328.068†	40726.1	322.49 µg/L	0.826	322.49 ppb	0.826	0.26%
Al 396.153Radial†	132482.2	92151 µg/L	67.3	92151 ppb	67.3	0.07%
As 188.979†	619.1	1114.6 µg/L	2.38	1114.6 ppb	2.38	0.21%
B 249.677†	38600.3	1473.6 µg/L	6.22	1473.6 ppb	6.22	0.42%
Ba 233.527†	82591.0	1985.0 µg/L	7.74	1985.0 ppb	7.74	0.39%
Be 313.107†	1404644.7	831.48 µg/L	3.507	831.48 ppb	3.507	0.42%
Ca 317.933Radial†	124366.4	106230 µg/L	269.0	106230 ppb	269.0	0.25%
Cd 226.502†	25854.4	623.81 µg/L	2.144	623.81 ppb	2.144	0.34%
Co 228.616†	21774.1	974.64 µg/L	3.589	974.64 ppb	3.589	0.37%
Cr 267.716†	125149.6	2514.5 µg/L	8.26	2514.5 ppb	8.26	0.33%
Cu 324.752†	291002.3	1927.1 µg/L	6.40	1927.1 ppb	6.40	0.33%
Fe 238.204 Radial†	25192.0	198710 µg/L	437.7	198710 ppb	437.7	0.22%
K 766.490 Radial†	63313.3	41351 µg/L	73.0	41351 ppb	73.0	0.18%
Mg 279.077 IEC†	4454.8	39617 µg/L	114.6	39617 ppb	114.6	0.29%
Mn 257.610†	1827481.7	5747.6 µg/L	23.69	5747.6 ppb	23.69	0.41%
Mo 202.031†	5510.0	547.13 µg/L	2.082	547.13 ppb	2.082	0.38%
Na 589.592 Radial†	33935.0	10423 µg/L	9.2	10423 ppb	9.2	0.09%

Ni 231.604†	28744.0	1434.3 µg/L	5.66	1434.3 ppb	5.66	0.39%
P 214.914†	4427.8	8448.1 µg/L	34.72	8448.1 ppb	34.72	0.41%
Pb 220.353†	3605.9	872.53 µg/L	3.606	872.53 ppb	3.606	0.41%
S 181.975 Axial†	974.1	4039.6 µg/L	16.12	4039.6 ppb	16.12	0.40%
Sb 206.836†	1545.4	1389.8 µg/L	9.78	1389.8 ppb	9.78	0.70%
Se 196.026†	2118.6	3453.4 µg/L	14.11	3453.4 ppb	14.11	0.41%
SiO2†	329541.7	65047 µg/L	258.5	65047 ppb	258.5	0.40%
Si 251.611†	403555.2	30679 µg/L	126.5	30679 ppb	126.5	0.41%
Sn 189.927†	2750.9	1143.1 µg/L	3.85	1143.1 ppb	3.85	0.34%
Sr 421.552†	254071.2	2343.8 µg/L	4.23	2343.8 ppb	4.23	0.18%
Ti 334.940†	2588260.4	5724.4 µg/L	24.92	5724.4 ppb	24.92	0.44%
Tl 190.801†	934.7	1308.9 µg/L	3.16	1308.9 ppb	3.16	0.24%
U 409.014†	-1377.9	-148.58 µg/L	7.665	-148.58 ppb	7.665	5.16%
V 292.402†	128864.5	1289.0 µg/L	4.33	1289.0 ppb	4.33	0.34%
Zn 213.857†	261123.0	6105.2 µg/L	22.68	6105.2 ppb	22.68	0.37%

Sequence No.: 3
 Sample ID: 245998001|948776|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 203
 Date Collected: 2/20/2010 01:10:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 245998001|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	59061.8	59061.8	105 %		01:10:37
1	Al 396.153Radial†	178360.3	170603.4	118680 µg/L	118680 ppb	01:10:37
1	Ca 317.933Radial†	62963.1	60016.2	51265 µg/L	51265 ppb	01:10:37
1	Fe 238.204 Radial†	15755.9	15054.7	118740 µg/L	118740 ppb	01:10:57
1	K 766.490 Radial†	19209.9	18210.3	11893 µg/L	11893 ppb	01:10:37
1	Mg 279.077 IEC†	2728.6	2597.2	23089 µg/L	23089 ppb	01:10:57
1	Na 589.592 Radial†	3818.0	3179.9	976.70 µg/L	976.70 ppb	01:10:57
1	Sr 421.552†	41609.4	39772.7	366.91 µg/L	366.91 ppb	01:10:37
1	Sc 361.383	1999474.3	1999474.3	101.85 %		01:12:02
1	Y 371.029	1417335.2	1417335.2	104.77 %		01:12:02
1	Ag 328.068†	-1928.6	-1491.9	-2.2098 µg/L	-2.2098 ppb	01:12:08
1	As 188.979†	8.7	9.0	20.302 µg/L	20.302 ppb	01:12:29
1	B 249.677†	1269.8	862.6	-26.506 µg/L	-26.506 ppb	01:12:08
1	Ba 233.527†	95106.9	93394.7	2242.5 µg/L	2242.5 ppb	01:12:08
1	Be 313.107†	17945.3	20474.7	10.754 µg/L	10.754 ppb	01:12:08
1	Cd 226.502†	296.2	432.5	-2.5299 µg/L	-2.5299 ppb	01:12:29
1	Co 228.616†	1092.1	1070.3	40.816 µg/L	40.816 ppb	01:12:29
1	Cr 267.716†	9228.7	9111.3	183.13 µg/L	183.13 ppb	01:12:08
1	Cu 324.752†	10505.3	7770.6	67.227 µg/L	67.227 ppb	01:12:08
1	Mn 257.610†	705301.8	692734.0	2184.2 µg/L	2184.2 ppb	01:12:02
1	Mo 202.031†	-11.4	-5.8	3.9439 µg/L	3.9439 ppb	01:12:29
1	Ni 231.604†	2375.8	2020.3	102.20 µg/L	102.20 ppb	01:12:29
1	P 214.914†	620.0	593.3	1106.9 µg/L	1106.9 ppb	01:12:29
1	Pb 220.353†	542.5	441.7	109.39 µg/L	109.39 ppb	01:12:29
1	S 181.975 Axial†	167.5	145.5	603.31 µg/L	603.31 ppb	01:12:29
1	Sb 206.836†	43.8	20.5	12.252 µg/L	12.252 ppb	01:12:29
1	Se 196.026†	-29.9	-48.7	221.22 µg/L	221.22 ppb	01:12:29
1	SiO2†	330290.9	322893.9	63735 µg/L	63735 ppb	01:12:02
1	Si 251.611†	396080.6	388568.4	29540 µg/L	29540 ppb	01:12:02
1	Sn 189.927†	-32.3	-32.1	-23.722 µg/L	-23.722 ppb	01:12:29
1	Ti 334.940†	1689172.2	1658284.6	3667.5 µg/L	3667.5 ppb	01:12:02
1	Tl 190.801†	-68.6	-44.9	3.6687 µg/L	3.6687 ppb	01:12:29
1	U 409.014†	-1201.8	-1102.8	-111.26 µg/L	-111.26 ppb	01:12:02
1	V 292.402†	21514.5	21168.1	220.59 µg/L	220.59 ppb	01:12:08
1	Zn 213.857†	10659.5	9931.3	225.52 µg/L	225.52 ppb	01:12:08
2	Sc RADIAL	58569.9	58569.9	104 %		01:11:03
2	Al 396.153Radial†	177788.7	171485.0	119290 µg/L	119290 ppb	01:11:03
2	Ca 317.933Radial†	62541.4	60115.2	51349 µg/L	51349 ppb	01:11:03
2	Fe 238.204 Radial†	15796.6	15220.6	120040 µg/L	120040 ppb	01:11:23
2	K 766.490 Radial†	19085.3	18244.4	11916 µg/L	11916 ppb	01:11:03
2	Mg 279.077 IEC†	2745.2	2635.2	23427 µg/L	23427 ppb	01:11:23
2	Na 589.592 Radial†	3798.6	3191.9	980.37 µg/L	980.37 ppb	01:11:23
2	Sr 421.552†	41453.2	39956.3	368.60 µg/L	368.60 ppb	01:11:03
2	Sc 361.383	2005942.6	2005942.6	102.18 %		01:12:36
2	Y 371.029	1421859.8	1421859.8	105.11 %		01:12:36
2	Ag 328.068†	-1869.7	-1428.1	-1.6583 µg/L	-1.6583 ppb	01:12:42
2	As 188.979†	9.8	10.0	22.293 µg/L	22.293 ppb	01:13:02
2	B 249.677†	1217.8	807.6	-29.429 µg/L	-29.429 ppb	01:12:42
2	Ba 233.527†	95237.6	93221.5	2238.4 µg/L	2238.4 ppb	01:12:42
2	Be 313.107†	18003.1	20474.4	10.756 µg/L	10.756 ppb	01:12:42
2	Cd 226.502†	281.1	416.8	-3.0712 µg/L	-3.0712 ppb	01:13:02
2	Co 228.616†	1088.8	1063.6	40.519 µg/L	40.519 ppb	01:13:02
2	Cr 267.716†	9254.4	9107.2	183.05 µg/L	183.05 ppb	01:12:42
2	Cu 324.752†	10469.5	7702.2	66.962 µg/L	66.962 ppb	01:12:42
2	Mn 257.610†	705751.5	690941.2	2178.7 µg/L	2178.7 ppb	01:12:36
2	Mo 202.031†	-12.6	-7.0	3.8729 µg/L	3.8729 ppb	01:13:02
2	Ni 231.604†	2360.3	1997.6	101.08 µg/L	101.08 ppb	01:13:02
2	P 214.914†	602.6	574.4	1068.6 µg/L	1068.6 ppb	01:13:02
2	Pb 220.353†	549.7	447.0	110.67 µg/L	110.67 ppb	01:13:02

2	S 181.975 Axial†	166.6	144.1	597.68 µg/L	597.68 ppb	01:13:02
2	Sb 206.836†	45.6	22.1	13.767 µg/L	13.767 ppb	01:13:02
2	Se 196.026†	-46.8	-65.2	201.37 µg/L	201.37 ppb	01:13:02
2	SiO2†	331377.3	322911.5	63739 µg/L	63739 ppb	01:12:36
2	Si 251.611†	397439.5	388644.3	29545 µg/L	29545 ppb	01:12:36
2	Sn 189.927†	-35.0	-34.6	-24.902 µg/L	-24.902 ppb	01:13:02
2	Ti 334.940†	1692722.8	1656411.6	3663.3 µg/L	3663.3 ppb	01:12:36
2	Tl 190.801†	-74.1	-50.2	-2.9420 µg/L	-2.9420 ppb	01:13:02
2	U 409.014†	-1255.3	-1151.5	-115.49 µg/L	-115.49 ppb	01:12:36
2	V 292.402†	21536.3	21121.3	220.28 µg/L	220.28 ppb	01:12:42
2	Zn 213.857†	10653.6	9891.8	224.52 µg/L	224.52 ppb	01:12:42
3	Sc RADIAL	58787.7	58787.7	104 %		01:11:29
3	Al 396.153Radial†	178039.1	171090.2	119020 µg/L	119020 ppb	01:11:29
3	Ca 317.933Radial†	62719.4	60062.8	51304 µg/L	51304 ppb	01:11:29
3	Fe 238.204 Radial†	15882.4	15246.5	120250 µg/L	120250 ppb	01:11:49
3	K 766.490 Radial†	19128.1	18217.4	11898 µg/L	11898 ppb	01:11:29
3	Mg 279.077 IEC†	2747.3	2627.4	23358 µg/L	23358 ppb	01:11:49
3	Na 589.592 Radial†	3814.2	3193.3	980.81 µg/L	980.81 ppb	01:11:49
3	Sr 421.552†	41539.9	39891.5	368.01 µg/L	368.01 ppb	01:11:29
3	Sc 361.383	2009100.8	2009100.8	102.34 %		01:13:10
3	Y 371.029	1423121.0	1423121.0	105.20 %		01:13:10
3	Ag 328.068†	-1818.7	-1375.5	-1.3380 µg/L	-1.3380 ppb	01:13:16
3	As 188.979†	12.1	12.3	26.303 µg/L	26.303 ppb	01:13:36
3	B 249.677†	1229.2	816.9	-29.177 µg/L	-29.177 ppb	01:13:16
3	Ba 233.527†	90634.5	88577.3	2126.8 µg/L	2126.8 ppb	01:13:16
3	Be 313.107†	16646.8	19121.5	10.009 µg/L	10.009 ppb	01:13:16
3	Cd 226.502†	246.8	382.8	-3.9509 µg/L	-3.9509 ppb	01:13:36
3	Co 228.616†	987.9	963.4	36.289 µg/L	36.289 ppb	01:13:36
3	Cr 267.716†	8667.3	8519.4	171.24 µg/L	171.24 ppb	01:13:16
3	Cu 324.752†	10065.6	7291.5	64.310 µg/L	64.310 ppb	01:13:16
3	Mn 257.610†	682133.0	666777.5	2103.1 µg/L	2103.1 ppb	01:13:10
3	Mo 202.031†	3.1	8.4	5.3940 µg/L	5.3940 ppb	01:13:36
3	Ni 231.604†	2147.6	1786.1	90.547 µg/L	90.547 ppb	01:13:36
3	P 214.914†	557.0	528.9	978.57 µg/L	978.57 ppb	01:13:36
3	Pb 220.353†	510.7	408.0	101.19 µg/L	101.19 ppb	01:13:36
3	S 181.975 Axial†	157.2	134.6	558.34 µg/L	558.34 ppb	01:13:36
3	Sb 206.836†	40.9	17.5	9.6811 µg/L	9.6811 ppb	01:13:36
3	Se 196.026†	-33.0	-51.5	221.14 µg/L	221.14 ppb	01:13:36
3	SiO2†	322843.3	314063.0	61992 µg/L	61992 ppb	01:13:10
3	Si 251.611†	387191.8	378019.8	28738 µg/L	28738 ppb	01:13:10
3	Sn 189.927†	-31.6	-31.2	-23.496 µg/L	-23.496 ppb	01:13:36
3	Ti 334.940†	1627190.3	1589774.8	3515.9 µg/L	3515.9 ppb	01:13:10
3	Tl 190.801†	-60.4	-36.6	13.106 µg/L	13.106 ppb	01:13:36
3	U 409.014†	-1210.0	-1105.3	-111.67 µg/L	-111.67 ppb	01:13:10
3	V 292.402†	20254.9	19836.1	207.77 µg/L	207.77 ppb	01:13:16
3	Zn 213.857†	10188.0	9420.5	213.50 µg/L	213.50 ppb	01:13:16

Mean Data: 245998001|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004839.2	102.13 %	0.250			0.24%
Sc RADIAL	58806.4	104 %	0.4			0.42%
Y 371.029	1420772.0	105.03 %	0.225			0.21%
Ag 328.068†	-1431.8	-1.7354 µg/L	0.44098	-1.7354 ppb	0.44098	25.41%
Al 396.153Radial†	171059.5	119000 µg/L	307.2	119000 ppb	307.2	0.26%
As 188.979†	10.4	22.966 µg/L	3.0564	22.966 ppb	3.0564	13.31%
B 249.677†	829.0	-28.371 µg/L	1.6198	-28.371 ppb	1.6198	5.71%
Ba 233.527†	91731.2	2202.6 µg/L	65.62	2202.6 ppb	65.62	2.98%
Be 313.107†	20023.6	10.506 µg/L	0.4308	10.506 ppb	0.4308	4.10%
Ca 317.933Radial†	60064.7	51306 µg/L	42.3	51306 ppb	42.3	0.08%
Cd 226.502†	410.7	-3.1840 µg/L	0.71717	-3.1840 ppb	0.71717	22.52%
Co 228.616†	1032.4	39.208 µg/L	2.5323	39.208 ppb	2.5323	6.46%
Cr 267.716†	8912.6	179.14 µg/L	6.845	179.14 ppb	6.845	3.82%
Cu 324.752†	7588.1	66.166 µg/L	1.6132	66.166 ppb	1.6132	2.44%
Fe 238.204 Radial†	15173.9	119680 µg/L	820.7	119680 ppb	820.7	0.69%
K 766.490 Radial†	18224.0	11902 µg/L	11.8	11902 ppb	11.8	0.10%
Mg 279.077 IEC†	2619.9	23291 µg/L	178.6	23291 ppb	178.6	0.77%
Mn 257.610†	683484.2	2155.3 µg/L	45.33	2155.3 ppb	45.33	2.10%
Mo 202.031†	-1.5	4.4036 µg/L	0.85844	4.4036 ppb	0.85844	19.49%
Na 589.592 Radial†	3188.4	979.29 µg/L	2.258	979.29 ppb	2.258	0.23%

Ni 231.604†	1934.6	97.941 µg/L	6.4274	97.941 ppb	6.4274	6.56%
P 214.914†	565.6	1051.4 µg/L	65.90	1051.4 ppb	65.90	6.27%
Pb 220.353†	432.2	107.08 µg/L	5.148	107.08 ppb	5.148	4.81%
S 181.975 Axial†	141.4	586.44 µg/L	24.498	586.44 ppb	24.498	4.18%
Sb 206.836†	20.0	11.900 µg/L	2.0658	11.900 ppb	2.0658	17.36%
Se 196.026†	-55.1	214.58 µg/L	11.437	214.58 ppb	11.437	5.33%
SiO2†	319956.1	63155 µg/L	1007.4	63155 ppb	1007.4	1.60%
Si 251.611†	385077.5	29274 µg/L	464.7	29274 ppb	464.7	1.59%
Sn 189.927†	-32.6	-24.040 µg/L	0.7551	-24.040 ppb	0.7551	3.14%
Sr 421.552†	39873.5	367.84 µg/L	0.859	367.84 ppb	0.859	0.23%
Ti 334.940†	1634823.7	3615.6 µg/L	86.34	3615.6 ppb	86.34	2.39%
Tl 190.801†	-43.9	4.6109 µg/L	8.06538	4.6109 ppb	8.06538	174.92%
U 409.014†	-1119.8	-112.81 µg/L	2.330	-112.81 ppb	2.330	2.07%
V 292.402†	20708.5	216.21 µg/L	7.314	216.21 ppb	7.314	3.38%
Zn 213.857†	9747.8	221.18 µg/L	6.667	221.18 ppb	6.667	3.01%

Sequence No.: 4

Sample ID: 1202032634|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 204

Date Collected: 2/20/2010 01:13:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032634|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57866.9	57866.9	102 %		01:14:18
1	Al 396.153Radial†	215034.5	209931.5	146040 µg/L	146040 ppb	01:14:18
1	Ca 317.933Radial†	61008.1	59351.1	50696 µg/L	50696 ppb	01:14:18
1	Fe 238.204 Radial†	19926.2	19437.4	153300 µg/L	153300 ppb	01:14:38
1	K 766.490 Radial†	22941.9	22233.2	14521 µg/L	14521 ppb	01:14:18
1	Mg 279.077 IEC†	3288.7	3197.9	28422 µg/L	28422 ppb	01:14:38
1	Na 589.592 Radial†	4406.0	3829.4	1176.2 µg/L	1176.2 ppb	01:14:38
1	Sr 421.552†	47531.7	46376.5	427.83 µg/L	427.83 ppb	01:14:18
1	Sc 361.383	1997642.9	1997642.9	101.76 %		01:15:43
1	Y 371.029	1425984.6	1425984.6	105.41 %		01:15:43
1	Ag 328.068†	-2224.7	-1784.6	-1.7893 µg/L	-1.7893 ppb	01:15:48
1	As 188.979†	17.1	17.2	37.131 µg/L	37.131 ppb	01:16:09
1	B 249.677†	1445.9	1036.8	-37.409 µg/L	-37.409 ppb	01:15:48
1	Ba 233.527†	101787.6	100045.6	2402.3 µg/L	2402.3 ppb	01:15:48
1	Be 313.107†	23432.0	25882.7	13.484 µg/L	13.484 ppb	01:15:48
1	Cd 226.502†	414.3	548.8	-3.5168 µg/L	-3.5168 ppb	01:16:09
1	Co 228.616†	1686.5	1655.4	64.684 µg/L	64.684 ppb	01:16:09
1	Cr 267.716†	10297.7	10170.2	204.44 µg/L	204.44 ppb	01:15:48
1	Cu 324.752†	11788.4	9040.9	80.323 µg/L	80.323 ppb	01:15:48
1	Mn 257.610†	1337942.4	1315076.2	4137.4 µg/L	4137.4 ppb	01:15:43
1	Mo 202.031†	-34.6	-28.6	3.0226 µg/L	3.0226 ppb	01:16:09
1	Ni 231.604†	2717.1	2357.8	119.44 µg/L	119.44 ppb	01:16:09
1	P 214.914†	729.2	701.2	1299.4 µg/L	1299.4 ppb	01:16:09
1	Pb 220.353†	733.6	630.0	155.38 µg/L	155.38 ppb	01:16:09
1	S 181.975 Axial†	156.3	134.6	558.34 µg/L	558.34 ppb	01:16:09
1	Sb 206.836†	47.9	24.6	15.831 µg/L	15.831 ppb	01:16:09
1	Se 196.026†	-58.3	-76.6	271.94 µg/L	271.94 ppb	01:16:09
1	SiO2†	335244.8	328059.5	64755 µg/L	64755 ppb	01:15:48
1	Si 251.611†	408039.8	400677.5	30460 µg/L	30460 ppb	01:15:43
1	Sn 189.927†	-40.0	-39.7	-29.997 µg/L	-29.997 ppb	01:16:09
1	Ti 334.940†	2266493.8	2227149.4	4925.5 µg/L	4925.5 ppb	01:15:43
1	Tl 190.801†	-74.9	-51.2	21.582 µg/L	21.582 ppb	01:16:09
1	U 409.014†	-1676.6	-1570.5	-154.89 µg/L	-154.89 ppb	01:15:48
1	V 292.402†	28007.8	27568.5	287.02 µg/L	287.02 ppb	01:15:48
1	Zn 213.857†	13157.4	12395.6	281.30 µg/L	281.30 ppb	01:15:48
2	Sc RADIAL	58124.1	58124.1	103 %		01:14:44
2	Al 396.153Radial†	216392.4	210322.2	146310 µg/L	146310 ppb	01:14:44
2	Ca 317.933Radial†	61298.5	59369.8	50712 µg/L	50712 ppb	01:14:44
2	Fe 238.204 Radial†	19942.1	19366.8	152750 µg/L	152750 ppb	01:15:04
2	K 766.490 Radial†	23124.2	22311.3	14572 µg/L	14572 ppb	01:14:44
2	Mg 279.077 IEC†	3283.2	3178.4	28248 µg/L	28248 ppb	01:15:04
2	Na 589.592 Radial†	4402.0	3806.4	1169.1 µg/L	1169.1 ppb	01:15:04
2	Sr 421.552†	47790.6	46422.8	428.26 µg/L	428.26 ppb	01:14:44
2	Sc 361.383	2008979.7	2008979.7	102.34 %		01:16:16
2	Y 371.029	1435114.3	1435114.3	106.09 %		01:16:16
2	Ag 328.068†	-2232.0	-1779.4	-1.7917 µg/L	-1.7917 ppb	01:16:22
2	As 188.979†	14.9	15.0	33.174 µg/L	33.174 ppb	01:16:42
2	B 249.677†	1398.6	982.6	-39.330 µg/L	-39.330 ppb	01:16:22
2	Ba 233.527†	101703.8	99399.2	2386.8 µg/L	2386.8 ppb	01:16:22
2	Be 313.107†	23550.0	25868.1	13.472 µg/L	13.472 ppb	01:16:22
2	Cd 226.502†	418.3	550.5	-3.4171 µg/L	-3.4171 ppb	01:16:42
2	Co 228.616†	1669.0	1629.0	63.467 µg/L	63.467 ppb	01:16:42
2	Cr 267.716†	10299.2	10114.5	203.32 µg/L	203.32 ppb	01:16:22
2	Cu 324.752†	11704.6	8893.7	79.285 µg/L	79.285 ppb	01:16:22
2	Mn 257.610†	1346258.1	1315782.4	4139.6 µg/L	4139.6 ppb	01:16:16
2	Mo 202.031†	-18.8	-13.1	4.5258 µg/L	4.5258 ppb	01:16:42
2	Ni 231.604†	2664.3	2291.2	116.11 µg/L	116.11 ppb	01:16:42
2	P 214.914†	728.1	696.1	1290.0 µg/L	1290.0 ppb	01:16:42
2	Pb 220.353†	730.8	623.1	153.75 µg/L	153.75 ppb	01:16:42

2	S 181.975 Axial†	156.0	133.5	553.71 µg/L	553.71 ppb	01:16:42
2	Sb 206.836†	32.4	9.2	1.7125 µg/L	1.7125 ppb	01:16:42
2	Se 196.026†	-54.3	-72.4	276.50 µg/L	276.50 ppb	01:16:42
2	SiO2†	334889.2	325853.0	64319 µg/L	64319 ppb	01:16:22
2	Si 251.611†	411326.3	401626.1	30532 µg/L	30532 ppb	01:16:16
2	Sn 189.927†	-37.1	-36.6	-28.655 µg/L	-28.655 ppb	01:16:42
2	Ti 334.940†	2284110.5	2231795.0	4935.8 µg/L	4935.8 ppb	01:16:16
2	Tl 190.801†	-71.9	-47.8	26.020 µg/L	26.020 ppb	01:16:42
2	U 409.014†	-1704.6	-1588.6	-156.31 µg/L	-156.31 ppb	01:16:22
2	V 292.402†	28074.3	27478.2	286.08 µg/L	286.08 ppb	01:16:22
2	Zn 213.857†	13153.1	12318.5	279.54 µg/L	279.54 ppb	01:16:22
3	Sc RADIAL	58184.7	58184.7	103 %		01:15:10
3	Al 396.153Radial†	216402.8	210113.5	146170 µg/L	146170 ppb	01:15:10
3	Ca 317.933Radial†	61242.0	59252.9	50613 µg/L	50613 ppb	01:15:10
3	Fe 238.204 Radial†	20034.1	19435.9	153290 µg/L	153290 ppb	01:15:30
3	K 766.490 Radial†	23062.7	22228.2	14518 µg/L	14518 ppb	01:15:10
3	Mg 279.077 IEC†	3305.5	3196.8	28412 µg/L	28412 ppb	01:15:30
3	Na 589.592 Radial†	4422.2	3821.7	1173.8 µg/L	1173.8 ppb	01:15:30
3	Sr 421.552†	47789.3	46373.2	427.80 µg/L	427.80 ppb	01:15:10
3	Sc 361.383	2006691.2	2006691.2	102.22 %		01:16:49
3	Y 371.029	1430444.1	1430444.1	105.74 %		01:16:49
3	Ag 328.068†	-2084.5	-1637.6	-0.7939 µg/L	-0.7939 ppb	01:16:55
3	As 188.979†	17.3	17.4	37.470 µg/L	37.470 ppb	01:17:16
3	B 249.677†	1358.9	945.2	-41.153 µg/L	-41.153 ppb	01:16:55
3	Ba 233.527†	97935.2	95825.8	2301.0 µg/L	2301.0 ppb	01:16:55
3	Be 313.107†	22135.2	24510.3	12.757 µg/L	12.757 ppb	01:16:55
3	Cd 226.502†	361.0	494.8	-4.8763 µg/L	-4.8763 ppb	01:17:16
3	Co 228.616†	1513.5	1478.7	57.157 µg/L	57.157 ppb	01:17:16
3	Cr 267.716†	9763.7	9602.1	193.02 µg/L	193.02 ppb	01:16:55
3	Cu 324.752†	11427.7	8635.8	77.677 µg/L	77.677 ppb	01:16:55
3	Mn 257.610†	1290821.6	1263049.9	3974.5 µg/L	3974.5 ppb	01:16:49
3	Mo 202.031†	-30.4	-24.4	3.4356 µg/L	3.4356 ppb	01:17:16
3	Ni 231.604†	2467.2	2101.3	106.66 µg/L	106.66 ppb	01:17:16
3	P 214.914†	672.4	642.4	1183.4 µg/L	1183.4 ppb	01:17:16
3	Pb 220.353†	693.5	587.5	145.05 µg/L	145.05 ppb	01:17:16
3	S 181.975 Axial†	154.1	131.8	546.56 µg/L	546.56 ppb	01:17:16
3	Sb 206.836†	36.9	13.6	5.8503 µg/L	5.8503 ppb	01:17:16
3	Se 196.026†	-61.9	-79.9	267.29 µg/L	267.29 ppb	01:17:16
3	SiO2†	324390.6	315955.5	62365 µg/L	62365 ppb	01:16:55
3	Si 251.611†	396762.5	387836.9	29484 µg/L	29484 ppb	01:16:49
3	Sn 189.927†	-41.0	-40.5	-30.333 µg/L	-30.333 ppb	01:17:16
3	Ti 334.940†	2171377.8	2124055.6	4697.4 µg/L	4697.4 ppb	01:16:49
3	Tl 190.801†	-75.3	-51.2	18.941 µg/L	18.941 ppb	01:17:16
3	U 409.014†	-1608.7	-1496.7	-148.74 µg/L	-148.74 ppb	01:16:55
3	V 292.402†	26653.4	26119.4	272.88 µg/L	272.88 ppb	01:16:55
3	Zn 213.857†	12654.5	11845.3	268.45 µg/L	268.45 ppb	01:16:55

Mean Data: 1202032634|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004437.9	102.10 %	0.305			0.30%
Sc RADIAL	58058.6	103 %	0.3			0.29%
Y 371.029	1430514.3	105.75 %	0.337			0.32%
Ag 328.068†	-1733.9	-1.4583 µg/L	0.57542	-1.4583 ppb	0.57542	39.46%
Al 396.153Radial†	210122.4	146170 µg/L	136.0	146170 ppb	136.0	0.09%
As 188.979†	16.6	35.925 µg/L	2.3882	35.925 ppb	2.3882	6.65%
B 249.677†	988.2	-39.297 µg/L	1.8726	-39.297 ppb	1.8726	4.77%
Ba 233.527†	98423.5	2363.3 µg/L	54.58	2363.3 ppb	54.58	2.31%
Be 313.107†	25420.4	13.238 µg/L	0.4165	13.238 ppb	0.4165	3.15%
Ca 317.933Radial†	59324.6	50674 µg/L	53.6	50674 ppb	53.6	0.11%
Cd 226.502†	531.4	-3.9367 µg/L	0.81521	-3.9367 ppb	0.81521	20.71%
Co 228.616†	1587.7	61.769 µg/L	4.0404	61.769 ppb	4.0404	6.54%
Cr 267.716†	9962.3	200.26 µg/L	6.294	200.26 ppb	6.294	3.14%
Cu 324.752†	8856.8	79.095 µg/L	1.3332	79.095 ppb	1.3332	1.69%
Fe 238.204 Radial†	19413.4	153110 µg/L	318.3	153110 ppb	318.3	0.21%
K 766.490 Radial†	22257.6	14537 µg/L	30.4	14537 ppb	30.4	0.21%
Mg 279.077 IEC†	3191.0	28361 µg/L	97.7	28361 ppb	97.7	0.34%
Mn 257.610†	1297969.5	4083.8 µg/L	94.69	4083.8 ppb	94.69	2.32%
Mo 202.031†	-22.0	3.6613 µg/L	0.77658	3.6613 ppb	0.77658	21.21%
Na 589.592 Radial†	3819.2	1173.0 µg/L	3.59	1173.0 ppb	3.59	0.31%

Ni 231.604†	2250.1	114.07 µg/L	6.629	114.07 ppb	6.629	5.81%
P 214.914†	679.9	1257.6 µg/L	64.47	1257.6 ppb	64.47	5.13%
Pb 220.353†	613.5	151.40 µg/L	5.554	151.40 ppb	5.554	3.67%
S 181.975 Axial†	133.3	552.87 µg/L	5.939	552.87 ppb	5.939	1.07%
Sb 206.836†	15.8	7.7978 µg/L	7.25774	7.7978 ppb	7.25774	93.07%
Se 196.026†	-76.3	271.91 µg/L	4.607	271.91 ppb	4.607	1.69%
SiO2†	323289.3	63813 µg/L	1272.4	63813 ppb	1272.4	1.99%
Si 251.611†	396713.5	30159 µg/L	585.5	30159 ppb	585.5	1.94%
Sn 189.927†	-39.0	-29.661 µg/L	0.8876	-29.661 ppb	0.8876	2.99%
Sr 421.552†	46390.9	427.96 µg/L	0.256	427.96 ppb	0.256	0.06%
Ti 334.940†	2194333.3	4852.9 µg/L	134.74	4852.9 ppb	134.74	2.78%
Tl 190.801†	-50.1	22.181 µg/L	3.5772	22.181 ppb	3.5772	16.13%
U 409.014†	-1551.9	-153.31 µg/L	4.022	-153.31 ppb	4.022	2.62%
V 292.402†	27055.4	281.99 µg/L	7.907	281.99 ppb	7.907	2.80%
Zn 213.857†	12186.5	276.43 µg/L	6.967	276.43 ppb	6.967	2.52%

Sequence No.: 5
 Sample ID: 1202032636|948776|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 205
 Date Collected: 2/20/2010 01:17:26
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202032636|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	59080.0	59080.0	105 %		01:17:59
1	Al 396.153Radial†	306182.9	292781.9	203670 µg/L	203670 ppb	01:17:59
1	Ca 317.933Radial†	73179.0	69766.6	59593 µg/L	59593 ppb	01:17:59
1	Fe 238.204 Radial†	21133.4	20192.4	159270 µg/L	159270 ppb	01:18:19
1	K 766.490 Radial†	33378.9	31753.8	20739 µg/L	20739 ppb	01:17:59
1	Mg 279.077 IEC†	4092.2	3900.4	34702 µg/L	34702 ppb	01:18:19
1	Na 589.592 Radial†	20533.3	19162.9	5885.8 µg/L	5885.8 ppb	01:17:59
1	Sr 421.552†	99351.8	94977.0	876.18 µg/L	876.18 ppb	01:17:59
1	Sc 361.383	2012446.1	2012446.1	102.51 %		01:19:24
1	Y 371.029	1427183.8	1427183.8	105.50 %		01:19:24
1	Ag 328.068†	64297.7	63123.3	482.45 µg/L	482.45 ppb	01:19:30
1	As 188.979†	291.0	284.3	514.87 µg/L	514.87 ppb	01:19:51
1	B 249.677†	12743.6	12047.1	409.00 µg/L	409.00 ppb	01:19:30
1	Ba 233.527†	130346.8	127169.0	3054.3 µg/L	3054.3 ppb	01:19:30
1	Be 313.107†	864387.3	846056.3	500.01 µg/L	500.01 ppb	01:19:24
1	Cd 226.502†	19806.9	19463.2	468.02 µg/L	468.02 ppb	01:19:30
1	Co 228.616†	11912.5	11618.6	514.91 µg/L	514.91 ppb	01:19:51
1	Cr 267.716†	34836.9	34033.4	684.03 µg/L	684.03 ppb	01:19:30
1	Cu 324.752†	90492.1	85730.3	581.74 µg/L	581.74 ppb	01:19:30
1	Mn 257.610†	1063735.1	1037918.3	3270.0 µg/L	3270.0 ppb	01:19:24
1	Mo 202.031†	4586.7	4479.6	444.72 µg/L	444.72 ppb	01:19:51
1	Ni 231.604†	12411.1	11794.6	589.40 µg/L	589.40 ppb	01:19:30
1	P 214.914†	1000.3	960.5	1779.1 µg/L	1779.1 ppb	01:19:51
1	Pb 220.353†	2632.4	2476.9	607.19 µg/L	607.19 ppb	01:19:51
1	S 181.975 Axial†	1424.6	1370.8	5684.5 µg/L	5684.5 ppb	01:19:51
1	Sb 206.836†	380.9	349.1	314.73 µg/L	314.73 ppb	01:19:51
1	Se 196.026†	285.9	259.5	752.21 µg/L	752.21 ppb	01:19:51
1	SiO2†	357291.9	347142.9	68521 µg/L	68521 ppb	01:19:30
1	Si 251.611†	436483.1	425474.0	32345 µg/L	32345 ppb	01:19:24
1	Sn 189.927†	1195.3	1165.6	478.38 µg/L	478.38 ppb	01:19:51
1	Ti 334.940†	2590490.5	2526821.0	5588.1 µg/L	5588.1 ppb	01:19:24
1	Tl 190.801†	291.4	306.6	492.45 µg/L	492.45 ppb	01:19:51
1	U 409.014†	4472.9	4440.3	343.15 µg/L	343.15 ppb	01:19:30
1	V 292.402†	76838.7	75000.1	754.98 µg/L	754.98 ppb	01:19:30
1	Zn 213.857†	34744.2	33358.2	769.59 µg/L	769.59 ppb	01:19:30
2	Sc RADIAL	59097.5	59097.5	105 %		01:18:25
2	Al 396.153Radial†	309125.6	295508.4	205560 µg/L	205560 ppb	01:18:25
2	Ca 317.933Radial†	73785.8	70326.0	60071 µg/L	60071 ppb	01:18:25
2	Fe 238.204 Radial†	21155.3	20207.3	159380 µg/L	159380 ppb	01:18:45
2	K 766.490 Radial†	33644.9	31998.6	20899 µg/L	20899 ppb	01:18:25
2	Mg 279.077 IEC†	4104.4	3910.9	34796 µg/L	34796 ppb	01:18:45
2	Na 589.592 Radial†	20860.8	19470.2	5980.1 µg/L	5980.1 ppb	01:18:25
2	Sr 421.552†	100319.1	95873.6	884.45 µg/L	884.45 ppb	01:18:25
2	Sc 361.383	2037963.1	2037963.1	103.81 %		01:19:58
2	Y 371.029	1445356.0	1445356.0	106.85 %		01:19:58
2	Ag 328.068†	64481.2	62514.8	477.90 µg/L	477.90 ppb	01:20:04
2	As 188.979†	289.1	278.9	505.16 µg/L	505.16 ppb	01:20:24
2	B 249.677†	12776.9	11923.6	403.89 µg/L	403.89 ppb	01:20:04
2	Ba 233.527†	130720.5	125936.9	3024.7 µg/L	3024.7 ppb	01:20:04
2	Be 313.107†	866294.0	837335.4	494.86 µg/L	494.86 ppb	01:19:58
2	Cd 226.502†	19863.0	19275.2	463.31 µg/L	463.31 ppb	01:20:04
2	Co 228.616†	11792.7	11357.7	503.21 µg/L	503.21 ppb	01:20:24
2	Cr 267.716†	34984.8	33750.4	678.34 µg/L	678.34 ppb	01:20:04
2	Cu 324.752†	90904.6	85022.4	577.14 µg/L	577.14 ppb	01:20:04
2	Mn 257.610†	1065716.0	1026834.1	3235.4 µg/L	3235.4 ppb	01:19:58
2	Mo 202.031†	4530.8	4369.7	433.97 µg/L	433.97 ppb	01:20:24
2	Ni 231.604†	12408.9	11640.9	581.75 µg/L	581.75 ppb	01:20:04
2	P 214.914†	989.5	937.8	1735.0 µg/L	1735.0 ppb	01:20:24
2	Pb 220.353†	2601.0	2414.5	592.12 µg/L	592.12 ppb	01:20:24

2	S 181.975 Axial†	1418.8	1347.7	5589.0 µg/L	5589.0 ppb	01:20:24
2	Sb 206.836†	399.0	361.8	326.26 µg/L	326.26 ppb	01:20:24
2	Se 196.026†	284.6	254.9	745.75 µg/L	745.75 ppb	01:20:24
2	SiO2†	358089.1	343546.9	67812 µg/L	67812 ppb	01:20:04
2	Si 251.611†	437672.3	421288.3	32027 µg/L	32027 ppb	01:19:58
2	Sn 189.927†	1178.7	1135.0	465.47 µg/L	465.47 ppb	01:20:24
2	Ti 334.940†	2594839.5	2499370.2	5527.4 µg/L	5527.4 ppb	01:19:58
2	Tl 190.801†	299.5	310.9	497.43 µg/L	497.43 ppb	01:20:24
2	U 409.014†	4439.1	4353.1	335.86 µg/L	335.86 ppb	01:20:04
2	V 292.402†	77097.8	74311.2	748.18 µg/L	748.18 ppb	01:20:04
2	Zn 213.857†	34796.4	32984.1	760.85 µg/L	760.85 ppb	01:20:04
3	Sc RADIAL	58878.3	58878.3	104 %		01:18:51
3	Al 396.153Radial†	309298.4	296774.3	206440 µg/L	206440 ppb	01:18:51
3	Ca 317.933Radial†	73845.0	70645.3	60344 µg/L	60344 ppb	01:18:51
3	Fe 238.204 Radial†	21168.5	20295.3	160080 µg/L	160080 ppb	01:19:11
3	K 766.490 Radial†	33620.0	32094.5	20961 µg/L	20961 ppb	01:18:51
3	Mg 279.077 IEC†	4117.0	3937.5	35033 µg/L	35033 ppb	01:19:11
3	Na 589.592 Radial†	20840.9	19525.3	5997.1 µg/L	5997.1 ppb	01:18:51
3	Sr 421.552†	100495.1	96399.4	889.30 µg/L	889.30 ppb	01:18:51
3	Sc 361.383	2028592.1	2028592.1	103.34 %		01:20:32
3	Y 371.029	1437366.5	1437366.5	106.25 %		01:20:32
3	Ag 328.068†	62902.3	61273.8	468.54 µg/L	468.54 ppb	01:20:37
3	As 188.979†	264.0	255.9	464.01 µg/L	464.01 ppb	01:20:58
3	B 249.677†	12385.6	11601.7	390.36 µg/L	390.36 ppb	01:20:37
3	Ba 233.527†	125355.3	121326.5	2914.0 µg/L	2914.0 ppb	01:20:37
3	Be 313.107†	839524.1	815284.3	481.83 µg/L	481.83 ppb	01:20:32
3	Cd 226.502†	19188.1	18710.5	449.13 µg/L	449.13 ppb	01:20:37
3	Co 228.616†	10925.0	10570.5	467.86 µg/L	467.86 ppb	01:20:58
3	Cr 267.716†	33120.6	32102.0	645.21 µg/L	645.21 ppb	01:20:37
3	Cu 324.752†	86968.3	81617.7	555.01 µg/L	555.01 ppb	01:20:37
3	Mn 257.610†	1034953.0	1001806.2	3157.1 µg/L	3157.1 ppb	01:20:32
3	Mo 202.031†	4212.7	4082.1	405.83 µg/L	405.83 ppb	01:20:58
3	Ni 231.604†	11875.1	11179.5	558.80 µg/L	558.80 ppb	01:20:37
3	P 214.914†	935.0	889.5	1640.9 µg/L	1640.9 ppb	01:20:58
3	Pb 220.353†	2477.3	2306.4	565.83 µg/L	565.83 ppb	01:20:58
3	S 181.975 Axial†	1350.3	1287.8	5340.6 µg/L	5340.6 ppb	01:20:58
3	Sb 206.836†	356.6	322.6	290.09 µg/L	290.09 ppb	01:20:58
3	Se 196.026†	274.7	246.5	735.61 µg/L	735.61 ppb	01:20:58
3	SiO2†	345258.8	332724.1	65675 µg/L	65675 ppb	01:20:37
3	Si 251.611†	427652.9	413539.9	31438 µg/L	31438 ppb	01:20:32
3	Sn 189.927†	1092.1	1056.5	432.29 µg/L	432.29 ppb	01:20:58
3	Ti 334.940†	2509303.3	2428141.1	5369.8 µg/L	5369.8 ppb	01:20:32
3	Tl 190.801†	277.4	290.8	469.95 µg/L	469.95 ppb	01:20:58
3	U 409.014†	4198.6	4140.2	318.06 µg/L	318.06 ppb	01:20:37
3	V 292.402†	73321.4	70999.7	715.68 µg/L	715.68 ppb	01:20:37
3	Zn 213.857†	33382.4	31770.6	732.47 µg/L	732.47 ppb	01:20:37

Mean Data: 1202032636|948776|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2026333.8	103.22 %	%	0.658			0.64%
Sc RADIAL	59018.6	104 %	%	0.2			0.21%
Y 371.029	1436635.4	106.20 %	%	0.673			0.63%
Ag 328.068†	62304.0	476.30 µg/L	µg/L	7.091	476.30 ppb	7.091	1.49%
Al 396.153Radial†	295021.5	205220 µg/L	µg/L	1419.6	205220 ppb	1419.6	0.69%
As 188.979†	273.0	494.68 µg/L	µg/L	26.999	494.68 ppb	26.999	5.46%
B 249.677†	11857.5	401.09 µg/L	µg/L	9.632	401.09 ppb	9.632	2.40%
Ba 233.527†	124810.8	2997.6 µg/L	µg/L	73.97	2997.6 ppb	73.97	2.47%
Be 313.107†	832892.0	492.23 µg/L	µg/L	9.370	492.23 ppb	9.370	1.90%
Ca 317.933Radial†	70246.0	60003 µg/L	µg/L	379.9	60003 ppb	379.9	0.63%
Cd 226.502†	19149.6	460.15 µg/L	µg/L	9.835	460.15 ppb	9.835	2.14%
Co 228.616†	11182.2	495.33 µg/L	µg/L	24.494	495.33 ppb	24.494	4.94%
Cr 267.716†	33295.3	669.19 µg/L	µg/L	20.963	669.19 ppb	20.963	3.13%
Cu 324.752†	84123.5	571.29 µg/L	µg/L	14.291	571.29 ppb	14.291	2.50%
Fe 238.204 Radial†	20231.7	159580 µg/L	µg/L	438.0	159580 ppb	438.0	0.27%
K 766.490 Radial†	31949.0	20866 µg/L	µg/L	114.7	20866 ppb	114.7	0.55%
Mg 279.077 IEC†	3916.2	34843 µg/L	µg/L	170.5	34843 ppb	170.5	0.49%
Mn 257.610†	1022186.2	3220.8 µg/L	µg/L	57.88	3220.8 ppb	57.88	1.80%
Mo 202.031†	4310.5	428.17 µg/L	µg/L	20.085	428.17 ppb	20.085	4.69%
Na 589.592 Radial†	19386.2	5954.3 µg/L	µg/L	59.98	5954.3 ppb	59.98	1.01%

Ni 231.604†	11538.3	576.65 µg/L	15.922	576.65 ppb	15.922	2.76%
P 214.914†	929.3	1718.3 µg/L	70.60	1718.3 ppb	70.60	4.11%
Pb 220.353†	2399.3	588.38 µg/L	20.935	588.38 ppb	20.935	3.56%
S 181.975 Axial†	1335.4	5538.0 µg/L	177.54	5538.0 ppb	177.54	3.21%
Sb 206.836†	344.5	310.36 µg/L	18.477	310.36 ppb	18.477	5.95%
Se 196.026†	253.6	744.52 µg/L	8.366	744.52 ppb	8.366	1.12%
SiO2†	341138.0	67336 µg/L	1481.4	67336 ppb	1481.4	2.20%
Si 251.611†	420100.7	31937 µg/L	460.3	31937 ppb	460.3	1.44%
Sn 189.927†	1119.0	458.71 µg/L	23.779	458.71 ppb	23.779	5.18%
Sr 421.552†	95750.0	883.31 µg/L	6.635	883.31 ppb	6.635	0.75%
Ti 334.940†	2484777.4	5495.1 µg/L	112.68	5495.1 ppb	112.68	2.05%
Tl 190.801†	302.8	486.61 µg/L	14.641	486.61 ppb	14.641	3.01%
U 409.014†	4311.2	332.36 µg/L	12.909	332.36 ppb	12.909	3.88%
V 292.402†	73437.0	739.61 µg/L	21.006	739.61 ppb	21.006	2.84%
Zn 213.857†	32704.3	754.30 µg/L	19.409	754.30 ppb	19.409	2.57%

Sequence No.: 6

Sample ID: 1202032637|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 206

Date Collected: 2/20/2010 01:21:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032637|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57948.5	57948.5	103 %		01:21:46
1	Al 396.153Radial†	318324.6	310336.0	215880 µg/L	215880 ppb	01:21:40
1	Ca 317.933Radial†	63847.7	62035.6	52989 µg/L	52989 ppb	01:21:46
1	Fe 238.204 Radial†	23710.4	23099.4	182190 µg/L	182190 ppb	01:21:46
1	K 766.490 Radial†	34135.0	33114.1	21627 µg/L	21627 ppb	01:21:40
1	Mg 279.077 IEC†	4345.4	4223.7	37567 µg/L	37567 ppb	01:21:46
1	Na 589.592 Radial†	20699.8	19708.6	6053.4 µg/L	6053.4 ppb	01:21:46
1	Sr 421.552†	100360.9	97815.8	902.36 µg/L	902.36 ppb	01:21:40
1	Sc 361.383	2032042.0	2032042.0	103.51 %		01:22:21
1	Y 371.029	1445817.7	1445817.7	106.88 %		01:22:21
1	Ag 328.068†	63919.0	62152.6	477.07 µg/L	477.07 ppb	01:22:27
1	As 188.979†	293.8	284.3	516.57 µg/L	516.57 ppb	01:22:47
1	B 249.677†	12914.3	12092.1	398.87 µg/L	398.87 ppb	01:22:27
1	Ba 233.527†	121885.2	117768.2	2828.7 µg/L	2828.7 ppb	01:22:27
1	Be 313.107†	860841.2	834499.2	492.85 µg/L	492.85 ppb	01:22:21
1	Cd 226.502†	19891.6	19358.6	462.82 µg/L	462.82 ppb	01:22:27
1	Co 228.616†	12076.6	11665.1	515.35 µg/L	515.35 ppb	01:22:47
1	Cr 267.716†	35177.6	34034.9	684.09 µg/L	684.09 ppb	01:22:27
1	Cu 324.752†	91258.1	85619.1	584.20 µg/L	584.20 ppb	01:22:27
1	Mn 257.610†	1429183.6	1380965.0	4347.2 µg/L	4347.2 ppb	01:22:21
1	Mo 202.031†	4608.7	4457.8	443.45 µg/L	443.45 ppb	01:22:47
1	Ni 231.604†	12462.5	11727.4	586.35 µg/L	586.35 ppb	01:22:27
1	P 214.914†	1008.5	958.9	1760.8 µg/L	1760.8 ppb	01:22:47
1	Pb 220.353†	2765.3	2580.6	632.23 µg/L	632.23 ppb	01:22:47
1	S 181.975 Axial†	1387.6	1321.6	5480.7 µg/L	5480.7 ppb	01:22:47
1	Sb 206.836†	403.7	367.5	332.19 µg/L	332.19 ppb	01:22:47
1	Se 196.026†	279.9	251.1	802.27 µg/L	802.27 ppb	01:22:47
1	SiO2†	359039.2	345469.8	68191 µg/L	68191 ppb	01:22:27
1	Si 251.611†	433319.7	418311.8	31801 µg/L	31801 ppb	01:22:21
1	Sn 189.927†	1168.7	1128.7	460.72 µg/L	460.72 ppb	01:22:47
1	Ti 334.940†	2989239.2	2887676.0	6386.0 µg/L	6386.0 ppb	01:22:21
1	Tl 190.801†	290.2	302.7	503.61 µg/L	503.61 ppb	01:22:47
1	U 409.014†	4055.7	3995.2	303.38 µg/L	303.38 ppb	01:22:27
1	V 292.402†	83582.5	80792.3	814.07 µg/L	814.07 ppb	01:22:27
1	Zn 213.857†	35569.6	33828.8	779.40 µg/L	779.40 ppb	01:22:27
2	Sc RADIAL	57913.1	57913.1	103 %		01:21:57
2	Al 396.153Radial†	318752.3	310943.1	216300 µg/L	216300 ppb	01:21:51
2	Ca 317.933Radial†	64320.2	62534.6	53416 µg/L	53416 ppb	01:21:57
2	Fe 238.204 Radial†	23880.4	23279.3	183610 µg/L	183610 ppb	01:21:57
2	K 766.490 Radial†	34173.4	33172.0	21665 µg/L	21665 ppb	01:21:51
2	Mg 279.077 IEC†	4365.2	4245.5	37762 µg/L	37762 ppb	01:21:57
2	Na 589.592 Radial†	20867.0	19884.1	6107.3 µg/L	6107.3 ppb	01:21:57
2	Sr 421.552†	100449.5	97962.0	903.71 µg/L	903.71 ppb	01:21:51
2	Sc 361.383	2009501.9	2009501.9	102.36 %		01:22:55
2	Y 371.029	1429945.8	1429945.8	105.71 %		01:22:55
2	Ag 328.068†	63197.0	62139.9	477.06 µg/L	477.06 ppb	01:23:00
2	As 188.979†	289.1	282.9	514.02 µg/L	514.02 ppb	01:23:21
2	B 249.677†	12752.3	12073.8	397.39 µg/L	397.39 ppb	01:23:00
2	Ba 233.527†	120459.9	117696.6	2827.0 µg/L	2827.0 ppb	01:23:00
2	Be 313.107†	854439.4	837573.4	494.66 µg/L	494.66 ppb	01:22:55
2	Cd 226.502†	19587.4	19277.0	460.62 µg/L	460.62 ppb	01:23:00
2	Co 228.616†	12108.6	11827.2	522.63 µg/L	522.63 ppb	01:23:21
2	Cr 267.716†	34802.3	34049.4	684.39 µg/L	684.39 ppb	01:23:00
2	Cu 324.752†	90399.5	85769.2	585.38 µg/L	585.38 ppb	01:23:00
2	Mn 257.610†	1417250.7	1384794.7	4359.4 µg/L	4359.4 ppb	01:22:55
2	Mo 202.031†	4647.7	4545.8	452.13 µg/L	452.13 ppb	01:23:21
2	Ni 231.604†	12288.2	11692.3	584.60 µg/L	584.60 ppb	01:23:00
2	P 214.914†	1013.0	974.3	1790.3 µg/L	1790.3 ppb	01:23:21
2	Pb 220.353†	2771.1	2616.2	640.88 µg/L	640.88 ppb	01:23:21

2	S 181.975 Axial†	1374.4	1323.8	5489.7 µg/L	5489.7 ppb	01:23:21
2	Sb 206.836†	406.8	374.9	339.03 µg/L	339.03 ppb	01:23:21
2	Se 196.026†	278.6	252.8	808.28 µg/L	808.28 ppb	01:23:21
2	SiO2†	354258.5	344690.1	68037 µg/L	68037 ppb	01:23:00
2	Si 251.611†	430828.7	420573.9	31973 µg/L	31973 ppb	01:22:55
2	Sn 189.927†	1179.5	1151.9	470.40 µg/L	470.40 ppb	01:23:21
2	Ti 334.940†	2970300.7	2901567.1	6416.8 µg/L	6416.8 ppb	01:22:55
2	Tl 190.801†	285.2	301.0	501.89 µg/L	501.89 ppb	01:23:21
2	U 409.014†	4040.5	4024.3	305.58 µg/L	305.58 ppb	01:23:00
2	V 292.402†	82581.0	80719.7	813.60 µg/L	813.60 ppb	01:23:00
2	Zn 213.857†	35187.6	33841.0	779.61 µg/L	779.61 ppb	01:23:00
3	Sc RADIAL	57873.6	57873.6	102 %		01:22:08
3	Al 396.153Radial†	323117.9	315417.0	219410 µg/L	219410 ppb	01:22:02
3	Ca 317.933Radial†	63764.4	62034.9	52989 µg/L	52989 ppb	01:22:08
3	Fe 238.204 Radial†	23597.8	23019.3	181560 µg/L	181560 ppb	01:22:08
3	K 766.490 Radial†	34530.2	33543.0	21907 µg/L	21907 ppb	01:22:02
3	Mg 279.077 IEC†	4338.5	4222.4	37557 µg/L	37557 ppb	01:22:08
3	Na 589.592 Radial†	20794.2	19826.9	6089.7 µg/L	6089.7 ppb	01:22:08
3	Sr 421.552†	101719.7	99268.9	915.77 µg/L	915.77 ppb	01:22:02
3	Sc 361.383	2008456.3	2008456.3	102.31 %		01:23:28
3	Y 371.029	1430285.8	1430285.8	105.73 %		01:23:28
3	Ag 328.068†	63797.5	62759.0	481.59 µg/L	481.59 ppb	01:23:34
3	As 188.979†	292.3	286.2	519.85 µg/L	519.85 ppb	01:23:55
3	B 249.677†	12922.5	12246.6	405.51 µg/L	405.51 ppb	01:23:34
3	Ba 233.527†	121739.3	119008.4	2858.5 µg/L	2858.5 ppb	01:23:34
3	Be 313.107†	863641.7	847002.6	500.23 µg/L	500.23 ppb	01:23:28
3	Cd 226.502†	19823.7	19517.9	466.87 µg/L	466.87 ppb	01:23:34
3	Co 228.616†	12025.3	11751.9	519.08 µg/L	519.08 ppb	01:23:55
3	Cr 267.716†	35182.3	34438.5	692.21 µg/L	692.21 ppb	01:23:34
3	Cu 324.752†	91478.6	86869.9	592.28 µg/L	592.28 ppb	01:23:34
3	Mn 257.610†	1432991.8	1400901.2	4409.6 µg/L	4409.6 ppb	01:23:28
3	Mo 202.031†	4580.2	4482.1	445.82 µg/L	445.82 ppb	01:23:55
3	Ni 231.604†	12453.9	11860.5	592.97 µg/L	592.97 ppb	01:23:34
3	P 214.914†	1017.6	979.3	1801.8 µg/L	1801.8 ppb	01:23:55
3	Pb 220.353†	2759.6	2606.4	638.70 µg/L	638.70 ppb	01:23:55
3	S 181.975 Axial†	1377.5	1327.4	5504.8 µg/L	5504.8 ppb	01:23:55
3	Sb 206.836†	412.2	380.4	343.96 µg/L	343.96 ppb	01:23:55
3	Se 196.026†	273.8	248.3	796.67 µg/L	796.67 ppb	01:23:55
3	SiO2†	357946.2	348474.8	68784 µg/L	68784 ppb	01:23:34
3	Si 251.611†	434038.4	423930.3	32228 µg/L	32228 ppb	01:23:28
3	Sn 189.927†	1162.2	1135.6	463.70 µg/L	463.70 ppb	01:23:55
3	Ti 334.940†	3000321.7	2932421.0	6485.0 µg/L	6485.0 ppb	01:23:28
3	Tl 190.801†	283.8	299.8	501.11 µg/L	501.11 ppb	01:23:55
3	U 409.014†	4157.8	4141.0	315.59 µg/L	315.59 ppb	01:23:34
3	V 292.402†	83609.5	81767.0	823.54 µg/L	823.54 ppb	01:23:34
3	Zn 213.857†	35566.9	34229.7	788.79 µg/L	788.79 ppb	01:23:34

Mean Data: 1202032637|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2016666.7	102.73 %	0.679			0.66%
Sc RADIAL	57911.8	103 %	0.1			0.06%
Y 371.029	1435349.8	106.11 %	0.670			0.63%
Ag 328.068†	62350.5	478.58 µg/L	2.609	478.58 ppb	2.609	0.55%
Al 396.153Radial†	312232.0	217200 µg/L	1930.4	217200 ppb	1930.4	0.89%
As 188.979†	284.5	516.81 µg/L	2.922	516.81 ppb	2.922	0.57%
B 249.677†	12137.5	400.59 µg/L	4.327	400.59 ppb	4.327	1.08%
Ba 233.527†	118157.7	2838.1 µg/L	17.72	2838.1 ppb	17.72	0.62%
Be 313.107†	839691.7	495.91 µg/L	3.848	495.91 ppb	3.848	0.78%
Ca 317.933Radial†	62201.7	53131 µg/L	246.3	53131 ppb	246.3	0.46%
Cd 226.502†	19384.5	463.44 µg/L	3.170	463.44 ppb	3.170	0.68%
Co 228.616†	11748.1	519.02 µg/L	3.644	519.02 ppb	3.644	0.70%
Cr 267.716†	34174.3	686.90 µg/L	4.602	686.90 ppb	4.602	0.67%
Cu 324.752†	86086.1	587.29 µg/L	4.363	587.29 ppb	4.363	0.74%
Fe 238.204 Radial†	23132.7	182460 µg/L	1050.2	182460 ppb	1050.2	0.58%
K 766.490 Radial†	33276.4	21733 µg/L	152.0	21733 ppb	152.0	0.70%
Mg 279.077 IEC†	4230.5	37629 µg/L	115.3	37629 ppb	115.3	0.31%
Mn 257.610†	1388886.9	4372.1 µg/L	33.05	4372.1 ppb	33.05	0.76%
Mo 202.031†	4495.2	447.13 µg/L	4.485	447.13 ppb	4.485	1.00%
Na 589.592 Radial†	19806.5	6083.4 µg/L	27.49	6083.4 ppb	27.49	0.45%

Ni 231.604†	11760.1	587.97 µg/L	4.411	587.97 ppb	4.411	0.75%
P 214.914†	970.8	1784.3 µg/L	21.14	1784.3 ppb	21.14	1.18%
Pb 220.353†	2601.1	637.27 µg/L	4.497	637.27 ppb	4.497	0.71%
S 181.975 Axial†	1324.3	5491.7 µg/L	12.20	5491.7 ppb	12.20	0.22%
Sb 206.836†	374.3	338.39 µg/L	5.915	338.39 ppb	5.915	1.75%
Se 196.026†	250.7	802.41 µg/L	5.809	802.41 ppb	5.809	0.72%
SiO2†	346211.6	68338 µg/L	394.5	68338 ppb	394.5	0.58%
Si 251.611†	420938.7	32001 µg/L	214.9	32001 ppb	214.9	0.67%
Sn 189.927†	1138.7	464.94 µg/L	4.957	464.94 ppb	4.957	1.07%
Sr 421.552†	98348.9	907.28 µg/L	7.381	907.28 ppb	7.381	0.81%
Ti 334.940†	2907221.3	6429.3 µg/L	50.67	6429.3 ppb	50.67	0.79%
Tl 190.801†	301.2	502.20 µg/L	1.275	502.20 ppb	1.275	0.25%
U 409.014†	4053.5	308.18 µg/L	6.505	308.18 ppb	6.505	2.11%
V 292.402†	81093.0	817.07 µg/L	5.611	817.07 ppb	5.611	0.69%
Zn 213.857†	33966.5	782.60 µg/L	5.363	782.60 ppb	5.363	0.69%

Sequence No.: 7
 Sample ID: 1202032635|948776|5
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 207
 Date Collected: 2/20/2010 01:24:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202032635|948776|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58006.5	58006.5	103 %		01:24:37
1	Al 396.153Radial†	35704.5	34767.1	24186 µg/L	24186 ppb	01:24:37
1	Ca 317.933Radial†	12460.3	11924.5	10186 µg/L	10186 ppb	01:24:57
1	Fe 238.204 Radial†	3228.2	3127.5	24667 µg/L	24667 ppb	01:24:57
1	K 766.490 Radial†	3974.2	3705.7	2420.3 µg/L	2420.3 ppb	01:24:37
1	Mg 279.077 IEC†	557.1	529.8	4709.2 µg/L	4709.2 ppb	01:24:57
1	Na 589.592 Radial†	1105.8	604.9	185.78 µg/L	185.78 ppb	01:24:37
1	Sr 421.552†	8317.6	8072.1	74.466 µg/L	74.466 ppb	01:24:37
1	Sc 361.383	2027276.6	2027276.6	103.27 %		01:26:00
1	Y 371.029	1402606.3	1402606.3	103.69 %		01:26:00
1	Ag 328.068†	-619.6	-198.3	0.3544 µg/L	0.3544 ppb	01:26:06
1	As 188.979†	0.7	1.1	2.9364 µg/L	2.9364 ppb	01:26:26
1	B 249.677†	545.1	143.7	-6.9541 µg/L	-6.9541 ppb	01:26:06
1	Ba 233.527†	19497.2	18897.3	453.74 µg/L	453.74 ppb	01:26:06
1	Be 313.107†	1552.2	4358.8	2.3056 µg/L	2.3056 ppb	01:26:06
1	Cd 226.502†	-57.0	86.5	-0.6108 µg/L	-0.6108 ppb	01:26:26
1	Co 228.616†	227.6	218.5	8.3544 µg/L	8.3544 ppb	01:26:26
1	Cr 267.716†	1863.1	1854.5	37.275 µg/L	37.275 ppb	01:26:06
1	Cu 324.752†	4092.6	1419.3	12.693 µg/L	12.693 ppb	01:26:06
1	Mn 257.610†	145127.9	140791.1	443.98 µg/L	443.98 ppb	01:26:00
1	Mo 202.031†	2.3	7.6	1.6787 µg/L	1.6787 ppb	01:26:26
1	Ni 231.604†	742.1	406.2	20.559 µg/L	20.559 ppb	01:26:26
1	P 214.914†	133.5	113.9	211.46 µg/L	211.46 ppb	01:26:26
1	Pb 220.353†	187.1	90.2	22.329 µg/L	22.329 ppb	01:26:26
1	S 181.975 Axial†	46.6	26.2	108.54 µg/L	108.54 ppb	01:26:26
1	Sb 206.836†	26.5	3.2	1.6472 µg/L	1.6472 ppb	01:26:26
1	Se 196.026†	6.3	-13.2	41.856 µg/L	41.856 ppb	01:26:26
1	SiO2†	67268.9	63748.4	12583 µg/L	12583 ppb	01:26:06
1	Si 251.611†	79729.1	76895.3	5845.7 µg/L	5845.7 ppb	01:26:06
1	Sn 189.927†	-2.5	-2.8	-3.3200 µg/L	-3.3200 ppb	01:26:26
1	Ti 334.940†	344954.8	333863.1	738.37 µg/L	738.37 ppb	01:26:00
1	Tl 190.801†	-29.0	-5.7	5.2725 µg/L	5.2725 ppb	01:26:26
1	U 409.014†	-302.9	-216.2	-22.014 µg/L	-22.014 ppb	01:26:06
1	V 292.402†	4283.5	4192.7	43.835 µg/L	43.835 ppb	01:26:06
1	Zn 213.857†	2608.4	1991.4	45.177 µg/L	45.177 ppb	01:26:26
2	Sc RADIAL	57765.1	57765.1	102 %		01:25:03
2	Al 396.153Radial†	35493.1	34705.7	24143 µg/L	24143 ppb	01:25:03
2	Ca 317.933Radial†	12438.7	11954.1	10211 µg/L	10211 ppb	01:25:23
2	Fe 238.204 Radial†	3226.4	3138.9	24757 µg/L	24757 ppb	01:25:23
2	K 766.490 Radial†	3987.2	3734.6	2439.1 µg/L	2439.1 ppb	01:25:03
2	Mg 279.077 IEC†	558.3	533.3	4740.2 µg/L	4740.2 ppb	01:25:23
2	Na 589.592 Radial†	1103.7	607.3	186.52 µg/L	186.52 ppb	01:25:03
2	Sr 421.552†	8266.2	8055.7	74.315 µg/L	74.315 ppb	01:25:03
2	Sc 361.383	2031446.6	2031446.6	103.48 %		01:26:33
2	Y 371.029	1406661.3	1406661.3	103.98 %		01:26:33
2	Ag 328.068†	-714.9	-289.3	-0.3127 µg/L	-0.3127 ppb	01:26:39
2	As 188.979†	4.7	5.0	9.8896 µg/L	9.8896 ppb	01:26:59
2	B 249.677†	542.6	140.2	-7.1423 µg/L	-7.1423 ppb	01:26:39
2	Ba 233.527†	19624.0	18981.0	455.75 µg/L	455.75 ppb	01:26:39
2	Be 313.107†	1423.0	4230.8	2.2287 µg/L	2.2287 ppb	01:26:39
2	Cd 226.502†	-55.6	87.9	-0.5847 µg/L	-0.5847 ppb	01:26:59
2	Co 228.616†	229.0	219.4	8.3881 µg/L	8.3881 ppb	01:26:59
2	Cr 267.716†	1876.7	1864.0	37.464 µg/L	37.464 ppb	01:26:39
2	Cu 324.752†	4101.3	1419.6	12.707 µg/L	12.707 ppb	01:26:39
2	Mn 257.610†	145938.4	141285.9	445.54 µg/L	445.54 ppb	01:26:33
2	Mo 202.031†	-1.2	4.2	1.3517 µg/L	1.3517 ppb	01:26:59
2	Ni 231.604†	727.0	390.2	19.763 µg/L	19.763 ppb	01:26:59
2	P 214.914†	129.6	109.9	203.45 µg/L	203.45 ppb	01:26:59
2	Pb 220.353†	176.2	79.3	19.676 µg/L	19.676 ppb	01:26:59

2	S 181.975 Axial†	44.3	23.9	99.186 µg/L	99.186 ppb	01:26:59
2	Sb 206.836†	25.4	2.1	0.6064 µg/L	0.6064 ppb	01:26:59
2	Se 196.026†	7.0	-12.5	43.001 µg/L	43.001 ppb	01:26:59
2	SiO2†	67788.2	64116.6	12656 µg/L	12656 ppb	01:26:39
2	Si 251.611†	80389.3	77374.8	5882.2 µg/L	5882.2 ppb	01:26:39
2	Sn 189.927†	-12.2	-12.2	-7.2795 µg/L	-7.2795 ppb	01:26:59
2	Ti 334.940†	346742.0	334904.4	740.67 µg/L	740.67 ppb	01:26:33
2	Tl 190.801†	-32.4	-8.9	1.1448 µg/L	1.1448 ppb	01:26:59
2	U 409.014†	-335.9	-247.5	-24.629 µg/L	-24.629 ppb	01:26:39
2	V 292.402†	4303.8	4203.8	43.949 µg/L	43.949 ppb	01:26:39
2	Zn 213.857†	2587.6	1966.2	44.582 µg/L	44.582 ppb	01:26:59
3	Sc RADIAL	57799.8	57799.8	102 %		01:25:29
3	Al 396.153Radial†	35669.9	34857.7	24249 µg/L	24249 ppb	01:25:29
3	Ca 317.933Radial†	12433.2	11941.4	10200 µg/L	10200 ppb	01:25:49
3	Fe 238.204 Radial†	3218.0	3128.8	24677 µg/L	24677 ppb	01:25:49
3	K 766.490 Radial†	3991.6	3736.6	2440.4 µg/L	2440.4 ppb	01:25:29
3	Mg 279.077 IEC†	559.3	533.9	4745.8 µg/L	4745.8 ppb	01:25:49
3	Na 589.592 Radial†	1112.1	614.8	188.84 µg/L	188.84 ppb	01:25:29
3	Sr 421.552†	8323.2	8106.6	74.784 µg/L	74.784 ppb	01:25:29
3	Sc 361.383	2009572.8	2009572.8	102.37 %		01:27:06
3	Y 371.029	1391314.8	1391314.8	102.85 %		01:27:06
3	Ag 328.068†	-603.4	-187.9	0.4075 µg/L	0.4075 ppb	01:27:12
3	As 188.979†	1.4	1.8	4.1883 µg/L	4.1883 ppb	01:27:32
3	B 249.677†	535.4	138.8	-7.1644 µg/L	-7.1644 ppb	01:27:12
3	Ba 233.527†	17897.8	17501.1	420.22 µg/L	420.22 ppb	01:27:12
3	Be 313.107†	1137.6	3967.0	2.0931 µg/L	2.0931 ppb	01:27:12
3	Cd 226.502†	-63.3	79.8	-0.7818 µg/L	-0.7818 ppb	01:27:32
3	Co 228.616†	196.0	189.6	7.1543 µg/L	7.1543 ppb	01:27:32
3	Cr 267.716†	1642.7	1655.1	33.266 µg/L	33.266 ppb	01:27:12
3	Cu 324.752†	3932.6	1298.0	11.903 µg/L	11.903 ppb	01:27:12
3	Mn 257.610†	134906.8	132044.3	416.59 µg/L	416.59 ppb	01:27:06
3	Mo 202.031†	0.8	6.1	1.5349 µg/L	1.5349 ppb	01:27:32
3	Ni 231.604†	650.9	323.5	16.438 µg/L	16.438 ppb	01:27:32
3	P 214.914†	115.5	97.5	179.00 µg/L	179.00 ppb	01:27:32
3	Pb 220.353†	162.9	68.2	16.971 µg/L	16.971 ppb	01:27:32
3	S 181.975 Axial†	43.7	23.8	98.640 µg/L	98.640 ppb	01:27:32
3	Sb 206.836†	23.8	0.7	-0.6009 µg/L	-0.6009 ppb	01:27:32
3	Se 196.026†	8.5	-11.0	44.928 µg/L	44.928 ppb	01:27:32
3	SiO2†	62457.1	59621.8	11769 µg/L	11769 ppb	01:27:12
3	Si 251.611†	73834.8	71817.4	5459.7 µg/L	5459.7 ppb	01:27:12
3	Sn 189.927†	-5.5	-5.8	-4.5632 µg/L	-4.5632 ppb	01:27:32
3	Ti 334.940†	317558.8	310043.1	685.67 µg/L	685.67 ppb	01:27:06
3	Tl 190.801†	-27.0	-4.0	6.9091 µg/L	6.9091 ppb	01:27:32
3	U 409.014†	-234.8	-152.3	-16.709 µg/L	-16.709 ppb	01:27:12
3	V 292.402†	3844.7	3800.6	40.010 µg/L	40.010 ppb	01:27:12
3	Zn 213.857†	2234.1	1648.1	37.139 µg/L	37.139 ppb	01:27:32

Mean Data: 1202032635|948776|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2022765.3	103.04 %		0.592			0.57%
Sc RADIAL	57857.1	102 %		0.2			0.23%
Y 371.029	1400194.1	103.51 %		0.588			0.57%
Ag 328.068†	-225.1	0.1497 µg/L		0.40137	0.1497 ppb	0.40137	268.07%
Al 396.153Radial†	34776.8	24193 µg/L		53.2	24193 ppb	53.2	0.22%
As 188.979†	2.7	5.6714 µg/L		3.70627	5.6714 ppb	3.70627	65.35%
B 249.677†	140.9	-7.0869 µg/L		0.11554	-7.0869 ppb	0.11554	1.63%
Ba 233.527†	18459.8	443.24 µg/L		19.961	443.24 ppb	19.961	4.50%
Be 313.107†	4185.5	2.2091 µg/L		0.10759	2.2091 ppb	0.10759	4.87%
Ca 317.933Radial†	11940.0	10199 µg/L		12.7	10199 ppb	12.7	0.12%
Cd 226.502†	84.7	-0.6591 µg/L		0.10707	-0.6591 ppb	0.10707	16.24%
Co 228.616†	209.1	7.9656 µg/L		0.70282	7.9656 ppb	0.70282	8.82%
Cr 267.716†	1791.2	36.001 µg/L		2.3711	36.001 ppb	2.3711	6.59%
Cu 324.752†	1379.0	12.434 µg/L		0.4607	12.434 ppb	0.4607	3.70%
Fe 238.204 Radial†	3131.8	24700 µg/L		49.1	24700 ppb	49.1	0.20%
K 766.490 Radial†	3725.7	2433.3 µg/L		11.28	2433.3 ppb	11.28	0.46%
Mg 279.077 IEC†	532.3	4731.7 µg/L		19.75	4731.7 ppb	19.75	0.42%
Mn 257.610†	138040.4	435.37 µg/L		16.283	435.37 ppb	16.283	3.74%
Mo 202.031†	6.0	1.5218 µg/L		0.16389	1.5218 ppb	0.16389	10.77%
Na 589.592 Radial†	609.0	187.04 µg/L		1.595	187.04 ppb	1.595	0.85%

Ni 231.604†	373.3	18.920 µg/L	2.1861	18.920 ppb	2.1861	11.55%
P 214.914†	107.1	197.97 µg/L	16.908	197.97 ppb	16.908	8.54%
Pb 220.353†	79.2	19.659 µg/L	2.6789	19.659 ppb	2.6789	13.63%
S 181.975 Axial†	24.6	102.12 µg/L	5.566	102.12 ppb	5.566	5.45%
Sb 206.836†	2.0	0.5509 µg/L	1.12506	0.5509 ppb	1.12506	204.22%
Se 196.026†	-12.2	43.262 µg/L	1.5527	43.262 ppb	1.5527	3.59%
SiO2†	62495.6	12336 µg/L	492.6	12336 ppb	492.6	3.99%
Si 251.611†	75362.5	5729.2 µg/L	234.11	5729.2 ppb	234.11	4.09%
Sn 189.927†	-6.9	-5.0542 µg/L	2.02489	-5.0542 ppb	2.02489	40.06%
Sr 421.552†	8078.1	74.522 µg/L	0.2395	74.522 ppb	0.2395	0.32%
Ti 334.940†	326270.2	721.57 µg/L	31.111	721.57 ppb	31.111	4.31%
Tl 190.801†	-6.2	4.4421 µg/L	2.97051	4.4421 ppb	2.97051	66.87%
U 409.014†	-205.4	-21.117 µg/L	4.0358	-21.117 ppb	4.0358	19.11%
V 292.402†	4065.7	42.598 µg/L	2.2417	42.598 ppb	2.2417	5.26%
Zn 213.857†	1868.6	42.299 µg/L	4.4789	42.299 ppb	4.4789	10.59%

Sequence No.: 8

Sample ID: 245998002|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 208

Date Collected: 2/20/2010 01:27:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998002|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57706.7	57706.7	102 %		01:28:14
1	Al 396.153Radial†	94881.0	92882.4	64614 µg/L	64614 ppb	01:28:14
1	Ca 317.933Radial†	19317.6	18700.9	15974 µg/L	15974 ppb	01:28:34
1	Fe 238.204 Radial†	10475.5	10239.1	80755 µg/L	80755 ppb	01:28:34
1	K 766.490 Radial†	19009.5	18445.6	12047 µg/L	12047 ppb	01:28:14
1	Mg 279.077 IEC†	1444.2	1401.1	12438 µg/L	12438 ppb	01:28:34
1	Na 589.592 Radial†	1467.3	964.3	296.17 µg/L	296.17 ppb	01:28:34
1	Sr 421.552†	18841.1	18416.9	169.90 µg/L	169.90 ppb	01:28:14
1	Sc 361.383	1999844.2	1999844.2	101.87 %		01:29:39
1	Y 371.029	1403149.6	1403149.6	103.73 %		01:29:39
1	Ag 328.068†	-1296.0	-870.6	-0.3126 µg/L	-0.3126 ppb	01:29:45
1	As 188.979†	7.2	7.6	17.418 µg/L	17.418 ppb	01:30:05
1	B 249.677†	1123.1	718.3	-12.754 µg/L	-12.754 ppb	01:29:45
1	Ba 233.527†	51101.1	50179.8	1205.0 µg/L	1205.0 ppb	01:29:45
1	Be 313.107†	12397.4	15025.4	7.5310 µg/L	7.5310 ppb	01:29:45
1	Cd 226.502†	177.5	315.9	-1.2005 µg/L	-1.2005 ppb	01:30:05
1	Co 228.616†	958.1	938.6	34.910 µg/L	34.910 ppb	01:30:05
1	Cr 267.716†	3340.9	3329.9	66.982 µg/L	66.982 ppb	01:29:45
1	Cu 324.752†	9966.1	7239.3	58.480 µg/L	58.480 ppb	01:29:45
1	Mn 257.610†	745982.7	732539.8	2304.2 µg/L	2304.2 ppb	01:29:39
1	Mo 202.031†	-9.2	-3.7	2.7037 µg/L	2.7037 ppb	01:30:05
1	Ni 231.604†	1265.6	930.0	47.359 µg/L	47.359 ppb	01:30:05
1	P 214.914†	650.0	622.8	1180.8 µg/L	1180.8 ppb	01:30:05
1	Pb 220.353†	494.4	394.4	96.307 µg/L	96.307 ppb	01:30:05
1	S 181.975 Axial†	261.7	238.0	986.84 µg/L	986.84 ppb	01:30:05
1	Sb 206.836†	30.1	7.0	4.3173 µg/L	4.3173 ppb	01:30:05
1	Se 196.026†	-21.4	-40.3	148.58 µg/L	148.58 ppb	01:30:05
1	SiO2†	331114.9	323642.8	63883 µg/L	63883 ppb	01:29:39
1	Si 251.611†	396719.3	389123.4	29582 µg/L	29582 ppb	01:29:39
1	Sn 189.927†	-31.7	-31.5	-20.497 µg/L	-20.497 ppb	01:30:05
1	Ti 334.940†	1676211.3	1645254.9	3638.9 µg/L	3638.9 ppb	01:29:39
1	Tl 190.801†	-59.1	-35.6	9.8596 µg/L	9.8596 ppb	01:30:05
1	U 409.014†	-350.6	-267.1	-34.389 µg/L	-34.389 ppb	01:29:45
1	V 292.402†	16572.5	16312.9	168.61 µg/L	168.61 ppb	01:29:45
1	Zn 213.857†	8312.7	7625.6	174.08 µg/L	174.08 ppb	01:29:45
2	Sc RADIAL	57591.2	57591.2	102 %		01:28:40
2	Al 396.153Radial†	95242.2	93422.9	64990 µg/L	64990 ppb	01:28:40
2	Ca 317.933Radial†	19264.6	18686.8	15962 µg/L	15962 ppb	01:29:01
2	Fe 238.204 Radial†	10431.6	10216.5	80578 µg/L	80578 ppb	01:29:01
2	K 766.490 Radial†	19089.6	18561.5	12123 µg/L	12123 ppb	01:28:40
2	Mg 279.077 IEC†	1441.7	1401.4	12441 µg/L	12441 ppb	01:29:01
2	Na 589.592 Radial†	1501.1	1000.4	307.26 µg/L	307.26 ppb	01:29:01
2	Sr 421.552†	18830.8	18443.8	170.15 µg/L	170.15 ppb	01:28:40
2	Sc 361.383	2018203.5	2018203.5	102.81 %		01:30:12
2	Y 371.029	1415276.2	1415276.2	104.62 %		01:30:12
2	Ag 328.068†	-1362.0	-923.3	-0.7295 µg/L	-0.7295 ppb	01:30:18
2	As 188.979†	7.7	7.9	18.027 µg/L	18.027 ppb	01:30:38
2	B 249.677†	1076.3	662.8	-14.928 µg/L	-14.928 ppb	01:30:18
2	Ba 233.527†	50674.1	49308.1	1184.0 µg/L	1184.0 ppb	01:30:18
2	Be 313.107†	12131.3	14655.8	7.3232 µg/L	7.3232 ppb	01:30:18
2	Cd 226.502†	168.8	305.9	-1.4309 µg/L	-1.4309 ppb	01:30:38
2	Co 228.616†	961.1	932.9	34.718 µg/L	34.718 ppb	01:30:38
2	Cr 267.716†	3254.8	3216.4	64.700 µg/L	64.700 ppb	01:30:18
2	Cu 324.752†	9808.6	6997.1	56.874 µg/L	56.874 ppb	01:30:18
2	Mn 257.610†	746146.4	726037.6	2283.8 µg/L	2283.8 ppb	01:30:12
2	Mo 202.031†	-3.2	2.3	3.2840 µg/L	3.2840 ppb	01:30:38
2	Ni 231.604†	1249.9	903.4	46.031 µg/L	46.031 ppb	01:30:38
2	P 214.914†	671.1	637.4	1210.3 µg/L	1210.3 ppb	01:30:38
2	Pb 220.353†	475.5	371.6	90.789 µg/L	90.789 ppb	01:30:38

2	S 181.975 Axial†	261.2	235.1	974.90 µg/L	974.90 ppb	01:30:38
2	Sb 206.836†	35.7	12.2	9.0824 µg/L	9.0824 ppb	01:30:38
2	Se 196.026†	-20.7	-39.5	149.23 µg/L	149.23 ppb	01:30:38
2	SiO2†	331384.3	320948.2	63351 µg/L	63351 ppb	01:30:12
2	Si 251.611†	397015.0	385868.5	29334 µg/L	29334 ppb	01:30:12
2	Sn 189.927†	-37.3	-36.6	-22.638 µg/L	-22.638 ppb	01:30:38
2	Ti 334.940†	1677484.0	1631524.7	3608.6 µg/L	3608.6 ppb	01:30:12
2	Tl 190.801†	-57.4	-33.4	12.322 µg/L	12.322 ppb	01:30:38
2	U 409.014†	-333.2	-247.0	-32.693 µg/L	-32.693 ppb	01:30:18
2	V 292.402†	16476.1	16071.1	166.23 µg/L	166.23 ppb	01:30:18
2	Zn 213.857†	8270.8	7510.7	171.40 µg/L	171.40 ppb	01:30:18
3	Sc RADIAL	57961.4	57961.4	103 %		01:29:06
3	Al 396.153Radial†	94301.4	91909.3	63937 µg/L	63937 ppb	01:29:06
3	Ca 317.933Radial†	19039.6	18346.9	15672 µg/L	15672 ppb	01:29:27
3	Fe 238.204 Radial†	10286.8	10010.0	78949 µg/L	78949 ppb	01:29:27
3	K 766.490 Radial†	18985.7	18340.6	11979 µg/L	11979 ppb	01:29:06
3	Mg 279.077 IEC†	1423.9	1375.0	12207 µg/L	12207 ppb	01:29:27
3	Na 589.592 Radial†	1473.9	964.4	296.22 µg/L	296.22 ppb	01:29:27
3	Sr 421.552†	18715.8	18213.7	168.02 µg/L	168.02 ppb	01:29:06
3	Sc 361.383	2009888.7	2009888.7	102.38 %		01:30:46
3	Y 371.029	1408277.1	1408277.1	104.10 %		01:30:46
3	Ag 328.068†	-1260.3	-829.4	-0.1962 µg/L	-0.1962 ppb	01:30:51
3	As 188.979†	6.5	6.8	15.928 µg/L	15.928 ppb	01:31:12
3	B 249.677†	1041.3	632.9	-15.302 µg/L	-15.302 ppb	01:30:51
3	Ba 233.527†	48015.1	46914.9	1126.6 µg/L	1126.6 ppb	01:30:51
3	Be 313.107†	11237.1	13831.3	6.8960 µg/L	6.8960 ppb	01:30:51
3	Cd 226.502†	127.6	266.3	-2.2383 µg/L	-2.2383 ppb	01:31:12
3	Co 228.616†	895.1	872.4	32.315 µg/L	32.315 ppb	01:31:12
3	Cr 267.716†	3076.0	3054.8	61.450 µg/L	61.450 ppb	01:30:51
3	Cu 324.752†	9489.4	6724.9	54.870 µg/L	54.870 ppb	01:30:51
3	Mn 257.610†	713952.3	697595.0	2194.5 µg/L	2194.5 ppb	01:30:46
3	Mo 202.031†	-4.1	1.4	3.1326 µg/L	3.1326 ppb	01:31:12
3	Ni 231.604†	1169.0	829.4	42.326 µg/L	42.326 ppb	01:31:12
3	P 214.914†	588.1	559.1	1056.3 µg/L	1056.3 ppb	01:31:12
3	Pb 220.353†	455.7	354.1	86.544 µg/L	86.544 ppb	01:31:12
3	S 181.975 Axial†	243.4	218.8	907.50 µg/L	907.50 ppb	01:31:12
3	Sb 206.836†	25.6	2.5	0.2473 µg/L	0.2473 ppb	01:31:12
3	Se 196.026†	-10.5	-29.6	158.96 µg/L	158.96 ppb	01:31:12
3	SiO2†	319719.3	310888.0	61365 µg/L	61365 ppb	01:30:46
3	Si 251.611†	383148.2	373922.0	28426 µg/L	28426 ppb	01:30:46
3	Sn 189.927†	-32.7	-32.3	-20.680 µg/L	-20.680 ppb	01:31:12
3	Ti 334.940†	1595099.0	1557807.1	3445.5 µg/L	3445.5 ppb	01:30:46
3	Tl 190.801†	-56.3	-32.6	11.369 µg/L	11.369 ppb	01:31:12
3	U 409.014†	-277.0	-193.5	-28.007 µg/L	-28.007 ppb	01:30:51
3	V 292.402†	15458.3	15143.3	156.99 µg/L	156.99 ppb	01:30:51
3	Zn 213.857†	7894.9	7176.8	163.68 µg/L	163.68 ppb	01:30:51

Mean Data: 245998002|948776|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	2009312.1	102.35 %		0.468			0.46%
Sc RADIAL	57753.1	102 %		0.3			0.33%
Y 371.029	1408901.0	104.15 %		0.450			0.43%
Ag 328.068†	-874.4	-0.4127 µg/L		0.28039	-0.4127 ppb	0.28039	67.93%
Al 396.153Radial†	92738.2	64514 µg/L		533.6	64514 ppb	533.6	0.83%
As 188.979†	7.4	17.124 µg/L		1.0800	17.124 ppb	1.0800	6.31%
B 249.677†	671.3	-14.328 µg/L		1.3761	-14.328 ppb	1.3761	9.60%
Ba 233.527†	48800.9	1171.8 µg/L		40.60	1171.8 ppb	40.60	3.46%
Be 313.107†	14504.2	7.2500 µg/L		0.32376	7.2500 ppb	0.32376	4.47%
Ca 317.933Radial†	18578.2	15869 µg/L		171.2	15869 ppb	171.2	1.08%
Cd 226.502†	296.0	-1.6232 µg/L		0.54500	-1.6232 ppb	0.54500	33.57%
Co 228.616†	914.6	33.981 µg/L		1.4458	33.981 ppb	1.4458	4.25%
Cr 267.716†	3200.4	64.377 µg/L		2.7803	64.377 ppb	2.7803	4.32%
Cu 324.752†	6987.1	56.741 µg/L		1.8082	56.741 ppb	1.8082	3.19%
Fe 238.204 Radial†	10155.2	80094 µg/L		995.6	80094 ppb	995.6	1.24%
K 766.490 Radial†	18449.2	12049 µg/L		72.2	12049 ppb	72.2	0.60%
Mg 279.077 IEC†	1392.5	12362 µg/L		134.4	12362 ppb	134.4	1.09%
Mn 257.610†	718724.1	2260.9 µg/L		58.33	2260.9 ppb	58.33	2.58%
Mo 202.031†	-0.0	3.0401 µg/L		0.30101	3.0401 ppb	0.30101	9.90%
Na 589.592 Radial†	976.4	299.88 µg/L		6.387	299.88 ppb	6.387	2.13%

Ni 231.604†	887.6	45.239 µg/L	2.6089	45.239 ppb	2.6089	5.77%
P 214.914†	606.4	1149.2 µg/L	81.72	1149.2 ppb	81.72	7.11%
Pb 220.353†	373.4	91.213 µg/L	4.8954	91.213 ppb	4.8954	5.37%
S 181.975 Axial†	230.6	956.41 µg/L	42.781	956.41 ppb	42.781	4.47%
Sb 206.836†	7.3	4.5490 µg/L	4.42212	4.5490 ppb	4.42212	97.21%
Se 196.026†	-36.4	152.26 µg/L	5.819	152.26 ppb	5.819	3.82%
SiO2†	318493.0	62866 µg/L	1326.9	62866 ppb	1326.9	2.11%
Si 251.611†	382971.3	29114 µg/L	608.5	29114 ppb	608.5	2.09%
Sn 189.927†	-33.5	-21.271 µg/L	1.1867	-21.271 ppb	1.1867	5.58%
Sr 421.552†	18358.1	169.36 µg/L	1.160	169.36 ppb	1.160	0.69%
Ti 334.940†	1611528.9	3564.3 µg/L	104.03	3564.3 ppb	104.03	2.92%
Tl 190.801†	-33.9	11.183 µg/L	1.2417	11.183 ppb	1.2417	11.10%
U 409.014†	-235.9	-31.697 µg/L	3.3055	-31.697 ppb	3.3055	10.43%
V 292.402†	15842.5	163.94 µg/L	6.135	163.94 ppb	6.135	3.74%
Zn 213.857†	7437.7	169.72 µg/L	5.401	169.72 ppb	5.401	3.18%

Sequence No.: 9

Sample ID: 245998003|948776|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 209

Date Collected: 2/20/2010 01:31:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998003|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58351.7	58351.7	103 %		01:31:54
1	Al 396.153Radial†	230829.4	223479.6	155460 µg/L	155460 ppb	01:31:54
1	Ca 317.933Radial†	43139.8	41556.3	35497 µg/L	35497 ppb	01:31:54
1	Fe 238.204 Radial†	17702.1	17122.5	135040 µg/L	135040 ppb	01:32:14
1	K 766.490 Radial†	25501.5	24525.4	16018 µg/L	16018 ppb	01:31:54
1	Mg 279.077 IEC†	2467.8	2376.5	21099 µg/L	21099 ppb	01:32:14
1	Na 589.592 Radial†	4183.8	3578.5	1099.1 µg/L	1099.1 ppb	01:32:14
1	Sr 421.552†	34841.3	33704.2	310.93 µg/L	310.93 ppb	01:31:54
1	Sc 361.383	2015047.8	2015047.8	102.65 %		01:33:20
1	Y 371.029	1432225.8	1432225.8	105.87 %		01:33:20
1	Ag 328.068†	-2009.7	-1556.3	-1.3340 µg/L	-1.3340 ppb	01:33:25
1	As 188.979†	17.1	17.1	36.592 µg/L	36.592 ppb	01:33:46
1	B 249.677†	1363.0	943.7	-31.811 µg/L	-31.811 ppb	01:33:25
1	Ba 233.527†	94447.8	92031.0	2209.9 µg/L	2209.9 ppb	01:33:25
1	Be 313.107†	23765.6	26008.8	13.234 µg/L	13.234 ppb	01:33:25
1	Cd 226.502†	391.8	523.4	-2.1279 µg/L	-2.1279 ppb	01:33:25
1	Co 228.616†	1372.7	1335.4	48.414 µg/L	48.414 ppb	01:33:46
1	Cr 267.716†	6084.8	5978.4	120.24 µg/L	120.24 ppb	01:33:25
1	Cu 324.752†	9269.9	6487.2	61.116 µg/L	61.116 ppb	01:33:25
1	Mn 257.610†	968169.6	943475.8	2971.6 µg/L	2971.6 ppb	01:33:20
1	Mo 202.031†	-24.3	-18.3	3.3371 µg/L	3.3371 ppb	01:33:46
1	Ni 231.604†	1937.4	1575.1	80.202 µg/L	80.202 ppb	01:33:46
1	P 214.914†	800.7	764.7	1444.3 µg/L	1444.3 ppb	01:33:46
1	Pb 220.353†	589.0	482.9	120.84 µg/L	120.84 ppb	01:33:46
1	S 181.975 Axial†	161.9	138.8	575.73 µg/L	575.73 ppb	01:33:46
1	Sb 206.836†	33.6	10.3	4.9387 µg/L	4.9387 ppb	01:33:46
1	Se 196.026†	-60.9	-78.6	229.93 µg/L	229.93 ppb	01:33:46
1	SiO2†	317303.1	307734.6	60743 µg/L	60743 ppb	01:33:20
1	Si 251.611†	380414.6	370300.6	28151 µg/L	28151 ppb	01:33:20
1	Sn 189.927†	-52.4	-51.4	-33.781 µg/L	-33.781 ppb	01:33:46
1	Ti 334.940†	2681991.7	2612701.5	5778.8 µg/L	5778.8 ppb	01:33:20
1	Tl 190.801†	-79.2	-54.7	19.459 µg/L	19.459 ppb	01:33:46
1	U 409.014†	-1373.5	-1261.0	-125.71 µg/L	-125.71 ppb	01:33:20
1	V 292.402†	26881.1	26233.1	271.70 µg/L	271.70 ppb	01:33:25
1	Zn 213.857†	12009.6	11165.7	253.93 µg/L	253.93 ppb	01:33:25
2	Sc RADIAL	58566.6	58566.6	104 %		01:32:20
2	Al 396.153Radial†	232533.2	224303.1	156040 µg/L	156040 ppb	01:32:20
2	Ca 317.933Radial†	43350.8	41606.6	35539 µg/L	35539 ppb	01:32:20
2	Fe 238.204 Radial†	17802.4	17156.3	135310 µg/L	135310 ppb	01:32:41
2	K 766.490 Radial†	25643.1	24571.4	16048 µg/L	16048 ppb	01:32:20
2	Mg 279.077 IEC†	2484.6	2384.0	21165 µg/L	21165 ppb	01:32:41
2	Na 589.592 Radial†	4185.3	3565.1	1095.0 µg/L	1095.0 ppb	01:32:41
2	Sr 421.552†	35056.3	33787.8	311.70 µg/L	311.70 ppb	01:32:20
2	Sc 361.383	2005625.3	2005625.3	102.17 %		01:33:54
2	Y 371.029	1425788.7	1425788.7	105.40 %		01:33:54
2	Ag 328.068†	-2054.9	-1609.7	-1.7407 µg/L	-1.7407 ppb	01:33:59
2	As 188.979†	9.8	10.0	23.984 µg/L	23.984 ppb	01:34:20
2	B 249.677†	1342.6	930.0	-32.511 µg/L	-32.511 ppb	01:33:59
2	Ba 233.527†	92677.0	90729.9	2178.6 µg/L	2178.6 ppb	01:33:59
2	Be 313.107†	23347.9	25708.8	13.053 µg/L	13.053 ppb	01:33:59
2	Cd 226.502†	369.0	502.8	-2.6697 µg/L	-2.6697 ppb	01:33:59
2	Co 228.616†	1351.1	1320.5	47.724 µg/L	47.724 ppb	01:34:20
2	Cr 267.716†	5953.3	5877.5	118.21 µg/L	118.21 ppb	01:33:59
2	Cu 324.752†	9194.0	6455.4	60.945 µg/L	60.945 ppb	01:33:59
2	Mn 257.610†	964626.5	944439.1	2974.7 µg/L	2974.7 ppb	01:33:54
2	Mo 202.031†	-18.8	-13.0	3.8659 µg/L	3.8659 ppb	01:34:20
2	Ni 231.604†	1952.6	1598.9	81.391 µg/L	81.391 ppb	01:34:20
2	P 214.914†	793.0	760.9	1436.8 µg/L	1436.8 ppb	01:34:20
2	Pb 220.353†	581.8	478.5	119.79 µg/L	119.79 ppb	01:34:20

2	S 181.975 Axial†	164.1	141.7	587.64	µg/L	587.64	ppb	01:34:20
2	Sb 206.836†	38.8	15.5	9.7574	µg/L	9.7574	ppb	01:34:20
2	Se 196.026†	-66.3	-84.2	222.76	µg/L	222.76	ppb	01:34:20
2	SiO2†	316057.6	307967.7	60789	µg/L	60789	ppb	01:33:54
2	Si 251.611†	379054.9	370711.0	28182	µg/L	28182	ppb	01:33:54
2	Sn 189.927†	-44.6	-44.0	-30.663	µg/L	-30.663	ppb	01:34:20
2	Ti 334.940†	2673066.9	2616241.2	5786.6	µg/L	5786.6	ppb	01:33:54
2	Tl 190.801†	-76.8	-52.8	22.141	µg/L	22.141	ppb	01:34:20
2	U 409.014†	-1340.6	-1235.1	-123.59	µg/L	-123.59	ppb	01:33:54
2	V 292.402†	26310.5	25797.7	267.49	µg/L	267.49	ppb	01:33:59
2	Zn 213.857†	11802.9	11018.4	250.45	µg/L	250.45	ppb	01:33:59
3	Sc RADIAL	57961.8	57961.8	103	%			01:32:46
3	Al 396.153Radial†	231322.5	225463.8	156840	µg/L	156840	ppb	01:32:46
3	Ca 317.933Radial†	42982.8	41684.3	35606	µg/L	35606	ppb	01:32:46
3	Fe 238.204 Radial†	17729.7	17264.7	136170	µg/L	136170	ppb	01:33:06
3	K 766.490 Radial†	25394.3	24587.0	16058	µg/L	16058	ppb	01:32:46
3	Mg 279.077 IEC†	2468.7	2393.4	21249	µg/L	21249	ppb	01:33:06
3	Na 589.592 Radial†	4179.8	3601.9	1106.3	µg/L	1106.3	ppb	01:33:06
3	Sr 421.552†	34749.0	33841.2	312.19	µg/L	312.19	ppb	01:32:46
3	Sc 361.383	2008683.8	2008683.8	102.32	%			01:34:28
3	Y 371.029	1426230.1	1426230.1	105.43	%			01:34:28
3	Ag 328.068†	-1941.8	-1496.1	-0.9259	µg/L	-0.9259	ppb	01:34:33
3	As 188.979†	11.8	11.9	27.462	µg/L	27.462	ppb	01:34:54
3	B 249.677†	1311.0	897.1	-34.309	µg/L	-34.309	ppb	01:34:33
3	Ba 233.527†	89044.5	87041.7	2090.1	µg/L	2090.1	ppb	01:34:33
3	Be 313.107†	22100.6	24454.9	12.382	µg/L	12.382	ppb	01:34:33
3	Cd 226.502†	337.0	471.1	-3.5659	µg/L	-3.5659	ppb	01:34:33
3	Co 228.616†	1232.0	1202.1	42.762	µg/L	42.762	ppb	01:34:54
3	Cr 267.716†	5612.9	5536.0	111.34	µg/L	111.34	ppb	01:34:33
3	Cu 324.752†	8885.2	6139.9	59.005	µg/L	59.005	ppb	01:34:33
3	Mn 257.610†	940587.0	919507.2	2896.7	µg/L	2896.7	ppb	01:34:28
3	Mo 202.031†	-17.0	-11.3	4.0716	µg/L	4.0716	ppb	01:34:54
3	Ni 231.604†	1803.1	1449.8	73.978	µg/L	73.978	ppb	01:34:54
3	P 214.914†	722.1	690.4	1297.0	µg/L	1297.0	ppb	01:34:54
3	Pb 220.353†	558.7	455.1	114.11	µg/L	114.11	ppb	01:34:54
3	S 181.975 Axial†	149.2	126.9	526.18	µg/L	526.18	ppb	01:34:54
3	Sb 206.836†	28.6	5.4	0.5954	µg/L	0.5954	ppb	01:34:54
3	Se 196.026†	-50.8	-69.0	246.36	µg/L	246.36	ppb	01:34:54
3	SiO2†	309899.3	301478.1	59508	µg/L	59508	ppb	01:34:28
3	Si 251.611†	371611.7	362871.6	27586	µg/L	27586	ppb	01:34:28
3	Sn 189.927†	-46.0	-45.3	-31.297	µg/L	-31.297	ppb	01:34:54
3	Ti 334.940†	2588374.5	2529486.0	5594.7	µg/L	5594.7	ppb	01:34:28
3	Tl 190.801†	-79.9	-55.7	16.566	µg/L	16.566	ppb	01:34:54
3	U 409.014†	-1378.1	-1269.7	-126.59	µg/L	-126.59	ppb	01:34:28
3	V 292.402†	25068.8	24544.9	255.36	µg/L	255.36	ppb	01:34:33
3	Zn 213.857†	11339.0	10547.4	239.39	µg/L	239.39	ppb	01:34:33

Mean Data: 245998003|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2009785.6	102.38 %	0.245			0.24%
Sc RADIAL	58293.4	103 %	0.5			0.53%
Y 371.029	1428081.5	105.57 %	0.266			0.25%
Ag 328.068†	-1554.0	-1.3335 µg/L	0.40742	-1.3335 ppb	0.40742	30.55%
Al 396.153Radial†	224415.5	156120 µg/L	693.5	156120 ppb	693.5	0.44%
As 188.979†	13.0	29.346 µg/L	6.5116	29.346 ppb	6.5116	22.19%
B 249.677†	923.6	-32.877 µg/L	1.2883	-32.877 ppb	1.2883	3.92%
Ba 233.527†	89934.2	2159.5 µg/L	62.15	2159.5 ppb	62.15	2.88%
Be 313.107†	25390.9	12.890 µg/L	0.4489	12.890 ppb	0.4489	3.48%
Ca 317.933Radial†	41615.7	35547 µg/L	55.1	35547 ppb	55.1	0.15%
Cd 226.502†	499.1	-2.7878 µg/L	0.72627	-2.7878 ppb	0.72627	26.05%
Co 228.616†	1286.0	46.300 µg/L	3.0837	46.300 ppb	3.0837	6.66%
Cr 267.716†	5797.3	116.60 µg/L	4.663	116.60 ppb	4.663	4.00%
Cu 324.752†	6360.8	60.356 µg/L	1.1728	60.356 ppb	1.1728	1.94%
Fe 238.204 Radial†	17181.1	135510 µg/L	586.0	135510 ppb	586.0	0.43%
K 766.490 Radial†	24561.2	16041 µg/L	20.9	16041 ppb	20.9	0.13%
Mg 279.077 IEC†	2384.6	21171 µg/L	75.1	21171 ppb	75.1	0.35%
Mn 257.610†	935807.4	2947.7 µg/L	44.16	2947.7 ppb	44.16	1.50%
Mo 202.031†	-14.2	3.7582 µg/L	0.37891	3.7582 ppb	0.37891	10.08%
Na 589.592 Radial†	3581.9	1100.1 µg/L	5.72	1100.1 ppb	5.72	0.52%

Ni 231.604†	1541.3	78.524 µg/L	3.9809	78.524 ppb	3.9809	5.07%
P 214.914†	738.7	1392.7 µg/L	82.96	1392.7 ppb	82.96	5.96%
Pb 220.353†	472.2	118.25 µg/L	3.617	118.25 ppb	3.617	3.06%
S 181.975 Axial†	135.8	563.18 µg/L	32.598	563.18 ppb	32.598	5.79%
Sb 206.836†	10.4	5.0972 µg/L	4.58304	5.0972 ppb	4.58304	89.91%
Se 196.026†	-77.3	233.01 µg/L	12.100	233.01 ppb	12.100	5.19%
SiO2†	305726.8	60346 µg/L	726.6	60346 ppb	726.6	1.20%
Si 251.611†	367961.1	27973 µg/L	335.4	27973 ppb	335.4	1.20%
Sn 189.927†	-46.9	-31.913 µg/L	1.6481	-31.913 ppb	1.6481	5.16%
Sr 421.552†	33777.7	311.60 µg/L	0.637	311.60 ppb	0.637	0.20%
Ti 334.940†	2586142.9	5720.0 µg/L	108.62	5720.0 ppb	108.62	1.90%
Tl 190.801†	-54.4	19.389 µg/L	2.7882	19.389 ppb	2.7882	14.38%
U 409.014†	-1255.3	-125.30 µg/L	1.542	-125.30 ppb	1.542	1.23%
V 292.402†	25525.2	264.85 µg/L	8.481	264.85 ppb	8.481	3.20%
Zn 213.857†	10910.5	247.92 µg/L	7.591	247.92 ppb	7.591	3.06%

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/20/2010 01:35:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57419.3	57419.3	102 %		01:35:43
1	Al 396.153Radial†	7273.3	7148.9	4962.6 µg/L	4962.6 ppb	01:35:43
1	Ca 317.933Radial†	6076.2	5767.2	4926.2 µg/L	4926.2 ppb	01:36:04
1	Fe 238.204 Radial†	668.4	641.0	5066.5 µg/L	5066.5 ppb	01:36:04
1	K 766.490 Radial†	7761.6	7471.8	4879.9 µg/L	4879.9 ppb	01:35:43
1	Mg 279.077 IEC†	582.0	559.9	5007.8 µg/L	5007.8 ppb	01:36:04
1	Na 589.592 Radial†	33078.6	32074.2	9851.4 µg/L	9851.4 ppb	01:35:43
1	Sr 421.552†	53197.6	52313.0	482.60 µg/L	482.60 ppb	01:35:43
1	Sc 361.383	2034231.0	2034231.0	103.62 %		01:37:07
1	Y 371.029	1401078.9	1401078.9	103.57 %		01:37:07
1	Ag 328.068†	68051.1	66073.8	493.05 µg/L	493.05 ppb	01:37:13
1	As 188.979†	299.7	289.7	518.21 µg/L	518.21 ppb	01:37:33
1	B 249.677†	12790.8	11959.5	485.61 µg/L	485.61 ppb	01:37:13
1	Ba 233.527†	21540.3	20804.3	500.35 µg/L	500.35 ppb	01:37:13
1	Be 313.107†	870171.9	842608.7	499.90 µg/L	499.90 ppb	01:37:07
1	Cd 226.502†	20795.1	20209.8	503.98 µg/L	503.98 ppb	01:37:13
1	Co 228.616†	11522.6	11117.9	502.92 µg/L	502.92 ppb	01:37:13
1	Cr 267.716†	26000.3	25141.8	505.29 µg/L	505.29 ppb	01:37:13
1	Cu 324.752†	80889.6	75518.2	493.65 µg/L	493.65 ppb	01:37:13
1	Mn 257.610†	168584.1	162946.9	510.74 µg/L	510.74 ppb	01:37:07
1	Mo 202.031†	5412.4	5228.5	512.20 µg/L	512.20 ppb	01:37:33
1	Ni 231.604†	10820.3	10129.7	504.43 µg/L	504.43 ppb	01:37:13
1	P 214.914†	1337.7	1275.6	2478.4 µg/L	2478.4 ppb	01:37:33
1	Pb 220.353†	2251.8	2082.1	506.35 µg/L	506.35 ppb	01:37:33
1	S 181.975 Axial†	270.9	242.5	1005.8 µg/L	1005.8 ppb	01:37:33
1	Sb 206.836†	601.8	558.3	514.73 µg/L	514.73 ppb	01:37:33
1	Se 196.026†	390.4	357.4	509.98 µg/L	509.98 ppb	01:37:33
1	SiO2†	29586.8	27161.0	5361.2 µg/L	5361.2 ppb	01:37:13
1	Si 251.611†	34523.3	33005.8	2509.2 µg/L	2509.2 ppb	01:37:13
1	Sn 189.927†	1266.8	1222.1	515.41 µg/L	515.41 ppb	01:37:33
1	Ti 334.940†	234198.4	225836.4	499.28 µg/L	499.28 ppb	01:37:07
1	Tl 190.801†	376.7	385.9	507.24 µg/L	507.24 ppb	01:37:33
1	U 409.014†	6139.1	6001.6	497.64 µg/L	497.64 ppb	01:37:13
1	V 292.402†	52802.2	51001.1	503.24 µg/L	503.24 ppb	01:37:13
1	Zn 213.857†	22812.8	21480.9	500.43 µg/L	500.43 ppb	01:37:13
2	Sc RADIAL	57564.5	57564.5	102 %		01:36:09
2	Al 396.153Radial†	7306.8	7163.8	4973.1 µg/L	4973.1 ppb	01:36:09
2	Ca 317.933Radial†	6109.1	5784.4	4940.9 µg/L	4940.9 ppb	01:36:30
2	Fe 238.204 Radial†	668.9	639.9	5057.7 µg/L	5057.7 ppb	01:36:30
2	K 766.490 Radial†	7818.3	7508.2	4903.7 µg/L	4903.7 ppb	01:36:09
2	Mg 279.077 IEC†	583.3	559.6	5005.7 µg/L	5005.7 ppb	01:36:30
2	Na 589.592 Radial†	33360.3	32268.7	9911.1 µg/L	9911.1 ppb	01:36:09
2	Sr 421.552†	53650.5	52625.5	485.48 µg/L	485.48 ppb	01:36:09
2	Sc 361.383	2011414.2	2011414.2	102.46 %		01:37:40
2	Y 371.029	1384320.1	1384320.1	102.33 %		01:37:40
2	Ag 328.068†	68129.8	66895.6	499.17 µg/L	499.17 ppb	01:37:46
2	As 188.979†	297.3	290.6	519.94 µg/L	519.94 ppb	01:38:07
2	B 249.677†	12762.8	12072.3	490.22 µg/L	490.22 ppb	01:37:46
2	Ba 233.527†	21511.3	21011.9	505.34 µg/L	505.34 ppb	01:37:46
2	Be 313.107†	857165.5	839440.6	498.02 µg/L	498.02 ppb	01:37:40
2	Cd 226.502†	20769.1	20412.1	509.04 µg/L	509.04 ppb	01:37:46
2	Co 228.616†	11488.3	11210.5	507.12 µg/L	507.12 ppb	01:37:46
2	Cr 267.716†	25975.8	25402.5	510.53 µg/L	510.53 ppb	01:37:46
2	Cu 324.752†	81008.6	76519.8	500.18 µg/L	500.18 ppb	01:37:46
2	Mn 257.610†	166212.0	162477.3	509.27 µg/L	509.27 ppb	01:37:40
2	Mo 202.031†	5296.2	5174.4	506.90 µg/L	506.90 ppb	01:38:07
2	Ni 231.604†	10788.5	10217.2	508.78 µg/L	508.78 ppb	01:37:46
2	P 214.914†	1313.4	1266.5	2459.7 µg/L	2459.7 ppb	01:38:07
2	Pb 220.353†	2218.7	2074.5	504.46 µg/L	504.46 ppb	01:38:07

2	S 181.975 Axial†	267.5	242.1	1004.0 µg/L	1004.0 ppb	01:38:07
2	Sb 206.836†	586.7	550.1	507.05 µg/L	507.05 ppb	01:38:07
2	Se 196.026†	392.7	363.9	519.07 µg/L	519.07 ppb	01:38:07
2	SiO2†	29613.1	27510.6	5430.2 µg/L	5430.2 ppb	01:37:46
2	Si 251.611†	34507.3	33368.1	2536.7 µg/L	2536.7 ppb	01:37:46
2	Sn 189.927†	1242.9	1212.7	511.45 µg/L	511.45 ppb	01:38:07
2	Ti 334.940†	231607.9	225872.0	499.36 µg/L	499.36 ppb	01:37:40
2	Tl 190.801†	376.6	389.9	512.47 µg/L	512.47 ppb	01:38:07
2	U 409.014†	6139.7	6069.4	503.27 µg/L	503.27 ppb	01:37:46
2	V 292.402†	52801.4	51578.4	508.85 µg/L	508.85 ppb	01:37:46
2	Zn 213.857†	22800.3	21718.5	505.97 µg/L	505.97 ppb	01:37:46
3	Sc RADIAL	57244.6	57244.6	101 %		01:36:35
3	Al 396.153Radial†	7255.4	7153.1	4967.6 µg/L	4967.6 ppb	01:36:35
3	Ca 317.933Radial†	6126.1	5834.7	4983.8 µg/L	4983.8 ppb	01:36:56
3	Fe 238.204 Radial†	671.1	645.7	5102.4 µg/L	5102.4 ppb	01:36:56
3	K 766.490 Radial†	7862.8	7594.9	4960.4 µg/L	4960.4 ppb	01:36:35
3	Mg 279.077 IEC†	592.0	571.5	5109.9 µg/L	5109.9 ppb	01:36:56
3	Na 589.592 Radial†	33278.2	32370.6	9942.4 µg/L	9942.4 ppb	01:36:35
3	Sr 421.552†	53507.0	52778.1	486.89 µg/L	486.89 ppb	01:36:35
3	Sc 361.383	2007877.4	2007877.4	102.28 %		01:38:14
3	Y 371.029	1383889.0	1383889.0	102.30 %		01:38:14
3	Ag 328.068†	63051.4	62047.6	462.82 µg/L	462.82 ppb	01:38:20
3	As 188.979†	242.2	237.3	424.54 µg/L	424.54 ppb	01:38:40
3	B 249.677†	11794.6	11147.5	452.38 µg/L	452.38 ppb	01:38:20
3	Ba 233.527†	19114.6	18705.6	449.86 µg/L	449.86 ppb	01:38:20
3	Be 313.107†	777323.4	762851.8	452.59 µg/L	452.59 ppb	01:38:14
3	Cd 226.502†	18378.3	18110.4	451.56 µg/L	451.56 ppb	01:38:20
3	Co 228.616†	10053.9	9827.9	444.52 µg/L	444.52 ppb	01:38:20
3	Cr 267.716†	21927.7	21489.3	431.89 µg/L	431.89 ppb	01:38:20
3	Cu 324.752†	71363.4	67228.9	439.54 µg/L	439.54 ppb	01:38:20
3	Mn 257.610†	151239.3	148124.0	464.33 µg/L	464.33 ppb	01:38:14
3	Mo 202.031†	4315.7	4224.8	413.91 µg/L	413.91 ppb	01:38:40
3	Ni 231.604†	9486.5	8962.7	446.32 µg/L	446.32 ppb	01:38:20
3	P 214.914†	1092.4	1052.7	2041.2 µg/L	2041.2 ppb	01:38:40
3	Pb 220.353†	1885.6	1752.6	426.13 µg/L	426.13 ppb	01:38:40
3	S 181.975 Axial†	228.9	204.8	849.49 µg/L	849.49 ppb	01:38:40
3	Sb 206.836†	488.5	455.1	419.26 µg/L	419.26 ppb	01:38:40
3	Se 196.026†	335.3	308.5	441.24 µg/L	441.24 ppb	01:38:40
3	SiO2†	26932.2	24940.3	4922.9 µg/L	4922.9 ppb	01:38:20
3	Si 251.611†	31223.7	30217.1	2297.2 µg/L	2297.2 ppb	01:38:20
3	Sn 189.927†	1002.7	980.0	413.30 µg/L	413.30 ppb	01:38:40
3	Ti 334.940†	208100.4	203286.6	449.39 µg/L	449.39 ppb	01:38:14
3	Tl 190.801†	327.4	342.5	450.33 µg/L	450.33 ppb	01:38:40
3	U 409.014†	5238.9	5199.2	430.96 µg/L	430.96 ppb	01:38:20
3	V 292.402†	45692.1	44718.3	441.02 µg/L	441.02 ppb	01:38:20
3	Zn 213.857†	20094.2	19111.9	445.18 µg/L	445.18 ppb	01:38:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2017840.8	102.79 %	0.729			0.71%
Sc RADIAL	57409.5	102 %	0.3			0.28%
Y 371.029	1389762.7	102.74 %	0.725			0.71%
Ag 328.068†	65005.7	485.01 µg/L	19.462	485.01 ppb	19.462	4.01%
QC value within limits for Ag 328.068 Recovery = 97.00%						
Al 396.153Radial†	7155.3	4967.8 µg/L	5.22	4967.8 ppb	5.22	0.11%
QC value within limits for Al 396.153Radial Recovery = 99.36%						
As 188.979†	272.5	487.56 µg/L	54.586	487.56 ppb	54.586	11.20%
QC value within limits for As 188.979 Recovery = 97.51%						
B 249.677†	11726.4	476.07 µg/L	20.645	476.07 ppb	20.645	4.34%
QC value within limits for B 249.677 Recovery = 95.21%						
Ba 233.527†	20174.0	485.18 µg/L	30.696	485.18 ppb	30.696	6.33%
QC value within limits for Ba 233.527 Recovery = 97.04%						
Be 313.107†	814967.0	483.50 µg/L	26.792	483.50 ppb	26.792	5.54%
QC value within limits for Be 313.107 Recovery = 96.70%						
Ca 317.933Radial†	5795.4	4950.3 µg/L	29.95	4950.3 ppb	29.95	0.60%
QC value within limits for Ca 317.933Radial Recovery = 99.01%						
Cd 226.502†	19577.4	488.19 µg/L	31.826	488.19 ppb	31.826	6.52%
QC value within limits for Cd 226.502 Recovery = 97.64%						
Co 228.616†	10718.8	484.85 µg/L	34.993	484.85 ppb	34.993	7.22%

QC value within limits for Co 228.616 Recovery = 96.97%					
Cr 267.716†	24011.2	482.57 µg/L	43.969	482.57 ppb	9.11%
QC value within limits for Cr 267.716 Recovery = 96.51%					
Cu 324.752†	73089.0	477.79 µg/L	33.284	477.79 ppb	6.97%
QC value within limits for Cu 324.752 Recovery = 95.56%					
Fe 238.204 Radial†	642.2	5075.5 µg/L	23.69	5075.5 ppb	0.47%
QC value within limits for Fe 238.204 Radial Recovery = 101.51%					
K 766.490 Radial†	7525.0	4914.7 µg/L	41.31	4914.7 ppb	0.84%
QC value within limits for K 766.490 Radial Recovery = 98.29%					
Mg 279.077 IEC†	563.7	5041.1 µg/L	59.58	5041.1 ppb	1.18%
QC value within limits for Mg 279.077 IEC Recovery = 100.82%					
Mn 257.610†	157849.4	494.78 µg/L	26.384	494.78 ppb	5.33%
QC value within limits for Mn 257.610 Recovery = 98.96%					
Mo 202.031†	4875.9	477.67 µg/L	55.281	477.67 ppb	11.57%
QC value within limits for Mo 202.031 Recovery = 95.53%					
Na 589.592 Radial†	32237.8	9901.6 µg/L	46.24	9901.6 ppb	0.47%
QC value within limits for Na 589.592 Radial Recovery = 99.02%					
Ni 231.604†	9769.8	486.51 µg/L	34.873	486.51 ppb	7.17%
QC value within limits for Ni 231.604 Recovery = 97.30%					
P 214.914†	1198.3	2326.4 µg/L	247.17	2326.4 ppb	10.62%
QC value within limits for P 214.914 Recovery = 93.06%					
Pb 220.353†	1969.8	478.98 µg/L	45.779	478.98 ppb	9.56%
QC value within limits for Pb 220.353 Recovery = 95.80%					
S 181.975 Axial†	229.8	953.10 µg/L	89.732	953.10 ppb	9.41%
QC value within limits for S 181.975 Axial Recovery = 95.31%					
Sb 206.836†	521.2	480.34 µg/L	53.042	480.34 ppb	11.04%
QC value within limits for Sb 206.836 Recovery = 96.07%					
Se 196.026†	343.3	490.10 µg/L	42.553	490.10 ppb	8.68%
QC value within limits for Se 196.026 Recovery = 98.02%					
SiO2†	26537.3	5238.1 µg/L	275.17	5238.1 ppb	5.25%
QC value within limits for SiO2 Recovery = 97.95%					
Si 251.611†	32197.0	2447.7 µg/L	131.08	2447.7 ppb	5.36%
QC value within limits for Si 251.611 Recovery = 97.91%					
Sn 189.927†	1138.3	480.05 µg/L	57.847	480.05 ppb	12.05%
QC value within limits for Sn 189.927 Recovery = 96.01%					
Sr 421.552†	52572.2	484.99 µg/L	2.187	484.99 ppb	0.45%
QC value within limits for Sr 421.552 Recovery = 97.00%					
Ti 334.940†	218331.7	482.68 µg/L	28.828	482.68 ppb	5.97%
QC value within limits for Ti 334.940 Recovery = 96.54%					
Tl 190.801†	372.8	490.01 µg/L	34.467	490.01 ppb	7.03%
QC value within limits for Tl 190.801 Recovery = 98.00%					
U 409.014†	5756.7	477.29 µg/L	40.220	477.29 ppb	8.43%
QC value within limits for U 409.014 Recovery = 95.46%					
V 292.402†	49099.3	484.37 µg/L	37.644	484.37 ppb	7.77%
QC value within limits for V 292.402 Recovery = 96.87%					
Zn 213.857†	20770.4	483.86 µg/L	33.610	483.86 ppb	6.95%
QC value within limits for Zn 213.857 Recovery = 96.77%					

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 01:38:49

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	57135.1	57135.1	101 %		01:39:22
1	Al 396.153Radial†	34.8	27.0	18.768 µg/L	18.768 ppb	01:39:22
1	Ca 317.933Radial†	207.1	-6.4	-5.4954 µg/L	-5.4954 ppb	01:39:43
1	Fe 238.204 Radial†	23.1	6.3	49.660 µg/L	49.660 ppb	01:39:43
1	K 766.490 Radial†	205.9	38.7	25.245 µg/L	25.245 ppb	01:39:22
1	Mg 279.077 IEC†	7.2	-5.7	-51.077 µg/L	-51.077 ppb	01:39:43
1	Na 589.592 Radial†	453.8	-23.5	-7.2226 µg/L	-7.2226 ppb	01:39:22
1	Sr 421.552†	70.3	40.7	0.3759 µg/L	0.3759 ppb	01:39:22
1	Sc 361.383	2042257.0	2042257.0	104.03 %		01:40:45
1	Y 371.029	1411266.5	1411266.5	104.33 %		01:40:45
1	Ag 328.068†	-373.7	42.4	0.3160 µg/L	0.3160 ppb	01:40:50
1	As 188.979†	2.2	2.5	4.5612 µg/L	4.5612 ppb	01:41:11
1	B 249.677†	379.7	-19.2	-0.8084 µg/L	-0.8084 ppb	01:41:11
1	Ba 233.527†	13.4	30.0	0.7187 µg/L	0.7187 ppb	01:41:11
1	Be 313.107†	-2631.9	325.8	0.1929 µg/L	0.1929 ppb	01:40:50
1	Cd 226.502†	-140.5	6.6	0.1583 µg/L	0.1583 ppb	01:41:11
1	Co 228.616†	13.2	10.8	0.4861 µg/L	0.4861 ppb	01:41:11
1	Cr 267.716†	-53.6	-1.2	-0.0241 µg/L	-0.0241 ppb	01:40:50
1	Cu 324.752†	2611.5	-33.4	-0.2113 µg/L	-0.2113 ppb	01:40:50
1	Mn 257.610†	14.5	269.9	0.8539 µg/L	0.8539 ppb	01:41:11
1	Mo 202.031†	2.8	8.0	0.7888 µg/L	0.7888 ppb	01:41:11
1	Ni 231.604†	315.0	-9.6	-0.4765 µg/L	-0.4765 ppb	01:41:11
1	P 214.914†	6.3	-9.3	-18.376 µg/L	-18.376 ppb	01:41:11
1	Pb 220.353†	88.8	-5.6	-1.3648 µg/L	-1.3648 ppb	01:41:11
1	S 181.975 Axial†	16.7	-2.9	-11.978 µg/L	-11.978 ppb	01:41:11
1	Sb 206.836†	22.2	-1.1	-1.0285 µg/L	-1.0285 ppb	01:41:11
1	Se 196.026†	21.8	1.7	2.5009 µg/L	2.5009 ppb	01:41:11
1	SiO2†	1521.5	71.0	14.008 µg/L	14.008 ppb	01:40:50
1	Si 251.611†	464.1	135.5	10.301 µg/L	10.301 ppb	01:41:11
1	Sn 189.927†	2.6	2.1	0.8882 µg/L	0.8882 ppb	01:41:11
1	Ti 334.940†	768.8	564.0	1.2516 µg/L	1.2516 ppb	01:40:50
1	Tl 190.801†	-21.5	1.7	2.2435 µg/L	2.2435 ppb	01:41:11
1	U 409.014†	-79.9	0.2	0.0140 µg/L	0.0140 ppb	01:40:50
1	V 292.402†	-69.0	-21.6	-0.1984 µg/L	-0.1984 ppb	01:40:50
1	Zn 213.857†	544.5	-11.0	-0.2547 µg/L	-0.2547 ppb	01:41:11
2	Sc RADIAL	57590.6	57590.6	102 %		01:39:48
2	Al 396.153Radial†	40.9	32.7	22.776 µg/L	22.776 ppb	01:39:48
2	Ca 317.933Radial†	207.8	-7.4	-6.3495 µg/L	-6.3495 ppb	01:40:09
2	Fe 238.204 Radial†	20.9	3.9	30.891 µg/L	30.891 ppb	01:40:09
2	K 766.490 Radial†	147.6	-20.2	-13.199 µg/L	-13.199 ppb	01:39:48
2	Mg 279.077 IEC†	10.5	-2.5	-22.537 µg/L	-22.537 ppb	01:40:09
2	Na 589.592 Radial†	425.0	-55.2	-16.966 µg/L	-16.966 ppb	01:39:48
2	Sr 421.552†	29.7	0.4	0.0032 µg/L	0.0032 ppb	01:39:48
2	Sc 361.383	2039883.2	2039883.2	103.91 %		01:41:17
2	Y 371.029	1409921.3	1409921.3	104.23 %		01:41:17
2	Ag 328.068†	-373.1	42.5	0.3150 µg/L	0.3150 ppb	01:41:22
2	As 188.979†	-3.5	-2.9	-5.1760 µg/L	-5.1760 ppb	01:41:43
2	B 249.677†	359.3	-38.4	-1.5807 µg/L	-1.5807 ppb	01:41:43
2	Ba 233.527†	-1.7	15.4	0.3695 µg/L	0.3695 ppb	01:41:43
2	Be 313.107†	-2593.5	359.8	0.2130 µg/L	0.2130 ppb	01:41:22
2	Cd 226.502†	-142.2	4.9	0.1169 µg/L	0.1169 ppb	01:41:43
2	Co 228.616†	13.6	11.1	0.5020 µg/L	0.5020 ppb	01:41:43
2	Cr 267.716†	-56.9	-4.4	-0.0888 µg/L	-0.0888 ppb	01:41:22
2	Cu 324.752†	2578.4	-62.4	-0.4030 µg/L	-0.4030 ppb	01:41:22
2	Mn 257.610†	-100.9	158.9	0.5026 µg/L	0.5026 ppb	01:41:43
2	Mo 202.031†	-3.5	2.0	0.1992 µg/L	0.1992 ppb	01:41:43
2	Ni 231.604†	312.1	-12.0	-0.5974 µg/L	-0.5974 ppb	01:41:43
2	P 214.914†	8.1	-7.5	-14.853 µg/L	-14.853 ppb	01:41:43
2	Pb 220.353†	89.5	-4.8	-1.1656 µg/L	-1.1656 ppb	01:41:43

2	S 181.975 Axial†	19.3	-0.4	-1.5228 µg/L	-1.5228 ppb	01:41:43
2	Sb 206.836†	15.6	-7.5	-6.8664 µg/L	-6.8664 ppb	01:41:43
2	Se 196.026†	20.8	0.7	1.1221 µg/L	1.1221 ppb	01:41:43
2	SiO2†	1543.7	94.1	18.568 µg/L	18.568 ppb	01:41:22
2	Si 251.611†	427.6	100.9	7.6718 µg/L	7.6718 ppb	01:41:43
2	Sn 189.927†	4.2	3.6	1.5286 µg/L	1.5286 ppb	01:41:43
2	Ti 334.940†	818.7	612.8	1.3574 µg/L	1.3574 ppb	01:41:22
2	Tl 190.801†	-26.6	-3.2	-4.1746 µg/L	-4.1746 ppb	01:41:43
2	U 409.014†	-39.9	38.7	3.2106 µg/L	3.2106 ppb	01:41:22
2	V 292.402†	-78.3	-30.6	-0.2901 µg/L	-0.2901 ppb	01:41:22
2	Zn 213.857†	543.6	-11.2	-0.2603 µg/L	-0.2603 ppb	01:41:43
3	Sc RADIAL	57858.1	57858.1	102 %		01:40:14
3	Al 396.153Radial†	22.7	14.8	10.295 µg/L	10.295 ppb	01:40:14
3	Ca 317.933Radial†	203.2	-12.8	-10.971 µg/L	-10.971 ppb	01:40:34
3	Fe 238.204 Radial†	18.8	1.8	13.850 µg/L	13.850 ppb	01:40:34
3	K 766.490 Radial†	204.6	34.8	22.747 µg/L	22.747 ppb	01:40:14
3	Mg 279.077 IEC†	12.5	-0.6	-5.2130 µg/L	-5.2130 ppb	01:40:34
3	Na 589.592 Radial†	471.2	-12.1	-3.7085 µg/L	-3.7085 ppb	01:40:14
3	Sr 421.552†	56.0	25.9	0.2389 µg/L	0.2389 ppb	01:40:14
3	Sc 361.383	2024319.1	2024319.1	103.12 %		01:41:49
3	Y 371.029	1399185.8	1399185.8	103.43 %		01:41:49
3	Ag 328.068†	-371.4	41.4	0.3087 µg/L	0.3087 ppb	01:41:54
3	As 188.979†	-3.1	-2.5	-4.5057 µg/L	-4.5057 ppb	01:42:15
3	B 249.677†	362.3	-32.8	-1.3442 µg/L	-1.3442 ppb	01:42:15
3	Ba 233.527†	3.3	20.3	0.4872 µg/L	0.4872 ppb	01:42:15
3	Be 313.107†	-2633.5	301.8	0.1788 µg/L	0.1788 ppb	01:41:54
3	Cd 226.502†	-140.5	5.4	0.1335 µg/L	0.1335 ppb	01:42:15
3	Co 228.616†	9.3	7.1	0.3187 µg/L	0.3187 ppb	01:42:15
3	Cr 267.716†	-65.5	-13.1	-0.2632 µg/L	-0.2632 ppb	01:41:54
3	Cu 324.752†	2611.5	-11.2	-0.0709 µg/L	-0.0709 ppb	01:41:54
3	Mn 257.610†	-129.8	130.1	0.4095 µg/L	0.4095 ppb	01:42:15
3	Mo 202.031†	1.2	6.5	0.6372 µg/L	0.6372 ppb	01:42:15
3	Ni 231.604†	315.4	-6.5	-0.3221 µg/L	-0.3221 ppb	01:42:15
3	P 214.914†	8.2	-7.4	-14.525 µg/L	-14.525 ppb	01:42:15
3	Pb 220.353†	92.1	-1.6	-0.3905 µg/L	-0.3905 ppb	01:42:15
3	S 181.975 Axial†	16.0	-3.4	-14.142 µg/L	-14.142 ppb	01:42:15
3	Sb 206.836†	29.1	5.7	5.2807 µg/L	5.2807 ppb	01:42:15
3	Se 196.026†	15.7	-4.1	-5.7582 µg/L	-5.7582 ppb	01:42:15
3	SiO2†	1504.9	67.8	13.386 µg/L	13.386 ppb	01:41:54
3	Si 251.611†	417.2	93.9	7.1408 µg/L	7.1408 ppb	01:42:15
3	Sn 189.927†	6.9	6.3	2.6486 µg/L	2.6486 ppb	01:42:15
3	Ti 334.940†	558.7	366.7	0.8115 µg/L	0.8115 ppb	01:41:54
3	Tl 190.801†	-25.8	-2.7	-3.4593 µg/L	-3.4593 ppb	01:42:15
3	U 409.014†	-73.9	5.4	0.4508 µg/L	0.4508 ppb	01:41:54
3	V 292.402†	-26.6	19.0	0.1913 µg/L	0.1913 ppb	01:41:54
3	Zn 213.857†	538.1	-12.6	-0.2940 µg/L	-0.2940 ppb	01:42:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035486.5	103.69 %	0.496			0.48%
Sc RADIAL	57527.9	102 %	0.6			0.64%
Y 371.029	1406791.2	103.99 %	0.489			0.47%
Ag 328.068†	42.1	0.3132 µg/L	0.00393	0.3132 ppb	0.00393	1.25%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	24.9	17.280 µg/L	6.3721	17.280 ppb	6.3721	36.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.7068 µg/L	5.43858	-1.7068 ppb	5.43858	318.63%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-30.1	-1.2444 µg/L	0.39571	-1.2444 ppb	0.39571	31.80%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	21.9	0.5252 µg/L	0.17766	0.5252 ppb	0.17766	33.83%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	329.1	0.1949 µg/L	0.01720	0.1949 ppb	0.01720	8.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-8.9	-7.6052 µg/L	2.94566	-7.6052 ppb	2.94566	38.73%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.6	0.1362 µg/L	0.02082	0.1362 ppb	0.02082	15.29%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.7	0.4356 µg/L	0.10158	0.4356 ppb	0.10158	23.32%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-6.2 -0.1253 µg/L	0.12371 -0.1253 ppb	0.12371 98.69%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-35.7 -0.2284 µg/L	0.16671 -0.2284 ppb	0.16671 73.00%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	4.0 31.467 µg/L	17.9117 31.467 ppb	17.9117 56.92%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	17.8 11.597 µg/L	21.5107 11.597 ppb	21.5107 185.48%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-2.9 -26.276 µg/L	23.1597 -26.276 ppb	23.1597 88.14%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	186.3 0.5887 µg/L	0.23433 0.5887 ppb	0.23433 39.81%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.5 0.5417 µg/L	0.30616 0.5417 ppb	0.30616 56.52%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-30.3 -9.2991 µg/L	6.86854 -9.2991 ppb	6.86854 73.86%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-9.3 -0.4653 µg/L	0.13799 -0.4653 ppb	0.13799 29.66%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-8.1 -15.918 µg/L	2.1350 -15.918 ppb	2.1350 13.41%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-4.0 -0.9736 µg/L	0.51474 -0.9736 ppb	0.51474 52.87%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.2 -9.2142 µg/L	6.74825 -9.2142 ppb	6.74825 73.24%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-1.0 -0.8714 µg/L	6.07511 -0.8714 ppb	6.07511 697.16%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-0.6 -0.7117 µg/L	4.42438 -0.7117 ppb	4.42438 621.65%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	77.6 15.321 µg/L	2.8290 15.321 ppb	2.8290 18.47%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	110.1 8.3713 µg/L	1.69231 8.3713 ppb	1.69231 20.22%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	4.0 1.6885 µg/L	0.89104 1.6885 ppb	0.89104 52.77%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	22.3 0.2060 µg/L	0.18848 0.2060 ppb	0.18848 91.49%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	514.5 1.1402 µg/L	0.28950 1.1402 ppb	0.28950 25.39%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.4 -1.7968 µg/L	3.51725 -1.7968 ppb	3.51725 195.75%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	14.8 1.2252 µg/L	1.73329 1.2252 ppb	1.73329 141.47%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-11.1 -0.0991 µg/L	0.25565 -0.0991 ppb	0.25565 258.03%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-11.6 -0.2697 µg/L	0.02125 -0.2697 ppb	0.02125 7.88%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 245998004|948776|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 210

Date Collected: 2/20/2010 01:42:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998004|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58623.5	58623.5	104 %			01:43:05
1	Al 396.153Radial†	97037.5	93507.9	65049 µg/L		65049 ppb	01:43:05
1	Ca 317.933Radial†	15630.8	14852.2	12686 µg/L		12686 ppb	01:43:25
1	Fe 238.204 Radial†	11692.5	11251.5	88740 µg/L		88740 ppb	01:43:25
1	K 766.490 Radial†	18204.5	17378.7	11350 µg/L		11350 ppb	01:43:05
1	Mg 279.077 IEC†	1418.2	1353.9	12007 µg/L		12007 ppb	01:43:25
1	Na 589.592 Radial†	1904.6	1363.3	418.71 µg/L		418.71 ppb	01:43:25
1	Sr 421.552†	16262.7	15643.6	144.31 µg/L		144.31 ppb	01:43:25
1	Sc 361.383	2024514.5	2024514.5	103.13 %			01:44:29
1	Y 371.029	1421678.3	1421678.3	105.09 %			01:44:29
1	Ag 328.068†	-1410.6	-966.2	-0.5143 µg/L		-0.5143 ppb	01:44:35
1	As 188.979†	12.0	12.1	26.235 µg/L		26.235 ppb	01:44:56
1	B 249.677†	1003.9	589.3	-22.167 µg/L		-22.167 ppb	01:44:35
1	Ba 233.527†	47176.3	45762.8	1098.9 µg/L		1098.9 ppb	01:44:35
1	Be 313.107†	12778.6	15246.8	7.6864 µg/L		7.6864 ppb	01:44:35
1	Cd 226.502†	215.8	351.0	-1.2239 µg/L		-1.2239 ppb	01:44:56
1	Co 228.616†	919.8	890.0	32.841 µg/L		32.841 ppb	01:44:56
1	Cr 267.716†	3776.9	3712.7	74.671 µg/L		74.671 ppb	01:44:35
1	Cu 324.752†	9992.1	7145.4	58.976 µg/L		58.976 ppb	01:44:35
1	Mn 257.610†	823024.0	798321.3	2511.3 µg/L		2511.3 ppb	01:44:29
1	Mo 202.031†	1.0	6.3	3.9931 µg/L		3.9931 ppb	01:44:56
1	Ni 231.604†	1367.0	1013.2	51.615 µg/L		51.615 ppb	01:44:56
1	P 214.914†	743.9	706.0	1339.4 µg/L		1339.4 ppb	01:44:56
1	Pb 220.353†	521.5	414.7	100.91 µg/L		100.91 ppb	01:44:56
1	S 181.975 Axial†	165.4	141.4	586.48 µg/L		586.48 ppb	01:44:56
1	Sb 206.836†	31.0	7.6	5.0416 µg/L		5.0416 ppb	01:44:56
1	Se 196.026†	-26.5	-45.0	165.09 µg/L		165.09 ppb	01:44:56
1	SiO2†	304147.6	293532.5	57939 µg/L		57939 ppb	01:44:29
1	Si 251.611†	364415.3	353053.6	26840 µg/L		26840 ppb	01:44:29
1	Sn 189.927†	-28.5	-28.0	-19.895 µg/L		-19.895 ppb	01:44:56
1	Ti 334.940†	1667441.8	1616700.5	3575.7 µg/L		3575.7 ppb	01:44:29
1	Tl 190.801†	-64.7	-40.4	5.5253 µg/L		5.5253 ppb	01:44:56
1	U 409.014†	296.3	364.4	17.170 µg/L		17.170 ppb	01:44:35
1	V 292.402†	16834.7	16368.9	170.17 µg/L		170.17 ppb	01:44:35
1	Zn 213.857†	10466.3	9614.5	220.37 µg/L		220.37 ppb	01:44:35
2	Sc RADIAL	58805.2	58805.2	104 %			01:43:31
2	Al 396.153Radial†	98274.1	94407.1	65675 µg/L		65675 ppb	01:43:31
2	Ca 317.933Radial†	15697.7	14870.0	12702 µg/L		12702 ppb	01:43:51
2	Fe 238.204 Radial†	11743.4	11265.6	88852 µg/L		88852 ppb	01:43:51
2	K 766.490 Radial†	18336.9	17451.7	11398 µg/L		11398 ppb	01:43:31
2	Mg 279.077 IEC†	1437.8	1368.5	12137 µg/L		12137 ppb	01:43:51
2	Na 589.592 Radial†	1930.7	1382.6	424.67 µg/L		424.67 ppb	01:43:51
2	Sr 421.552†	16340.6	15670.1	144.56 µg/L		144.56 ppb	01:43:51
2	Sc 361.383	2018527.3	2018527.3	102.82 %			01:45:03
2	Y 371.029	1416437.2	1416437.2	104.71 %			01:45:03
2	Ag 328.068†	-1443.1	-1001.8	-0.7540 µg/L		-0.7540 ppb	01:45:08
2	As 188.979†	9.6	9.8	22.008 µg/L		22.008 ppb	01:45:29
2	B 249.677†	986.7	575.5	-22.786 µg/L		-22.786 ppb	01:45:08
2	Ba 233.527†	47616.8	46326.9	1112.5 µg/L		1112.5 ppb	01:45:08
2	Be 313.107†	12876.2	15378.5	7.7665 µg/L		7.7665 ppb	01:45:08
2	Cd 226.502†	207.9	343.9	-1.4135 µg/L		-1.4135 ppb	01:45:29
2	Co 228.616†	925.2	897.9	33.210 µg/L		33.210 ppb	01:45:29
2	Cr 267.716†	3854.3	3798.9	76.404 µg/L		76.404 ppb	01:45:08
2	Cu 324.752†	10091.5	7270.7	59.810 µg/L		59.810 ppb	01:45:08
2	Mn 257.610†	819632.3	797389.8	2508.4 µg/L		2508.4 ppb	01:45:03
2	Mo 202.031†	-2.4	3.0	3.6740 µg/L		3.6740 ppb	01:45:29
2	Ni 231.604†	1357.5	1007.9	51.348 µg/L		51.348 ppb	01:45:29
2	P 214.914†	747.0	711.2	1349.6 µg/L		1349.6 ppb	01:45:29
2	Pb 220.353†	520.6	415.4	101.11 µg/L		101.11 ppb	01:45:29

2	S 181.975 Axial†	165.1	141.6	587.27 µg/L	587.27 ppb	01:45:29
2	Sb 206.836†	35.3	11.9	8.9328 µg/L	8.9328 ppb	01:45:29
2	Se 196.026†	-40.8	-59.0	145.64 µg/L	145.64 ppb	01:45:29
2	SiO2†	302466.3	292772.2	57789 µg/L	57789 ppb	01:45:03
2	Si 251.611†	362779.3	352510.6	26799 µg/L	26799 ppb	01:45:03
2	Sn 189.927†	-29.7	-29.2	-20.431 µg/L	-20.431 ppb	01:45:29
2	Ti 334.940†	1660130.7	1614386.0	3570.6 µg/L	3570.6 ppb	01:45:03
2	Tl 190.801†	-58.9	-34.9	12.584 µg/L	12.584 ppb	01:45:29
2	U 409.014†	240.7	311.1	12.725 µg/L	12.725 ppb	01:45:08
2	V 292.402†	17058.7	16635.2	172.78 µg/L	172.78 ppb	01:45:08
2	Zn 213.857†	10578.8	9754.0	223.63 µg/L	223.63 ppb	01:45:08
3	Sc RADIAL	58509.4	58509.4	104 %		01:43:57
3	Al 396.153Radial†	98477.5	95080.7	66143 µg/L	66143 ppb	01:43:57
3	Ca 317.933Radial†	15740.1	14987.1	12802 µg/L	12802 ppb	01:44:17
3	Fe 238.204 Radial†	11781.1	11359.0	89589 µg/L	89589 ppb	01:44:17
3	K 766.490 Radial†	18264.5	17470.9	11411 µg/L	11411 ppb	01:43:57
3	Mg 279.077 IEC†	1440.4	1378.0	12222 µg/L	12222 ppb	01:44:17
3	Na 589.592 Radial†	1938.5	1399.6	429.87 µg/L	429.87 ppb	01:44:17
3	Sr 421.552†	16382.6	15789.9	145.66 µg/L	145.66 ppb	01:44:17
3	Sc 361.383	2030375.6	2030375.6	103.43 %		01:45:36
3	Y 371.029	1423632.7	1423632.7	105.24 %		01:45:36
3	Ag 328.068†	-1369.0	-922.1	-0.1839 µg/L	-0.1839 ppb	01:45:42
3	As 188.979†	4.7	5.0	13.569 µg/L	13.569 ppb	01:46:02
3	B 249.677†	984.8	568.1	-23.481 µg/L	-23.481 ppb	01:45:42
3	Ba 233.527†	45306.8	43823.1	1052.3 µg/L	1052.3 ppb	01:45:42
3	Be 313.107†	12223.6	14674.4	7.3915 µg/L	7.3915 ppb	01:45:42
3	Cd 226.502†	165.9	302.1	-2.5434 µg/L	-2.5434 ppb	01:46:02
3	Co 228.616†	838.4	808.6	29.404 µg/L	29.404 ppb	01:46:02
3	Cr 267.716†	3579.9	3511.7	70.630 µg/L	70.630 ppb	01:45:42
3	Cu 324.752†	9734.0	6867.8	57.282 µg/L	57.282 ppb	01:45:42
3	Mn 257.610†	801287.4	775000.9	2438.4 µg/L	2438.4 ppb	01:45:36
3	Mo 202.031†	8.9	14.0	4.7712 µg/L	4.7712 ppb	01:46:02
3	Ni 231.604†	1260.9	906.8	46.325 µg/L	46.325 ppb	01:46:02
3	P 214.914†	676.7	638.9	1206.3 µg/L	1206.3 ppb	01:46:02
3	Pb 220.353†	496.3	388.9	94.676 µg/L	94.676 ppb	01:46:02
3	S 181.975 Axial†	151.0	127.0	526.83 µg/L	526.83 ppb	01:46:02
3	Sb 206.836†	27.1	3.7	1.5057 µg/L	1.5057 ppb	01:46:02
3	Se 196.026†	-31.7	-50.0	160.13 µg/L	160.13 ppb	01:46:02
3	SiO2†	298889.7	287597.5	56768 µg/L	56768 ppb	01:45:36
3	Si 251.611†	358336.3	346155.8	26315 µg/L	26315 ppb	01:45:36
3	Sn 189.927†	-29.1	-28.5	-20.178 µg/L	-20.178 ppb	01:46:02
3	Ti 334.940†	1617235.0	1563489.4	3458.0 µg/L	3458.0 ppb	01:45:36
3	Tl 190.801†	-48.4	-24.5	25.073 µg/L	25.073 ppb	01:46:02
3	U 409.014†	178.5	249.6	7.5083 µg/L	7.5083 ppb	01:45:42
3	V 292.402†	16075.7	15587.9	162.65 µg/L	162.65 ppb	01:45:42
3	Zn 213.857†	10097.6	9228.8	211.29 µg/L	211.29 ppb	01:45:42

Mean Data: 245998004|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2024472.5	103.13 %	0.302			0.29%
Sc RADIAL	58646.0	104 %	0.3			0.25%
Y 371.029	1420582.7	105.01 %	0.275			0.26%
Ag 328.068†	-963.4	-0.4841 µg/L	0.28624	-0.4841 ppb	0.28624	59.13%
Al 396.153Radial†	94331.9	65622 µg/L	548.9	65622 ppb	548.9	0.84%
As 188.979†	9.0	20.604 µg/L	6.4485	20.604 ppb	6.4485	31.30%
B 249.677†	577.6	-22.811 µg/L	0.6575	-22.811 ppb	0.6575	2.88%
Ba 233.527†	45304.3	1087.9 µg/L	31.54	1087.9 ppb	31.54	2.90%
Be 313.107†	15099.9	7.6148 µg/L	0.19747	7.6148 ppb	0.19747	2.59%
Ca 317.933Radial†	14903.1	12730 µg/L	62.6	12730 ppb	62.6	0.49%
Cd 226.502†	332.3	-1.7269 µg/L	0.71339	-1.7269 ppb	0.71339	41.31%
Co 228.616†	865.5	31.818 µg/L	2.0986	31.818 ppb	2.0986	6.60%
Cr 267.716†	3674.4	73.902 µg/L	2.9630	73.902 ppb	2.9630	4.01%
Cu 324.752†	7094.6	58.690 µg/L	1.2879	58.690 ppb	1.2879	2.19%
Fe 238.204 Radial†	11292.1	89060 µg/L	460.8	89060 ppb	460.8	0.52%
K 766.490 Radial†	17433.8	11386 µg/L	31.8	11386 ppb	31.8	0.28%
Mg 279.077 IEC†	1366.8	12122 µg/L	108.3	12122 ppb	108.3	0.89%
Mn 257.610†	790237.3	2486.0 µg/L	41.29	2486.0 ppb	41.29	1.66%
Mo 202.031†	7.8	4.1461 µg/L	0.56436	4.1461 ppb	0.56436	13.61%
Na 589.592 Radial†	1381.8	424.42 µg/L	5.581	424.42 ppb	5.581	1.32%

Ni 231.604†	976.0	49.763 µg/L	2.9805	49.763 ppb	2.9805	5.99%
P 214.914†	685.4	1298.4 µg/L	79.94	1298.4 ppb	79.94	6.16%
Pb 220.353†	406.3	98.897 µg/L	3.6565	98.897 ppb	3.6565	3.70%
S 181.975 Axial†	136.7	566.86 µg/L	34.668	566.86 ppb	34.668	6.12%
Sb 206.836†	7.7	5.1600 µg/L	3.71497	5.1600 ppb	3.71497	72.00%
Se 196.026†	-51.3	156.96 µg/L	10.108	156.96 ppb	10.108	6.44%
SiO2†	291300.7	57499 µg/L	637.5	57499 ppb	637.5	1.11%
Si 251.611†	350573.3	26651 µg/L	291.6	26651 ppb	291.6	1.09%
Sn 189.927†	-28.6	-20.168 µg/L	0.2682	-20.168 ppb	0.2682	1.33%
Sr 421.552†	15701.2	144.85 µg/L	0.719	144.85 ppb	0.719	0.50%
Ti 334.940†	1598192.0	3534.8 µg/L	66.54	3534.8 ppb	66.54	1.88%
Tl 190.801†	-33.3	14.394 µg/L	9.8989	14.394 ppb	9.8989	68.77%
U 409.014†	308.4	12.468 µg/L	4.8358	12.468 ppb	4.8358	38.79%
V 292.402†	16197.3	168.53 µg/L	5.260	168.53 ppb	5.260	3.12%
Zn 213.857†	9532.5	218.43 µg/L	6.393	218.43 ppb	6.393	2.93%

Sequence No.: 13
 Sample ID: 245998005|948776|1
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 211
 Date Collected: 2/20/2010 01:46:11
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 245998005|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58504.9	58504.9	104 %		01:46:44
1	Al 396.153Radial†	223217.8	215544.2	149940 µg/L	149940 ppb	01:46:44
1	Ca 317.933Radial†	129793.4	125124.5	106880 µg/L	106880 ppb	01:46:44
1	Fe 238.204 Radial†	17571.9	16951.8	133700 µg/L	133700 ppb	01:47:05
1	K 766.490 Radial†	26762.8	25678.7	16771 µg/L	16771 ppb	01:46:44
1	Mg 279.077 IEC†	3021.7	2905.1	25825 µg/L	25825 ppb	01:47:05
1	Na 589.592 Radial†	9707.5	8901.9	2734.2 µg/L	2734.2 ppb	01:47:05
1	Sr 421.552†	58407.4	56372.7	520.05 µg/L	520.05 ppb	01:46:44
1	Sc 361.383	1998053.1	1998053.1	101.78 %		01:48:09
1	Y 371.029	1439974.2	1439974.2	106.45 %		01:48:09
1	Ag 328.068†	-2192.0	-1752.1	-2.8047 µg/L	-2.8047 ppb	01:48:15
1	As 188.979†	12.2	12.4	24.466 µg/L	24.466 ppb	01:48:35
1	B 249.677†	1449.2	1039.7	-27.150 µg/L	-27.150 ppb	01:48:15
1	Ba 233.527†	154559.4	151874.2	3646.5 µg/L	3646.5 ppb	01:48:15
1	Be 313.107†	26167.8	28566.0	14.910 µg/L	14.910 ppb	01:48:15
1	Cd 226.502†	321.2	457.3	-3.6082 µg/L	-3.6082 ppb	01:48:35
1	Co 228.616†	1219.0	1195.8	42.955 µg/L	42.955 ppb	01:48:35
1	Cr 267.716†	7527.0	7445.8	149.72 µg/L	149.72 ppb	01:48:35
1	Cu 324.752†	10053.3	7333.8	66.455 µg/L	66.455 ppb	01:48:15
1	Mn 257.610†	778801.2	765441.0	2413.7 µg/L	2413.7 ppb	01:48:09
1	Mo 202.031†	-11.5	-5.9	4.5010 µg/L	4.5010 ppb	01:48:35
1	Ni 231.604†	2250.7	1899.0	96.339 µg/L	96.339 ppb	01:48:35
1	P 214.914†	1878.1	1830.0	3552.2 µg/L	3552.2 ppb	01:48:35
1	Pb 220.353†	599.5	498.1	124.32 µg/L	124.32 ppb	01:48:35
1	S 181.975 Axial†	401.2	375.3	1556.2 µg/L	1556.2 ppb	01:48:35
1	Sb 206.836†	42.3	19.1	6.4910 µg/L	6.4910 ppb	01:48:35
1	Se 196.026†	-53.0	-71.4	212.33 µg/L	212.33 ppb	01:48:35
1	SiO2†	415768.4	407107.7	80358 µg/L	80358 ppb	01:48:15
1	Si 251.611†	502772.1	493671.2	37530 µg/L	37530 ppb	01:48:09
1	Sn 189.927†	-67.1	-66.3	-39.731 µg/L	-39.731 ppb	01:48:35
1	Ti 334.940†	2468848.4	2425508.9	5365.4 µg/L	5365.4 ppb	01:48:09
1	Tl 190.801†	-80.0	-56.3	3.6622 µg/L	3.6622 ppb	01:48:35
1	U 409.014†	-1857.3	-1747.7	-170.31 µg/L	-170.31 ppb	01:48:15
1	V 292.402†	27672.6	27233.5	281.32 µg/L	281.32 ppb	01:48:15
1	Zn 213.857†	11744.7	11004.9	249.87 µg/L	249.87 ppb	01:48:35
2	Sc RADIAL	58398.1	58398.1	103 %		01:47:10
2	Al 396.153Radial†	224874.5	217541.2	151330 µg/L	151330 ppb	01:47:10
2	Ca 317.933Radial†	130543.3	126079.2	107690 µg/L	107690 ppb	01:47:10
2	Fe 238.204 Radial†	17671.8	17079.5	134710 µg/L	134710 ppb	01:47:31
2	K 766.490 Radial†	26921.9	25879.8	16903 µg/L	16903 ppb	01:47:10
2	Mg 279.077 IEC†	3032.8	2921.2	25968 µg/L	25968 ppb	01:47:31
2	Na 589.592 Radial†	9721.0	8932.1	2743.4 µg/L	2743.4 ppb	01:47:31
2	Sr 421.552†	58902.8	56955.1	525.42 µg/L	525.42 ppb	01:47:10
2	Sc 361.383	1998606.1	1998606.1	101.81 %		01:48:42
2	Y 371.029	1440808.7	1440808.7	106.51 %		01:48:42
2	Ag 328.068†	-2214.6	-1773.6	-2.8969 µg/L	-2.8969 ppb	01:48:48
2	As 188.979†	12.6	12.8	25.204 µg/L	25.204 ppb	01:49:09
2	B 249.677†	1486.9	1076.4	-26.181 µg/L	-26.181 ppb	01:48:48
2	Ba 233.527†	154781.4	152050.2	3650.8 µg/L	3650.8 ppb	01:48:48
2	Be 313.107†	26194.1	28584.7	14.915 µg/L	14.915 ppb	01:48:48
2	Cd 226.502†	322.7	458.6	-3.6883 µg/L	-3.6883 ppb	01:49:09
2	Co 228.616†	1210.0	1186.6	42.508 µg/L	42.508 ppb	01:49:09
2	Cr 267.716†	7471.2	7388.9	148.58 µg/L	148.58 ppb	01:49:09
2	Cu 324.752†	9993.0	7271.8	66.191 µg/L	66.191 ppb	01:48:48
2	Mn 257.610†	780371.9	766772.0	2418.0 µg/L	2418.0 ppb	01:48:42
2	Mo 202.031†	-25.9	-20.1	3.1498 µg/L	3.1498 ppb	01:49:09
2	Ni 231.604†	2251.9	1899.6	96.383 µg/L	96.383 ppb	01:49:09
2	P 214.914†	1870.2	1821.6	3535.5 µg/L	3535.5 ppb	01:49:09
2	Pb 220.353†	604.7	503.0	125.56 µg/L	125.56 ppb	01:49:09

2	S 181.975 Axial†	398.3	372.3	1544.1 µg/L	1544.1 ppb	01:49:09
2	Sb 206.836†	45.2	21.9	9.0623 µg/L	9.0623 ppb	01:49:09
2	Se 196.026†	-59.9	-78.2	205.22 µg/L	205.22 ppb	01:49:09
2	SiO2†	415707.1	406934.4	80324 µg/L	80324 ppb	01:48:48
2	Si 251.611†	504003.7	494744.2	37611 µg/L	37611 ppb	01:48:42
2	Sn 189.927†	-50.8	-50.3	-33.066 µg/L	-33.066 ppb	01:49:09
2	Ti 334.940†	2476307.3	2432164.1	5380.1 µg/L	5380.1 ppb	01:48:42
2	Tl 190.801†	-82.9	-59.1	0.3150 µg/L	0.3150 ppb	01:49:09
2	U 409.014†	-1916.1	-1805.0	-175.26 µg/L	-175.26 ppb	01:48:48
2	V 292.402†	27742.3	27294.5	282.02 µg/L	282.02 ppb	01:48:48
2	Zn 213.857†	11703.5	10961.3	248.79 µg/L	248.79 ppb	01:49:09
3	Sc RADIAL	58524.1	58524.1	104 %		01:47:36
3	Al 396.153Radial†	225649.1	217820.6	151530 µg/L	151530 ppb	01:47:36
3	Ca 317.933Radial†	131100.1	126344.8	107920 µg/L	107920 ppb	01:47:36
3	Fe 238.204 Radial†	17590.0	16963.7	133790 µg/L	133790 ppb	01:47:57
3	K 766.490 Radial†	27003.0	25902.1	16917 µg/L	16917 ppb	01:47:36
3	Mg 279.077 IEC†	3038.2	2920.1	25959 µg/L	25959 ppb	01:47:57
3	Na 589.592 Radial†	9723.6	8914.4	2738.0 µg/L	2738.0 ppb	01:47:57
3	Sr 421.552†	58958.8	56886.5	524.79 µg/L	524.79 ppb	01:47:36
3	Sc 361.383	1996216.5	1996216.5	101.69 %		01:49:16
3	Y 371.029	1438733.6	1438733.6	106.36 %		01:49:16
3	Ag 328.068†	-2150.6	-1713.3	-2.5851 µg/L	-2.5851 ppb	01:49:22
3	As 188.979†	13.1	13.4	26.099 µg/L	26.099 ppb	01:49:42
3	B 249.677†	1409.6	1002.1	-28.752 µg/L	-28.752 ppb	01:49:22
3	Ba 233.527†	148719.9	146271.2	3512.0 µg/L	3512.0 ppb	01:49:22
3	Be 313.107†	24906.2	27349.0	14.244 µg/L	14.244 ppb	01:49:22
3	Cd 226.502†	282.9	419.9	-4.5585 µg/L	-4.5585 ppb	01:49:42
3	Co 228.616†	1096.7	1076.6	37.866 µg/L	37.866 ppb	01:49:42
3	Cr 267.716†	6797.2	6734.8	135.43 µg/L	135.43 ppb	01:49:42
3	Cu 324.752†	9734.6	7029.4	64.482 µg/L	64.482 ppb	01:49:22
3	Mn 257.610†	760137.5	747790.6	2358.5 µg/L	2358.5 ppb	01:49:16
3	Mo 202.031†	-18.3	-12.6	3.8495 µg/L	3.8495 ppb	01:49:42
3	Ni 231.604†	2077.6	1730.9	87.964 µg/L	87.964 ppb	01:49:42
3	P 214.914†	1729.5	1685.5	3266.8 µg/L	3266.8 ppb	01:49:42
3	Pb 220.353†	574.2	473.7	118.47 µg/L	118.47 ppb	01:49:42
3	S 181.975 Axial†	380.2	354.9	1471.9 µg/L	1471.9 ppb	01:49:42
3	Sb 206.836†	47.9	24.6	11.679 µg/L	11.679 ppb	01:49:42
3	Se 196.026†	-56.9	-75.2	206.77 µg/L	206.77 ppb	01:49:42
3	SiO2†	401937.5	393881.9	77747 µg/L	77747 ppb	01:49:22
3	Si 251.611†	493816.5	485318.6	36895 µg/L	36895 ppb	01:49:16
3	Sn 189.927†	-55.8	-55.2	-35.058 µg/L	-35.058 ppb	01:49:42
3	Ti 334.940†	2398727.4	2358782.1	5217.8 µg/L	5217.8 ppb	01:49:16
3	Tl 190.801†	-76.3	-52.7	6.9032 µg/L	6.9032 ppb	01:49:42
3	U 409.014†	-1745.7	-1639.6	-161.41 µg/L	-161.41 ppb	01:49:22
3	V 292.402†	26484.6	26090.3	270.16 µg/L	270.16 ppb	01:49:22
3	Zn 213.857†	10798.1	10084.6	228.31 µg/L	228.31 ppb	01:49:42

Mean Data: 245998005|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1997625.2	101.76 %	0.064			0.06%
Sc RADIAL	58475.7	104 %	0.1			0.12%
Y 371.029	1439838.8	106.44 %	0.077			0.07%
Ag 328.068†	-1746.3	-2.7622 µg/L	0.16023	-2.7622 ppb	0.16023	5.80%
Al 396.153Radial†	216968.7	150930 µg/L	863.7	150930 ppb	863.7	0.57%
As 188.979†	12.9	25.256 µg/L	0.8176	25.256 ppb	0.8176	3.24%
B 249.677†	1039.4	-27.361 µg/L	1.2985	-27.361 ppb	1.2985	4.75%
Ba 233.527†	150065.2	3603.1 µg/L	78.92	3603.1 ppb	78.92	2.19%
Be 313.107†	28166.6	14.690 µg/L	0.3862	14.690 ppb	0.3862	2.63%
Ca 317.933Radial†	125849.5	107500 µg/L	548.2	107500 ppb	548.2	0.51%
Cd 226.502†	445.3	-3.9517 µg/L	0.52706	-3.9517 ppb	0.52706	13.34%
Co 228.616†	1153.0	41.110 µg/L	2.8177	41.110 ppb	2.8177	6.85%
Cr 267.716†	7189.8	144.57 µg/L	7.939	144.57 ppb	7.939	5.49%
Cu 324.752†	7211.7	65.709 µg/L	1.0714	65.709 ppb	1.0714	1.63%
Fe 238.204 Radial†	16998.3	134070 µg/L	556.3	134070 ppb	556.3	0.41%
K 766.490 Radial†	25820.2	16864 µg/L	80.4	16864 ppb	80.4	0.48%
Mg 279.077 IEC†	2915.5	25918 µg/L	79.9	25918 ppb	79.9	0.31%
Mn 257.610†	760001.2	2396.7 µg/L	33.22	2396.7 ppb	33.22	1.39%
Mo 202.031†	-12.9	3.8334 µg/L	0.67578	3.8334 ppb	0.67578	17.63%
Na 589.592 Radial†	8916.1	2738.5 µg/L	4.66	2738.5 ppb	4.66	0.17%

Ni 231.604†	1843.2	93.562 µg/L	4.8481	93.562 ppb	4.8481	5.18%
P 214.914†	1779.0	3451.5 µg/L	160.16	3451.5 ppb	160.16	4.64%
Pb 220.353†	491.6	122.78 µg/L	3.785	122.78 ppb	3.785	3.08%
S 181.975 Axial†	367.5	1524.1 µg/L	45.55	1524.1 ppb	45.55	2.99%
Sb 206.836†	21.9	9.0774 µg/L	2.59398	9.0774 ppb	2.59398	28.58%
Se 196.026†	-74.9	208.11 µg/L	3.735	208.11 ppb	3.735	1.79%
SiO2†	402641.4	79476 µg/L	1497.5	79476 ppb	1497.5	1.88%
Si 251.611†	491244.7	37345 µg/L	392.3	37345 ppb	392.3	1.05%
Sn 189.927†	-57.3	-35.952 µg/L	3.4210	-35.952 ppb	3.4210	9.52%
Sr 421.552†	56738.1	523.42 µg/L	2.936	523.42 ppb	2.936	0.56%
Ti 334.940†	2405485.0	5321.1 µg/L	89.77	5321.1 ppb	89.77	1.69%
Tl 190.801†	-56.0	3.6268 µg/L	3.29420	3.6268 ppb	3.29420	90.83%
U 409.014†	-1730.8	-169.00 µg/L	7.020	-169.00 ppb	7.020	4.15%
V 292.402†	26872.8	277.83 µg/L	6.652	277.83 ppb	6.652	2.39%
Zn 213.857†	10683.6	242.33 µg/L	12.150	242.33 ppb	12.150	5.01%

Sequence No.: 14

Sample ID: 245998006|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 212

Date Collected: 2/20/2010 01:49:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998006|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57981.3	57981.3	103 %			01:50:24
1	Al 396.153Radial†	74955.5	73027.5	50802 µg/L		50802 ppb	01:50:24
1	Ca 317.933Radial†	37992.9	36808.1	31441 µg/L		31441 ppb	01:50:24
1	Fe 238.204 Radial†	8707.1	8467.4	66782 µg/L		66782 ppb	01:50:45
1	K 766.490 Radial†	18323.3	17688.8	11553 µg/L		11553 ppb	01:50:24
1	Mg 279.077 IEC†	1354.0	1306.5	11607 µg/L		11607 ppb	01:50:45
1	Na 589.592 Radial†	1437.4	928.4	285.14 µg/L		285.14 ppb	01:50:24
1	Sr 421.552†	25850.9	25159.7	232.10 µg/L		232.10 ppb	01:50:24
1	Sc 361.383	1989054.6	1989054.6	101.32 %			01:51:49
1	Y 371.029	1392202.8	1392202.8	102.92 %			01:51:49
1	Ag 328.068†	-1120.8	-704.6	-0.1580 µg/L		-0.1580 ppb	01:51:54
1	As 188.979†	11.0	11.3	22.495 µg/L		22.495 ppb	01:52:15
1	B 249.677†	1416.9	1014.3	6.5930 µg/L		6.5930 ppb	01:51:54
1	Ba 233.527†	55822.2	55111.4	1323.3 µg/L		1323.3 ppb	01:51:54
1	Be 313.107†	8943.0	11682.1	5.9473 µg/L		5.9473 ppb	01:51:54
1	Cd 226.502†	194.7	333.9	0.8253 µg/L		0.8253 ppb	01:52:15
1	Co 228.616†	858.5	845.4	32.887 µg/L		32.887 ppb	01:52:15
1	Cr 267.716†	3150.4	3159.7	63.546 µg/L		63.546 ppb	01:51:54
1	Cu 324.752†	27983.8	25075.2	172.96 µg/L		172.96 ppb	01:51:54
1	Mn 257.610†	1472328.1	1453386.8	4559.7 µg/L		4559.7 ppb	01:51:49
1	Mo 202.031†	10.2	15.4	4.0491 µg/L		4.0491 ppb	01:52:15
1	Ni 231.604†	1219.2	890.9	45.236 µg/L		45.236 ppb	01:52:15
1	P 214.914†	1455.2	1420.8	2756.0 µg/L		2756.0 ppb	01:52:15
1	Pb 220.353†	962.9	859.4	208.83 µg/L		208.83 ppb	01:52:15
1	S 181.975 Axial†	604.4	577.5	2395.0 µg/L		2395.0 ppb	01:52:15
1	Sb 206.836†	27.7	4.9	1.0390 µg/L		1.0390 ppb	01:52:15
1	Se 196.026†	-10.5	-29.7	121.73 µg/L		121.73 ppb	01:52:15
1	SiO2†	343447.2	337577.5	66633 µg/L		66633 ppb	01:51:49
1	Si 251.611†	411710.2	406031.4	30867 µg/L		30867 ppb	01:51:49
1	Sn 189.927†	-25.1	-25.1	-16.496 µg/L		-16.496 ppb	01:52:15
1	Ti 334.940†	1185633.8	1169999.6	2587.9 µg/L		2587.9 ppb	01:51:49
1	Tl 190.801†	-51.8	-28.8	14.312 µg/L		14.312 ppb	01:52:15
1	U 409.014†	613.8	682.9	45.540 µg/L		45.540 ppb	01:51:54
1	V 292.402†	13413.6	13283.4	137.53 µg/L		137.53 ppb	01:51:54
1	Zn 213.857†	11541.6	10856.8	250.42 µg/L		250.42 ppb	01:51:54
2	Sc RADIAL	58519.9	58519.9	104 %			01:50:50
2	Al 396.153Radial†	75079.0	72474.6	50417 µg/L		50417 ppb	01:50:50
2	Ca 317.933Radial†	37974.9	36450.0	31135 µg/L		31135 ppb	01:50:50
2	Fe 238.204 Radial†	8722.2	8403.9	66282 µg/L		66282 ppb	01:51:10
2	K 766.490 Radial†	18392.0	17590.8	11489 µg/L		11489 ppb	01:50:50
2	Mg 279.077 IEC†	1362.1	1302.1	11569 µg/L		11569 ppb	01:51:10
2	Na 589.592 Radial†	1441.3	919.2	282.34 µg/L		282.34 ppb	01:50:50
2	Sr 421.552†	25840.4	24917.7	229.87 µg/L		229.87 ppb	01:50:50
2	Sc 361.383	2003772.3	2003772.3	102.07 %			01:52:22
2	Y 371.029	1402377.7	1402377.7	103.67 %			01:52:22
2	Ag 328.068†	-1138.1	-713.4	-0.2576 µg/L		-0.2576 ppb	01:52:28
2	As 188.979†	1.1	1.5	4.9194 µg/L		4.9194 ppb	01:52:48
2	B 249.677†	1380.0	967.9	4.9640 µg/L		4.9640 ppb	01:52:28
2	Ba 233.527†	55991.9	54873.1	1317.6 µg/L		1317.6 ppb	01:52:28
2	Be 313.107†	8856.6	11532.6	5.8606 µg/L		5.8606 ppb	01:52:28
2	Cd 226.502†	181.1	319.2	0.5135 µg/L		0.5135 ppb	01:52:48
2	Co 228.616†	853.8	834.6	32.406 µg/L		32.406 ppb	01:52:48
2	Cr 267.716†	3134.0	3120.8	62.763 µg/L		62.763 ppb	01:52:28
2	Cu 324.752†	28031.4	24918.9	171.87 µg/L		171.87 ppb	01:52:28
2	Mn 257.610†	1477720.8	1447996.8	4542.8 µg/L		4542.8 ppb	01:52:22
2	Mo 202.031†	5.9	11.1	3.6076 µg/L		3.6076 ppb	01:52:48
2	Ni 231.604†	1204.5	867.7	44.073 µg/L		44.073 ppb	01:52:48
2	P 214.914†	1445.7	1401.0	2717.1 µg/L		2717.1 ppb	01:52:48
2	Pb 220.353†	953.8	843.5	204.96 µg/L		204.96 ppb	01:52:48

2	S 181.975 Axial†	600.8	569.7	2362.5 µg/L	2362.5 ppb	01:52:48
2	Sb 206.836†	26.4	3.3	-0.3349 µg/L	-0.3349 ppb	01:52:48
2	Se 196.026†	-7.0	-26.2	125.42 µg/L	125.42 ppb	01:52:48
2	SiO2†	345115.5	336722.3	66465 µg/L	66465 ppb	01:52:22
2	Si 251.611†	414001.2	405291.3	30811 µg/L	30811 ppb	01:52:22
2	Sn 189.927†	-31.2	-30.9	-18.905 µg/L	-18.905 ppb	01:52:48
2	Ti 334.940†	1191892.4	1167536.2	2582.4 µg/L	2582.4 ppb	01:52:22
2	Tl 190.801†	-56.3	-32.8	8.8689 µg/L	8.8689 ppb	01:52:48
2	U 409.014†	678.8	742.2	50.549 µg/L	50.549 ppb	01:52:28
2	V 292.402†	13472.2	13243.6	137.08 µg/L	137.08 ppb	01:52:28
2	Zn 213.857†	11555.2	10786.4	248.80 µg/L	248.80 ppb	01:52:28
3	Sc RADIAL	57839.8	57839.8	102 %		01:51:16
3	Al 396.153Radial†	74739.1	72994.8	50779 µg/L	50779 ppb	01:51:16
3	Ca 317.933Radial†	37764.7	36675.8	31328 µg/L	31328 ppb	01:51:16
3	Fe 238.204 Radial†	8723.1	8503.8	67070 µg/L	67070 ppb	01:51:36
3	K 766.490 Radial†	18411.0	17818.2	11637 µg/L	11637 ppb	01:51:16
3	Mg 279.077 IEC†	1363.2	1318.7	11716 µg/L	11716 ppb	01:51:36
3	Na 589.592 Radial†	1444.4	938.7	288.30 µg/L	288.30 ppb	01:51:16
3	Sr 421.552†	25714.9	25088.5	231.45 µg/L	231.45 ppb	01:51:16
3	Sc 361.383	1996902.3	1996902.3	101.72 %		01:52:55
3	Y 371.029	1396999.8	1396999.8	103.27 %		01:52:55
3	Ag 328.068†	-1115.8	-695.3	-0.1210 µg/L	-0.1210 ppb	01:53:01
3	As 188.979†	8.2	8.6	17.605 µg/L	17.605 ppb	01:53:22
3	B 249.677†	1365.9	958.7	4.1715 µg/L	4.1715 ppb	01:53:01
3	Ba 233.527†	53354.9	52469.4	1259.9 µg/L	1259.9 ppb	01:53:01
3	Be 313.107†	8291.4	11006.8	5.5783 µg/L	5.5783 ppb	01:53:01
3	Cd 226.502†	167.4	306.3	0.0997 µg/L	0.0997 ppb	01:53:22
3	Co 228.616†	779.1	764.0	29.374 µg/L	29.374 ppb	01:53:22
3	Cr 267.716†	2934.5	2935.2	59.031 µg/L	59.031 ppb	01:53:01
3	Cu 324.752†	26704.0	23708.5	164.08 µg/L	164.08 ppb	01:53:01
3	Mn 257.610†	1438570.6	1414489.7	4438.0 µg/L	4438.0 ppb	01:52:55
3	Mo 202.031†	15.4	20.5	4.5522 µg/L	4.5522 ppb	01:53:22
3	Ni 231.604†	1140.7	809.0	41.160 µg/L	41.160 ppb	01:53:22
3	P 214.914†	1337.9	1299.9	2517.3 µg/L	2517.3 ppb	01:53:22
3	Pb 220.353†	904.4	798.2	193.96 µg/L	193.96 ppb	01:53:22
3	S 181.975 Axial†	565.8	537.3	2228.1 µg/L	2228.1 ppb	01:53:22
3	Sb 206.836†	32.0	8.9	4.8422 µg/L	4.8422 ppb	01:53:22
3	Se 196.026†	-7.2	-26.4	127.01 µg/L	127.01 ppb	01:53:22
3	SiO2†	337606.4	330503.4	65237 µg/L	65237 ppb	01:52:55
3	Si 251.611†	404668.5	397511.9	30220 µg/L	30220 ppb	01:52:55
3	Sn 189.927†	-32.4	-32.2	-19.498 µg/L	-19.498 ppb	01:53:22
3	Ti 334.940†	1151904.3	1132242.0	2504.3 µg/L	2504.3 ppb	01:52:55
3	Tl 190.801†	-51.8	-28.5	13.492 µg/L	13.492 ppb	01:53:22
3	U 409.014†	609.8	676.5	44.975 µg/L	44.975 ppb	01:53:01
3	V 292.402†	12672.8	12503.1	129.95 µg/L	129.95 ppb	01:53:01
3	Zn 213.857†	11048.1	10326.8	238.00 µg/L	238.00 ppb	01:53:01

Mean Data: 245998006|948776|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1996576.4	101.70 %		0.375			0.37%
Sc RADIAL	58113.7	103 %		0.6			0.62%
Y 371.029	1397193.5	103.28 %		0.376			0.36%
Ag 328.068†	-704.4	-0.1789 µg/L		0.07067	-0.1789 ppb	0.07067	39.51%
Al 396.153Radial†	72832.3	50666 µg/L		215.8	50666 ppb	215.8	0.43%
As 188.979†	7.1	15.006 µg/L		9.0714	15.006 ppb	9.0714	60.45%
B 249.677†	980.3	5.2428 µg/L		1.23457	5.2428 ppb	1.23457	23.55%
Ba 233.527†	54151.3	1300.2 µg/L		35.09	1300.2 ppb	35.09	2.70%
Be 313.107†	11407.2	5.7954 µg/L		0.19295	5.7954 ppb	0.19295	3.33%
Ca 317.933Radial†	36644.7	31301 µg/L		154.7	31301 ppb	154.7	0.49%
Cd 226.502†	319.8	0.4795 µg/L		0.36402	0.4795 ppb	0.36402	75.92%
Co 228.616†	814.7	31.556 µg/L		1.9046	31.556 ppb	1.9046	6.04%
Cr 267.716†	3071.9	61.780 µg/L		2.4125	61.780 ppb	2.4125	3.91%
Cu 324.752†	24567.5	169.64 µg/L		4.844	169.64 ppb	4.844	2.86%
Fe 238.204 Radial†	8458.4	66711 µg/L		398.7	66711 ppb	398.7	0.60%
K 766.490 Radial†	17699.3	11560 µg/L		74.5	11560 ppb	74.5	0.64%
Mg 279.077 IEC†	1309.1	11631 µg/L		76.5	11631 ppb	76.5	0.66%
Mn 257.610†	1438624.5	4513.5 µg/L		65.96	4513.5 ppb	65.96	1.46%
Mo 202.031†	15.7	4.0696 µg/L		0.47266	4.0696 ppb	0.47266	11.61%
Na 589.592 Radial†	928.8	285.26 µg/L		2.984	285.26 ppb	2.984	1.05%

Ni 231.604†	855.9	43.489 µg/L	2.0999	43.489 ppb	2.0999	4.83%
P 214.914†	1373.9	2663.5 µg/L	128.08	2663.5 ppb	128.08	4.81%
Pb 220.353†	833.7	202.58 µg/L	7.717	202.58 ppb	7.717	3.81%
S 181.975 Axial†	561.5	2328.5 µg/L	88.46	2328.5 ppb	88.46	3.80%
Sb 206.836†	5.7	1.8487 µg/L	2.68186	1.8487 ppb	2.68186	145.06%
Se 196.026†	-27.4	124.72 µg/L	2.708	124.72 ppb	2.708	2.17%
SiO2†	334934.4	66112 µg/L	762.1	66112 ppb	762.1	1.15%
Si 251.611†	402944.9	30633 µg/L	358.8	30633 ppb	358.8	1.17%
Sn 189.927†	-29.4	-18.300 µg/L	1.5899	-18.300 ppb	1.5899	8.69%
Sr 421.552†	25055.3	231.14 µg/L	1.147	231.14 ppb	1.147	0.50%
Ti 334.940†	1156592.6	2558.2 µg/L	46.74	2558.2 ppb	46.74	1.83%
Tl 190.801†	-30.0	12.224 µg/L	2.9345	12.224 ppb	2.9345	24.01%
U 409.014†	700.5	47.021 µg/L	3.0680	47.021 ppb	3.0680	6.52%
V 292.402†	13010.1	134.85 µg/L	4.252	134.85 ppb	4.252	3.15%
Zn 213.857†	10656.6	245.74 µg/L	6.753	245.74 ppb	6.753	2.75%

Sequence No.: 15

Sample ID: 245998007|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 213

Date Collected: 2/20/2010 01:53:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998007|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58636.7	58636.7	104 %		01:54:04
1	Al 396.153Radial†	173908.1	167550.6	116560 µg/L	116560 ppb	01:54:04
1	Ca 317.933Radial†	54509.0	52307.4	44680 µg/L	44680 ppb	01:54:04
1	Fe 238.204 Radial†	16499.8	15880.8	125250 µg/L	125250 ppb	01:54:24
1	K 766.490 Radial†	19291.5	18422.1	12032 µg/L	12032 ppb	01:54:04
1	Mg 279.077 IEC†	2786.5	2671.9	23750 µg/L	23750 ppb	01:54:24
1	Na 589.592 Radial†	3756.5	3147.1	966.61 µg/L	966.61 ppb	01:54:24
1	Sr 421.552†	40311.9	38811.1	358.04 µg/L	358.04 ppb	01:54:04
1	Sc 361.383	2003041.5	2003041.5	102.03 %		01:55:30
1	Y 371.029	1421563.5	1421563.5	105.09 %		01:55:30
1	Ag 328.068†	-1984.7	-1543.6	-2.0284 µg/L	-2.0284 ppb	01:55:35
1	As 188.979†	12.6	12.8	27.816 µg/L	27.816 ppb	01:55:56
1	B 249.677†	1195.5	787.6	-32.959 µg/L	-32.959 ppb	01:55:35
1	Ba 233.527†	87105.9	85386.9	2050.3 µg/L	2050.3 ppb	01:55:35
1	Be 313.107†	18765.3	21247.0	11.130 µg/L	11.130 ppb	01:55:35
1	Cd 226.502†	295.1	430.9	-3.3040 µg/L	-3.3040 ppb	01:55:56
1	Co 228.616†	1350.3	1321.4	51.736 µg/L	51.736 ppb	01:55:56
1	Cr 267.716†	9421.4	9284.0	186.62 µg/L	186.62 ppb	01:55:35
1	Cu 324.752†	10793.8	8034.9	69.858 µg/L	69.858 ppb	01:55:35
1	Mn 257.610†	1007493.5	987669.6	3108.6 µg/L	3108.6 ppb	01:55:30
1	Mo 202.031†	-16.2	-10.5	3.7282 µg/L	3.7282 ppb	01:55:56
1	Ni 231.604†	2410.0	2049.7	103.73 µg/L	103.73 ppb	01:55:56
1	P 214.914†	629.7	601.8	1117.7 µg/L	1117.7 ppb	01:55:56
1	Pb 220.353†	631.7	528.2	130.07 µg/L	130.07 ppb	01:55:56
1	S 181.975 Axial†	182.7	160.1	664.11 µg/L	664.11 ppb	01:55:56
1	Sb 206.836†	44.4	21.0	13.261 µg/L	13.261 ppb	01:55:56
1	Se 196.026†	-46.6	-65.0	217.41 µg/L	217.41 ppb	01:55:56
1	SiO2†	323640.1	315798.2	62334 µg/L	62334 ppb	01:55:30
1	Si 251.611†	388395.6	380344.0	28914 µg/L	28914 ppb	01:55:30
1	Sn 189.927†	-31.0	-30.7	-23.727 µg/L	-23.727 ppb	01:55:56
1	Ti 334.940†	1792079.9	1756187.7	3883.9 µg/L	3883.9 ppb	01:55:30
1	Tl 190.801†	-66.4	-42.7	13.580 µg/L	13.580 ppb	01:55:56
1	U 409.014†	-1502.5	-1395.5	-136.08 µg/L	-136.08 ppb	01:55:30
1	V 292.402†	23994.0	23560.5	244.65 µg/L	244.65 ppb	01:55:35
1	Zn 213.857†	10725.8	9977.6	226.25 µg/L	226.25 ppb	01:55:35
2	Sc RADIAL	58913.3	58913.3	104 %		01:54:30
2	Al 396.153Radial†	175686.2	168469.1	117200 µg/L	117200 ppb	01:54:30
2	Ca 317.933Radial†	55026.4	52557.0	44893 µg/L	44893 ppb	01:54:30
2	Fe 238.204 Radial†	16477.0	15784.2	124490 µg/L	124490 ppb	01:54:51
2	K 766.490 Radial†	19479.2	18514.8	12092 µg/L	12092 ppb	01:54:30
2	Mg 279.077 IEC†	2788.1	2660.9	23652 µg/L	23652 ppb	01:54:51
2	Na 589.592 Radial†	3791.3	3163.5	971.64 µg/L	971.64 ppb	01:54:51
2	Sr 421.552†	40738.2	39037.6	360.13 µg/L	360.13 ppb	01:54:30
2	Sc 361.383	2013408.2	2013408.2	102.56 %		01:56:04
2	Y 371.029	1429160.1	1429160.1	105.65 %		01:56:04
2	Ag 328.068†	-1926.4	-1476.7	-1.5927 µg/L	-1.5927 ppb	01:56:09
2	As 188.979†	13.3	13.4	28.910 µg/L	28.910 ppb	01:56:30
2	B 249.677†	1186.0	772.2	-33.190 µg/L	-33.190 ppb	01:56:09
2	Ba 233.527†	86670.3	84522.7	2029.6 µg/L	2029.6 ppb	01:56:09
2	Be 313.107†	18648.2	21038.2	11.018 µg/L	11.018 ppb	01:56:09
2	Cd 226.502†	323.3	456.9	-2.5704 µg/L	-2.5704 ppb	01:56:30
2	Co 228.616†	1347.5	1311.9	51.368 µg/L	51.368 ppb	01:56:30
2	Cr 267.716†	9370.7	9187.0	184.67 µg/L	184.67 ppb	01:56:09
2	Cu 324.752†	10729.6	7917.9	68.988 µg/L	68.988 ppb	01:56:09
2	Mn 257.610†	1007208.1	982307.3	3091.7 µg/L	3091.7 ppb	01:56:04
2	Mo 202.031†	-17.2	-11.4	3.6106 µg/L	3.6106 ppb	01:56:30
2	Ni 231.604†	2423.5	2050.7	103.77 µg/L	103.77 ppb	01:56:30
2	P 214.914†	632.7	601.5	1117.9 µg/L	1117.9 ppb	01:56:30
2	Pb 220.353†	627.7	521.1	128.41 µg/L	128.41 ppb	01:56:30

2	S 181.975 Axial†	184.7	161.2	668.42 µg/L	668.42 ppb	01:56:30
2	Sb 206.836†	39.3	15.8	8.4762 µg/L	8.4762 ppb	01:56:30
2	Se 196.026†	-48.0	-66.1	213.79 µg/L	213.79 ppb	01:56:30
2	SiO2†	322957.3	313499.3	61881 µg/L	61881 ppb	01:56:04
2	Si 251.611†	387531.9	377542.0	28701 µg/L	28701 ppb	01:56:04
2	Sn 189.927†	-35.2	-34.7	-25.340 µg/L	-25.340 ppb	01:56:30
2	Ti 334.940†	1787327.0	1742510.3	3853.7 µg/L	3853.7 ppb	01:56:04
2	Tl 190.801†	-65.7	-41.7	14.516 µg/L	14.516 ppb	01:56:30
2	U 409.014†	-1530.7	-1415.4	-137.64 µg/L	-137.64 ppb	01:56:04
2	V 292.402†	23929.1	23376.2	242.75 µg/L	242.75 ppb	01:56:09
2	Zn 213.857†	10669.4	9868.5	223.73 µg/L	223.73 ppb	01:56:09
3	Sc RADIAL	58077.9	58077.9	103 %		01:54:56
3	Al 396.153Radial†	174558.1	169795.0	118120 µg/L	118120 ppb	01:54:56
3	Ca 317.933Radial†	54428.0	52733.9	45044 µg/L	45044 ppb	01:54:56
3	Fe 238.204 Radial†	16534.1	16067.0	126720 µg/L	126720 ppb	01:55:17
3	K 766.490 Radial†	19269.0	18579.0	12134 µg/L	12134 ppb	01:54:56
3	Mg 279.077 IEC†	2802.9	2713.7	24122 µg/L	24122 ppb	01:55:17
3	Na 589.592 Radial†	3796.0	3220.4	989.12 µg/L	989.12 ppb	01:55:17
3	Sr 421.552†	40370.1	39241.4	362.01 µg/L	362.01 ppb	01:54:56
3	Sc 361.383	2007541.1	2007541.1	102.26 %		01:56:38
3	Y 371.029	1422275.9	1422275.9	105.14 %		01:56:38
3	Ag 328.068†	-1852.3	-1409.7	-1.0154 µg/L	-1.0154 ppb	01:56:43
3	As 188.979†	15.6	15.7	33.142 µg/L	33.142 ppb	01:57:04
3	B 249.677†	1171.5	761.4	-34.808 µg/L	-34.808 ppb	01:56:43
3	Ba 233.527†	83814.0	81976.5	1968.4 µg/L	1968.4 ppb	01:56:43
3	Be 313.107†	17821.9	20283.3	10.619 µg/L	10.619 ppb	01:56:43
3	Cd 226.502†	261.3	397.2	-4.3190 µg/L	-4.3190 ppb	01:57:04
3	Co 228.616†	1226.1	1197.0	46.437 µg/L	46.437 ppb	01:57:04
3	Cr 267.716†	8902.4	8755.8	176.00 µg/L	176.00 ppb	01:56:43
3	Cu 324.752†	10403.7	7629.7	67.417 µg/L	67.417 ppb	01:56:43
3	Mn 257.610†	975941.8	954603.0	3005.2 µg/L	3005.2 ppb	01:56:38
3	Mo 202.031†	-9.3	-3.7	4.4502 µg/L	4.4502 ppb	01:57:04
3	Ni 231.604†	2230.8	1869.1	94.756 µg/L	94.756 ppb	01:57:04
3	P 214.914†	599.5	570.9	1055.9 µg/L	1055.9 ppb	01:57:04
3	Pb 220.353†	576.3	472.7	116.61 µg/L	116.61 ppb	01:57:04
3	S 181.975 Axial†	169.4	146.7	608.40 µg/L	608.40 ppb	01:57:04
3	Sb 206.836†	48.5	24.9	16.928 µg/L	16.928 ppb	01:57:04
3	Se 196.026†	-45.0	-63.3	223.32 µg/L	223.32 ppb	01:57:04
3	SiO2†	315038.6	306676.1	60534 µg/L	60534 ppb	01:56:38
3	Si 251.611†	378171.2	369492.7	28090 µg/L	28090 ppb	01:56:38
3	Sn 189.927†	-36.6	-36.2	-26.160 µg/L	-26.160 ppb	01:57:04
3	Ti 334.940†	1721514.8	1683247.5	3722.5 µg/L	3722.5 ppb	01:56:38
3	Tl 190.801†	-59.5	-35.8	21.128 µg/L	21.128 ppb	01:57:04
3	U 409.014†	-1451.3	-1342.1	-131.87 µg/L	-131.87 ppb	01:56:38
3	V 292.402†	22919.2	22456.8	234.05 µg/L	234.05 ppb	01:56:43
3	Zn 213.857†	10347.8	9584.4	216.98 µg/L	216.98 ppb	01:56:43

Mean Data: 245998007|948776|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2007996.9	102.29 %		0.265			0.26%
Sc RADIAL	58542.7	104 %		0.8			0.73%
Y 371.029	1424333.2	105.29 %		0.310			0.29%
Ag 328.068†	-1476.7	-1.5455 µg/L		0.50816	-1.5455 ppb	0.50816	32.88%
Al 396.153Radial†	168604.9	117290 µg/L		784.9	117290 ppb	784.9	0.67%
As 188.979†	14.0	29.956 µg/L		2.8132	29.956 ppb	2.8132	9.39%
B 249.677†	773.7	-33.653 µg/L		1.0077	-33.653 ppb	1.0077	2.99%
Ba 233.527†	83962.0	2016.1 µg/L		42.57	2016.1 ppb	42.57	2.11%
Be 313.107†	20856.1	10.922 µg/L		0.2682	10.922 ppb	0.2682	2.46%
Ca 317.933Radial†	52532.8	44872 µg/L		183.0	44872 ppb	183.0	0.41%
Cd 226.502†	428.3	-3.3978 µg/L		0.87807	-3.3978 ppb	0.87807	25.84%
Co 228.616†	1276.8	49.847 µg/L		2.9585	49.847 ppb	2.9585	5.94%
Cr 267.716†	9075.6	182.43 µg/L		5.651	182.43 ppb	5.651	3.10%
Cu 324.752†	7860.8	68.754 µg/L		1.2369	68.754 ppb	1.2369	1.80%
Fe 238.204 Radial†	15910.7	125490 µg/L		1133.8	125490 ppb	1133.8	0.90%
K 766.490 Radial†	18505.3	12086 µg/L		51.5	12086 ppb	51.5	0.43%
Mg 279.077 IEC†	2682.2	23841 µg/L		247.9	23841 ppb	247.9	1.04%
Mn 257.610†	974860.0	3068.5 µg/L		55.45	3068.5 ppb	55.45	1.81%
Mo 202.031†	-8.6	3.9297 µg/L		0.45458	3.9297 ppb	0.45458	11.57%
Na 589.592 Radial†	3177.0	975.79 µg/L		11.815	975.79 ppb	11.815	1.21%

Ni 231.604†	1989.8	100.75 µg/L	5.194	100.75 ppb	5.194	5.16%
P 214.914†	591.4	1097.1 µg/L	35.76	1097.1 ppb	35.76	3.26%
Pb 220.353†	507.3	125.03 µg/L	7.340	125.03 ppb	7.340	5.87%
S 181.975 Axial†	156.0	646.98 µg/L	33.477	646.98 ppb	33.477	5.17%
Sb 206.836†	20.6	12.888 µg/L	4.2381	12.888 ppb	4.2381	32.88%
Se 196.026†	-64.8	218.17 µg/L	4.815	218.17 ppb	4.815	2.21%
SiO2†	311991.2	61583 µg/L	936.5	61583 ppb	936.5	1.52%
Si 251.611†	375792.9	28569 µg/L	428.2	28569 ppb	428.2	1.50%
Sn 189.927†	-33.9	-25.076 µg/L	1.2378	-25.076 ppb	1.2378	4.94%
Sr 421.552†	39030.0	360.06 µg/L	1.986	360.06 ppb	1.986	0.55%
Ti 334.940†	1727315.2	3820.0 µg/L	85.79	3820.0 ppb	85.79	2.25%
Tl 190.801†	-40.1	16.408 µg/L	4.1144	16.408 ppb	4.1144	25.08%
U 409.014†	-1384.3	-135.19 µg/L	2.985	-135.19 ppb	2.985	2.21%
V 292.402†	23131.2	240.48 µg/L	5.652	240.48 ppb	5.652	2.35%
Zn 213.857†	9810.2	222.32 µg/L	4.794	222.32 ppb	4.794	2.16%

Sequence No.: 16

Sample ID: 245998008|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 214

Date Collected: 2/20/2010 01:57:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998008|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58001.6	58001.6	103 %		01:57:46
1	Al 396.153Radial†	172748.7	168256.0	117050 µg/L	117050 ppb	01:57:46
1	Ca 317.933Radial†	28500.6	27549.3	23532 µg/L	23532 ppb	01:58:06
1	Fe 238.204 Radial†	18250.3	17759.9	140070 µg/L	140070 ppb	01:58:06
1	K 766.490 Radial†	28859.7	27945.4	18252 µg/L	18252 ppb	01:57:46
1	Mg 279.077 IEC†	2317.5	2244.5	19913 µg/L	19913 ppb	01:58:06
1	Na 589.592 Radial†	2624.5	2084.2	640.14 µg/L	640.14 ppb	01:58:06
1	Sr 421.552†	30293.5	29478.1	271.94 µg/L	271.94 ppb	01:57:46
1	Sc 361.383	2006762.4	2006762.4	102.22 %		01:59:11
1	Y 371.029	1425437.1	1425437.1	105.37 %		01:59:11
1	Ag 328.068†	-2085.5	-1638.6	-1.4837 µg/L	-1.4837 ppb	01:59:17
1	As 188.979†	15.6	15.7	35.116 µg/L	35.116 ppb	01:59:37
1	B 249.677†	1389.4	975.0	-33.152 µg/L	-33.152 ppb	01:59:17
1	Ba 233.527†	84179.1	82365.5	1977.9 µg/L	1977.9 ppb	01:59:17
1	Be 313.107†	22655.0	25018.0	12.544 µg/L	12.544 ppb	01:59:17
1	Cd 226.502†	436.6	568.8	-1.5559 µg/L	-1.5559 ppb	01:59:17
1	Co 228.616†	1690.2	1651.5	62.172 µg/L	62.172 ppb	01:59:37
1	Cr 267.716†	6235.9	6150.6	123.71 µg/L	123.71 ppb	01:59:17
1	Cu 324.752†	13727.0	10884.7	90.520 µg/L	90.520 ppb	01:59:17
1	Mn 257.610†	1359515.9	1330205.5	4183.4 µg/L	4183.4 ppb	01:59:11
1	Mo 202.031†	-20.9	-15.1	3.8441 µg/L	3.8441 ppb	01:59:37
1	Ni 231.604†	2070.8	1713.4	87.143 µg/L	87.143 ppb	01:59:37
1	P 214.914†	895.6	860.7	1616.3 µg/L	1616.3 ppb	01:59:37
1	Pb 220.353†	816.2	707.5	172.99 µg/L	172.99 ppb	01:59:37
1	S 181.975 Axial†	289.7	264.4	1096.5 µg/L	1096.5 ppb	01:59:37
1	Sb 206.836†	35.5	12.2	7.7621 µg/L	7.7621 ppb	01:59:37
1	Se 196.026†	-48.7	-66.9	264.51 µg/L	264.51 ppb	01:59:37
1	SiO2†	319117.8	310786.1	61345 µg/L	61345 ppb	01:59:11
1	Si 251.611†	382687.3	374054.1	28436 µg/L	28436 ppb	01:59:11
1	Sn 189.927†	-47.3	-46.6	-32.370 µg/L	-32.370 ppb	01:59:37
1	Ti 334.940†	2794483.7	2733535.0	6046.0 µg/L	6046.0 ppb	01:59:11
1	Tl 190.801†	-84.7	-60.4	18.135 µg/L	18.135 ppb	01:59:37
1	U 409.014†	-260.9	-178.2	-35.707 µg/L	-35.707 ppb	01:59:11
1	V 292.402†	29041.8	28454.9	294.04 µg/L	294.04 ppb	01:59:17
1	Zn 213.857†	15212.9	14347.7	328.33 µg/L	328.33 ppb	01:59:17
2	Sc RADIAL	58732.4	58732.4	104 %		01:58:12
2	Al 396.153Radial†	174734.7	168072.7	116920 µg/L	116920 ppb	01:58:12
2	Ca 317.933Radial†	28413.9	27120.5	23166 µg/L	23166 ppb	01:58:32
2	Fe 238.204 Radial†	18243.5	17532.1	138280 µg/L	138280 ppb	01:58:32
2	K 766.490 Radial†	29279.2	27999.2	18287 µg/L	18287 ppb	01:58:12
2	Mg 279.077 IEC†	2318.3	2217.2	19671 µg/L	19671 ppb	01:58:32
2	Na 589.592 Radial†	2632.1	2059.7	632.61 µg/L	632.61 ppb	01:58:32
2	Sr 421.552†	30639.9	29444.2	271.63 µg/L	271.63 ppb	01:58:12
2	Sc 361.383	2006345.4	2006345.4	102.20 %		01:59:45
2	Y 371.029	1424071.7	1424071.7	105.27 %		01:59:45
2	Ag 328.068†	-2136.6	-1688.9	-1.9639 µg/L	-1.9639 ppb	01:59:51
2	As 188.979†	16.8	16.9	37.168 µg/L	37.168 ppb	02:00:11
2	B 249.677†	1382.9	968.9	-32.463 µg/L	-32.463 ppb	01:59:51
2	Ba 233.527†	84534.4	82730.2	1986.6 µg/L	1986.6 ppb	01:59:51
2	Be 313.107†	22643.0	25010.9	12.528 µg/L	12.528 ppb	01:59:51
2	Cd 226.502†	426.8	559.3	-1.5930 µg/L	-1.5930 ppb	01:59:51
2	Co 228.616†	1659.8	1622.1	60.772 µg/L	60.772 ppb	02:00:11
2	Cr 267.716†	6232.2	6148.3	123.67 µg/L	123.67 ppb	01:59:51
2	Cu 324.752†	13765.5	10925.2	90.534 µg/L	90.534 ppb	01:59:51
2	Mn 257.610†	1368474.7	1339247.7	4211.5 µg/L	4211.5 ppb	01:59:45
2	Mo 202.031†	-17.0	-11.3	4.1460 µg/L	4.1460 ppb	02:00:11
2	Ni 231.604†	2022.2	1666.3	84.774 µg/L	84.774 ppb	02:00:11
2	P 214.914†	889.8	855.3	1606.9 µg/L	1606.9 ppb	02:00:11
2	Pb 220.353†	817.3	708.8	173.37 µg/L	173.37 ppb	02:00:11

2	S 181.975 Axial†	283.8	258.8	1073.1 µg/L	1073.1 ppb	02:00:11
2	Sb 206.836†	27.8	4.7	0.9080 µg/L	0.9080 ppb	02:00:11
2	Se 196.026†	-57.8	-75.9	247.29 µg/L	247.29 ppb	02:00:11
2	SiO2†	320710.7	312409.6	61666 µg/L	61666 ppb	01:59:45
2	Si 251.611†	384382.7	375790.8	28568 µg/L	28568 ppb	01:59:45
2	Sn 189.927†	-47.4	-46.8	-32.259 µg/L	-32.259 ppb	02:00:11
2	Ti 334.940†	2808887.9	2748197.0	6078.4 µg/L	6078.4 ppb	01:59:45
2	Tl 190.801†	-82.0	-57.9	21.614 µg/L	21.614 ppb	02:00:11
2	U 409.014†	-275.2	-192.1	-36.597 µg/L	-36.597 ppb	01:59:45
2	V 292.402†	29133.5	28550.5	294.77 µg/L	294.77 ppb	01:59:51
2	Zn 213.857†	15252.5	14389.5	329.43 µg/L	329.43 ppb	01:59:51
3	Sc RADIAL	58432.7	58432.7	103 %		01:58:38
3	Al 396.153Radial†	174990.3	169181.9	117690 µg/L	117690 ppb	01:58:38
3	Ca 317.933Radial†	28735.0	27571.2	23551 µg/L	23551 ppb	01:58:58
3	Fe 238.204 Radial†	18382.3	17756.3	140040 µg/L	140040 ppb	01:58:58
3	K 766.490 Radial†	29111.9	27981.8	18275 µg/L	18275 ppb	01:58:38
3	Mg 279.077 IEC†	2328.9	2238.9	19863 µg/L	19863 ppb	01:58:58
3	Na 589.592 Radial†	2630.9	2071.5	636.25 µg/L	636.25 ppb	01:58:58
3	Sr 421.552†	30641.4	29596.8	273.03 µg/L	273.03 ppb	01:58:38
3	Sc 361.383	1996930.2	1996930.2	101.72 %		02:00:19
3	Y 371.029	1415951.7	1415951.7	104.67 %		02:00:19
3	Ag 328.068†	-2007.9	-1572.3	-1.0889 µg/L	-1.0889 ppb	02:00:25
3	As 188.979†	13.2	13.4	30.974 µg/L	30.974 ppb	02:00:45
3	B 249.677†	1348.1	941.2	-34.528 µg/L	-34.528 ppb	02:00:25
3	Ba 233.527†	80425.9	79081.3	1899.0 µg/L	1899.0 ppb	02:00:25
3	Be 313.107†	21257.3	23753.1	11.880 µg/L	11.880 ppb	02:00:25
3	Cd 226.502†	373.2	508.6	-3.0635 µg/L	-3.0635 ppb	02:00:25
3	Co 228.616†	1512.7	1485.2	55.114 µg/L	55.114 ppb	02:00:45
3	Cr 267.716†	5841.3	5792.8	116.52 µg/L	116.52 ppb	02:00:25
3	Cu 324.752†	13147.5	10381.2	87.229 µg/L	87.229 ppb	02:00:25
3	Mn 257.610†	1311741.5	1289788.1	4056.8 µg/L	4056.8 ppb	02:00:19
3	Mo 202.031†	-9.1	-3.6	4.9650 µg/L	4.9650 ppb	02:00:45
3	Ni 231.604†	1883.2	1539.0	78.458 µg/L	78.458 ppb	02:00:45
3	P 214.914†	808.6	779.6	1456.3 µg/L	1456.3 ppb	02:00:45
3	Pb 220.353†	763.9	660.0	161.48 µg/L	161.48 ppb	02:00:45
3	S 181.975 Axial†	272.8	249.2	1033.4 µg/L	1033.4 ppb	02:00:45
3	Sb 206.836†	30.7	7.7	3.6591 µg/L	3.6591 ppb	02:00:45
3	Se 196.026†	-56.8	-75.2	252.85 µg/L	252.85 ppb	02:00:45
3	SiO2†	310311.0	303665.5	59940 µg/L	59940 ppb	02:00:19
3	Si 251.611†	372284.0	365670.2	27799 µg/L	27799 ppb	02:00:19
3	Sn 189.927†	-43.6	-43.2	-30.919 µg/L	-30.919 ppb	02:00:45
3	Ti 334.940†	2676082.6	2630598.3	5818.3 µg/L	5818.3 ppb	02:00:19
3	Tl 190.801†	-76.2	-52.6	25.938 µg/L	25.938 ppb	02:00:45
3	U 409.014†	-169.3	-89.3	-28.325 µg/L	-28.325 ppb	02:00:19
3	V 292.402†	27408.8	26989.5	279.76 µg/L	279.76 ppb	02:00:25
3	Zn 213.857†	14555.9	13775.0	314.95 µg/L	314.95 ppb	02:00:25

Mean Data: 245998008|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2003346.0	102.05 %	0.283			0.28%
Sc RADIAL	58388.9	103 %	0.7			0.63%
Y 371.029	1421820.2	105.11 %	0.379			0.36%
Ag 328.068†	-1633.3	-1.5122 µg/L	0.43819	-1.5122 ppb	0.43819	28.98%
Al 396.153Radial†	168503.5	117220 µg/L	413.6	117220 ppb	413.6	0.35%
As 188.979†	15.4	34.420 µg/L	3.1552	34.420 ppb	3.1552	9.17%
B 249.677†	961.7	-33.381 µg/L	1.0517	-33.381 ppb	1.0517	3.15%
Ba 233.527†	81392.3	1954.5 µg/L	48.26	1954.5 ppb	48.26	2.47%
Be 313.107†	24594.0	12.317 µg/L	0.3787	12.317 ppb	0.3787	3.07%
Ca 317.933Radial†	27413.7	23416 µg/L	217.1	23416 ppb	217.1	0.93%
Cd 226.502†	545.6	-2.0708 µg/L	0.85990	-2.0708 ppb	0.85990	41.53%
Co 228.616†	1586.3	59.353 µg/L	3.7372	59.353 ppb	3.7372	6.30%
Cr 267.716†	6030.6	121.30 µg/L	4.141	121.30 ppb	4.141	3.41%
Cu 324.752†	10730.4	89.428 µg/L	1.9043	89.428 ppb	1.9043	2.13%
Fe 238.204 Radial†	17682.8	139460 µg/L	1029.1	139460 ppb	1029.1	0.74%
K 766.490 Radial†	27975.5	18271 µg/L	17.9	18271 ppb	17.9	0.10%
Mg 279.077 IEC†	2233.5	19816 µg/L	128.0	19816 ppb	128.0	0.65%
Mn 257.610†	1319747.1	4150.6 µg/L	82.39	4150.6 ppb	82.39	1.98%
Mo 202.031†	-10.0	4.3183 µg/L	0.57998	4.3183 ppb	0.57998	13.43%
Na 589.592 Radial†	2071.8	636.33 µg/L	3.766	636.33 ppb	3.766	0.59%

Ni 231.604†	1639.5	83.458 µg/L	4.4893	83.458 ppb	4.4893	5.38%
P 214.914†	831.9	1559.8 µg/L	89.79	1559.8 ppb	89.79	5.76%
Pb 220.353†	692.1	169.28 µg/L	6.756	169.28 ppb	6.756	3.99%
S 181.975 Axial†	257.5	1067.7 µg/L	31.89	1067.7 ppb	31.89	2.99%
Sb 206.836†	8.2	4.1097 µg/L	3.44921	4.1097 ppb	3.44921	83.93%
Se 196.026†	-72.7	254.89 µg/L	8.787	254.89 ppb	8.787	3.45%
SiO2†	308953.7	60983 µg/L	918.1	60983 ppb	918.1	1.51%
Si 251.611†	371838.4	28268 µg/L	411.4	28268 ppb	411.4	1.46%
Sn 189.927†	-45.5	-31.849 µg/L	0.8077	-31.849 ppb	0.8077	2.54%
Sr 421.552†	29506.4	272.20 µg/L	0.739	272.20 ppb	0.739	0.27%
Ti 334.940†	2704110.1	5980.9 µg/L	141.77	5980.9 ppb	141.77	2.37%
Tl 190.801†	-57.0	21.896 µg/L	3.9093	21.896 ppb	3.9093	17.85%
U 409.014†	-153.2	-33.543 µg/L	4.5409	-33.543 ppb	4.5409	13.54%
V 292.402†	27998.3	289.52 µg/L	8.463	289.52 ppb	8.463	2.92%
Zn 213.857†	14170.7	324.24 µg/L	8.062	324.24 ppb	8.062	2.49%

Sequence No.: 17

Sample ID: 245998009|948776|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 215

Date Collected: 2/20/2010 02:00:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245998009|948776|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58644.6	58644.6	104 %		02:01:27
1	Al 396.153Radial†	123712.6	119171.8	82902 µg/L	82902 ppb	02:01:27
1	Ca 317.933Radial†	21399.6	20404.2	17429 µg/L	17429 ppb	02:01:47
1	Fe 238.204 Radial†	14197.6	13660.7	107740 µg/L	107740 ppb	02:01:47
1	K 766.490 Radial†	23435.8	22412.0	14638 µg/L	14638 ppb	02:01:27
1	Mg 279.077 IEC†	1739.7	1663.2	14752 µg/L	14752 ppb	02:01:47
1	Na 589.592 Radial†	2187.6	1635.2	502.24 µg/L	502.24 ppb	02:01:47
1	Sr 421.552†	23025.0	22152.4	204.36 µg/L	204.36 ppb	02:01:27
1	Sc 361.383	1997001.7	1997001.7	101.73 %		02:02:52
1	Y 371.029	1405251.9	1405251.9	103.88 %		02:02:52
1	Ag 328.068†	-1726.8	-1295.9	-1.3737 µg/L	-1.3737 ppb	02:02:57
1	As 188.979†	20.8	20.9	42.874 µg/L	42.874 ppb	02:03:18
1	B 249.677†	1147.1	743.5	-25.704 µg/L	-25.704 ppb	02:02:57
1	Ba 233.527†	60588.6	59577.7	1430.7 µg/L	1430.7 ppb	02:02:57
1	Be 313.107†	16054.5	18637.8	9.3412 µg/L	9.3412 ppb	02:02:57
1	Cd 226.502†	319.7	456.0	-0.7222 µg/L	-0.7222 ppb	02:03:18
1	Co 228.616†	1394.7	1369.1	52.581 µg/L	52.581 ppb	02:03:18
1	Cr 267.716†	6697.8	6634.5	133.39 µg/L	133.39 ppb	02:02:57
1	Cu 324.752†	16977.7	14145.9	107.31 µg/L	107.31 ppb	02:02:57
1	Mn 257.610†	1113162.8	1094532.5	3441.3 µg/L	3441.3 ppb	02:02:52
1	Mo 202.031†	-10.9	-5.4	3.5680 µg/L	3.5680 ppb	02:03:18
1	Ni 231.604†	1961.2	1615.6	81.863 µg/L	81.863 ppb	02:03:18
1	P 214.914†	742.9	715.0	1342.0 µg/L	1342.0 ppb	02:03:18
1	Pb 220.353†	614.6	513.3	125.08 µg/L	125.08 ppb	02:03:18
1	S 181.975 Axial†	225.8	203.0	841.96 µg/L	841.96 ppb	02:03:18
1	Sb 206.836†	30.1	7.1	3.5173 µg/L	3.5173 ppb	02:03:18
1	Se 196.026†	-37.5	-56.2	197.55 µg/L	197.55 ppb	02:03:18
1	SiO2†	299265.8	292796.8	57794 µg/L	57794 ppb	02:02:52
1	Si 251.611†	358743.5	352346.3	26786 µg/L	26786 ppb	02:02:52
1	Sn 189.927†	-35.4	-35.2	-24.670 µg/L	-24.670 ppb	02:03:18
1	Ti 334.940†	2076524.1	2041118.0	4514.5 µg/L	4514.5 ppb	02:02:52
1	Tl 190.801†	-65.2	-41.7	19.323 µg/L	19.323 ppb	02:03:18
1	U 409.014†	-89.2	-10.6	-16.916 µg/L	-16.916 ppb	02:02:57
1	V 292.402†	22707.6	22367.1	230.96 µg/L	230.96 ppb	02:02:57
1	Zn 213.857†	10702.6	9986.6	227.84 µg/L	227.84 ppb	02:02:57
2	Sc RADIAL	57971.3	57971.3	103 %		02:01:53
2	Al 396.153Radial†	123249.5	120104.8	83551 µg/L	83551 ppb	02:01:53
2	Ca 317.933Radial†	21373.5	20618.2	17612 µg/L	17612 ppb	02:02:13
2	Fe 238.204 Radial†	14173.8	13796.5	108810 µg/L	108810 ppb	02:02:13
2	K 766.490 Radial†	23344.7	22585.4	14751 µg/L	14751 ppb	02:01:53
2	Mg 279.077 IEC†	1739.3	1682.2	14921 µg/L	14921 ppb	02:02:13
2	Na 589.592 Radial†	2180.2	1652.5	507.56 µg/L	507.56 ppb	02:02:13
2	Sr 421.552†	22837.3	22227.2	205.05 µg/L	205.05 ppb	02:01:53
2	Sc 361.383	2006427.8	2006427.8	102.21 %		02:03:25
2	Y 371.029	1410540.8	1410540.8	104.27 %		02:03:25
2	Ag 328.068†	-1746.8	-1307.4	-1.4097 µg/L	-1.4097 ppb	02:03:30
2	As 188.979†	9.6	9.8	23.045 µg/L	23.045 ppb	02:03:51
2	B 249.677†	1194.2	784.3	-24.600 µg/L	-24.600 ppb	02:03:30
2	Ba 233.527†	60025.7	58747.2	1410.7 µg/L	1410.7 ppb	02:03:30
2	Be 313.107†	15936.3	18448.0	9.2337 µg/L	9.2337 ppb	02:03:30
2	Cd 226.502†	308.5	443.5	-1.1545 µg/L	-1.1545 ppb	02:03:51
2	Co 228.616†	1393.0	1361.0	52.239 µg/L	52.239 ppb	02:03:51
2	Cr 267.716†	6698.9	6604.7	132.79 µg/L	132.79 ppb	02:03:30
2	Cu 324.752†	16832.9	13925.9	106.03 µg/L	106.03 ppb	02:03:30
2	Mn 257.610†	1112357.3	1088603.5	3422.9 µg/L	3422.9 ppb	02:03:25
2	Mo 202.031†	-12.5	-6.9	3.4631 µg/L	3.4631 ppb	02:03:51
2	Ni 231.604†	1957.1	1602.5	81.227 µg/L	81.227 ppb	02:03:51
2	P 214.914†	732.4	701.2	1314.2 µg/L	1314.2 ppb	02:03:51
2	Pb 220.353†	636.3	531.6	129.54 µg/L	129.54 ppb	02:03:51

2	S 181.975 Axial†	231.2	207.3	859.51 µg/L	859.51 ppb	02:03:51
2	Sb 206.836†	30.6	7.4	3.7695 µg/L	3.7695 ppb	02:03:51
2	Se 196.026†	-39.3	-57.7	198.06 µg/L	198.06 ppb	02:03:51
2	SiO2†	299971.0	292104.6	57658 µg/L	57658 ppb	02:03:25
2	Si 251.611†	359693.6	351619.1	26731 µg/L	26731 ppb	02:03:25
2	Sn 189.927†	-37.4	-37.0	-25.526 µg/L	-25.526 ppb	02:03:51
2	Ti 334.940†	2080214.9	2035139.2	4501.3 µg/L	4501.3 ppb	02:03:25
2	Tl 190.801†	-72.8	-48.9	10.044 µg/L	10.044 ppb	02:03:51
2	U 409.014†	-73.9	4.8	-15.803 µg/L	-15.803 ppb	02:03:30
2	V 292.402†	22529.3	22087.8	228.36 µg/L	228.36 ppb	02:03:30
2	Zn 213.857†	10651.5	9887.1	225.45 µg/L	225.45 ppb	02:03:30
3	Sc RADIAL	57589.7	57589.7	102 %		02:02:19
3	Al 396.153Radial†	123165.7	120818.5	84048 µg/L	84048 ppb	02:02:19
3	Ca 317.933Radial†	21602.6	20981.0	17921 µg/L	17921 ppb	02:02:39
3	Fe 238.204 Radial†	14343.5	14054.4	110850 µg/L	110850 ppb	02:02:39
3	K 766.490 Radial†	23309.8	22702.0	14827 µg/L	14827 ppb	02:02:19
3	Mg 279.077 IEC†	1755.1	1708.9	15157 µg/L	15157 ppb	02:02:39
3	Na 589.592 Radial†	2169.0	1655.6	508.52 µg/L	508.52 ppb	02:02:39
3	Sr 421.552†	22840.4	22377.7	206.44 µg/L	206.44 ppb	02:02:19
3	Sc 361.383	2005082.8	2005082.8	102.14 %		02:03:58
3	Y 371.029	1409201.7	1409201.7	104.17 %		02:03:58
3	Ag 328.068†	-1651.9	-1215.7	-0.6613 µg/L	-0.6613 ppb	02:04:04
3	As 188.979†	3.8	4.2	12.960 µg/L	12.960 ppb	02:04:24
3	B 249.677†	1149.2	741.0	-27.436 µg/L	-27.436 ppb	02:04:04
3	Ba 233.527†	57969.4	56773.3	1363.3 µg/L	1363.3 ppb	02:04:04
3	Be 313.107†	15144.7	17683.4	8.8324 µg/L	8.8324 ppb	02:04:04
3	Cd 226.502†	259.3	395.5	-2.5874 µg/L	-2.5874 ppb	02:04:24
3	Co 228.616†	1283.4	1254.6	47.710 µg/L	47.710 ppb	02:04:24
3	Cr 267.716†	6376.9	6293.9	126.54 µg/L	126.54 ppb	02:04:04
3	Cu 324.752†	16249.4	13365.5	102.65 µg/L	102.65 ppb	02:04:04
3	Mn 257.610†	1084601.0	1062158.2	3340.3 µg/L	3340.3 ppb	02:03:58
3	Mo 202.031†	-10.8	-5.2	3.6999 µg/L	3.6999 ppb	02:04:24
3	Ni 231.604†	1822.1	1471.6	74.733 µg/L	74.733 ppb	02:04:24
3	P 214.914†	680.9	651.3	1214.3 µg/L	1214.3 ppb	02:04:24
3	Pb 220.353†	589.7	486.4	118.51 µg/L	118.51 ppb	02:04:24
3	S 181.975 Axial†	213.0	189.6	786.46 µg/L	786.46 ppb	02:04:24
3	Sb 206.836†	32.0	8.8	5.1048 µg/L	5.1048 ppb	02:04:24
3	Se 196.026†	-43.4	-61.8	197.64 µg/L	197.64 ppb	02:04:24
3	SiO2†	294146.5	286598.9	56571 µg/L	56571 ppb	02:03:58
3	Si 251.611†	352668.6	344977.2	26226 µg/L	26226 ppb	02:03:58
3	Sn 189.927†	-28.2	-27.9	-21.898 µg/L	-21.898 ppb	02:04:24
3	Ti 334.940†	2015208.1	1972858.1	4363.5 µg/L	4363.5 ppb	02:03:58
3	Tl 190.801†	-63.5	-39.8	20.632 µg/L	20.632 ppb	02:04:24
3	U 409.014†	-50.3	27.9	-14.186 µg/L	-14.186 ppb	02:04:04
3	V 292.402†	21575.3	21168.5	219.63 µg/L	219.63 ppb	02:04:04
3	Zn 213.857†	10336.8	9586.1	218.31 µg/L	218.31 ppb	02:04:04

Mean Data: 245998009|948776|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2002837.4	102.02 %	0.260			0.25%
Sc RADIAL	58068.6	103 %	0.9			0.92%
Y 371.029	1408331.4	104.11 %	0.203			0.20%
Ag 328.068†	-1273.0	-1.1482 µg/L	0.42211	-1.1482 ppb	0.42211	36.76%
Al 396.153Radial†	120031.7	83500 µg/L	574.4	83500 ppb	574.4	0.69%
As 188.979†	11.6	26.293 µg/L	15.2194	26.293 ppb	15.2194	57.88%
B 249.677†	756.3	-25.913 µg/L	1.4299	-25.913 ppb	1.4299	5.52%
Ba 233.527†	58366.0	1401.6 µg/L	34.59	1401.6 ppb	34.59	2.47%
Be 313.107†	18256.4	9.1358 µg/L	0.26820	9.1358 ppb	0.26820	2.94%
Ca 317.933Radial†	20667.8	17654 µg/L	249.0	17654 ppb	249.0	1.41%
Cd 226.502†	431.7	-1.4881 µg/L	0.97629	-1.4881 ppb	0.97629	65.61%
Co 228.616†	1328.2	50.843 µg/L	2.7189	50.843 ppb	2.7189	5.35%
Cr 267.716†	6511.0	130.91 µg/L	3.793	130.91 ppb	3.793	2.90%
Cu 324.752†	13812.4	105.33 µg/L	2.408	105.33 ppb	2.408	2.29%
Fe 238.204 Radial†	13837.2	109130 µg/L	1577.1	109130 ppb	1577.1	1.45%
K 766.490 Radial†	22566.5	14739 µg/L	95.3	14739 ppb	95.3	0.65%
Mg 279.077 IEC†	1684.8	14943 µg/L	203.8	14943 ppb	203.8	1.36%
Mn 257.610†	1081764.7	3401.5 µg/L	53.78	3401.5 ppb	53.78	1.58%
Mo 202.031†	-5.8	3.5770 µg/L	0.11868	3.5770 ppb	0.11868	3.32%
Na 589.592 Radial†	1647.8	506.11 µg/L	3.382	506.11 ppb	3.382	0.67%

Ni 231.604†	1563.3	79.275 µg/L	3.9461	79.275 ppb	3.9461	4.98%
P 214.914†	689.2	1290.2 µg/L	67.12	1290.2 ppb	67.12	5.20%
Pb 220.353†	510.4	124.38 µg/L	5.549	124.38 ppb	5.549	4.46%
S 181.975 Axial†	200.0	829.31 µg/L	38.131	829.31 ppb	38.131	4.60%
Sb 206.836†	7.8	4.1305 µg/L	0.85311	4.1305 ppb	0.85311	20.65%
Se 196.026†	-58.6	197.75 µg/L	0.270	197.75 ppb	0.270	0.14%
SiO2†	290500.1	57341 µg/L	670.4	57341 ppb	670.4	1.17%
Si 251.611†	349647.5	26581 µg/L	308.7	26581 ppb	308.7	1.16%
Sn 189.927†	-33.4	-24.031 µg/L	1.8967	-24.031 ppb	1.8967	7.89%
Sr 421.552†	22252.4	205.28 µg/L	1.059	205.28 ppb	1.059	0.52%
Ti 334.940†	2016371.8	4459.8 µg/L	83.64	4459.8 ppb	83.64	1.88%
Tl 190.801†	-43.5	16.666 µg/L	5.7724	16.666 ppb	5.7724	34.63%
U 409.014†	7.4	-15.635 µg/L	1.3731	-15.635 ppb	1.3731	8.78%
V 292.402†	21874.5	226.31 µg/L	5.934	226.31 ppb	5.934	2.62%
Zn 213.857†	9820.0	223.86 µg/L	4.958	223.86 ppb	4.958	2.21%

Sequence No.: 21

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 02:15:30

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	58191.5	58191.5	103 %		02:16:09
1	Al 396.153Radial†	7258.5	7039.6	4886.5 µg/L	4886.5 ppb	02:16:09
1	Ca 317.933Radial†	6140.0	5749.8	4911.3 µg/L	4911.3 ppb	02:16:30
1	Fe 238.204 Radial†	671.6	635.5	5022.8 µg/L	5022.8 ppb	02:16:30
1	K 766.490 Radial†	7817.3	7424.5	4849.1 µg/L	4849.1 ppb	02:16:09
1	Mg 279.077 IEC†	585.2	555.3	4967.5 µg/L	4967.5 ppb	02:16:30
1	Na 589.592 Radial†	33349.1	31905.1	9799.4 µg/L	9799.4 ppb	02:16:09
1	Sr 421.552†	53529.5	51940.7	479.16 µg/L	479.16 ppb	02:16:09
1	Sc 361.383	2025495.0	2025495.0	103.18 %		02:17:34
1	Y 371.029	1393522.4	1393522.4	103.01 %		02:17:34
1	Ag 328.068†	68051.7	66357.7	495.15 µg/L	495.15 ppb	02:17:39
1	As 188.979†	294.2	285.6	510.95 µg/L	510.95 ppb	02:18:00
1	B 249.677†	12740.6	11964.1	485.82 µg/L	485.82 ppb	02:17:39
1	Ba 233.527†	21431.5	20788.6	499.97 µg/L	499.97 ppb	02:17:39
1	Be 313.107†	860224.1	836589.2	496.33 µg/L	496.33 ppb	02:17:34
1	Cd 226.502†	20683.9	20188.6	503.46 µg/L	503.46 ppb	02:17:39
1	Co 228.616†	11485.2	11129.6	503.47 µg/L	503.47 ppb	02:17:39
1	Cr 267.716†	25878.1	25131.6	505.09 µg/L	505.09 ppb	02:17:39
1	Cu 324.752†	80890.3	75855.5	495.84 µg/L	495.84 ppb	02:17:39
1	Mn 257.610†	166534.0	161661.6	506.71 µg/L	506.71 ppb	02:17:34
1	Mo 202.031†	5429.0	5267.2	515.99 µg/L	515.99 ppb	02:18:00
1	Ni 231.604†	10805.9	10160.8	505.98 µg/L	505.98 ppb	02:17:39
1	P 214.914†	1357.1	1300.0	2526.6 µg/L	2526.6 ppb	02:18:00
1	Pb 220.353†	2263.0	2102.4	511.26 µg/L	511.26 ppb	02:18:00
1	S 181.975 Axial†	272.8	245.5	1018.0 µg/L	1018.0 ppb	02:18:00
1	Sb 206.836†	595.8	554.9	511.72 µg/L	511.72 ppb	02:18:00
1	Se 196.026†	396.0	364.5	519.78 µg/L	519.78 ppb	02:18:00
1	SiO2†	29444.9	27146.6	5358.4 µg/L	5358.4 ppb	02:17:39
1	Si 251.611†	34240.6	32875.6	2499.3 µg/L	2499.3 ppb	02:17:39
1	Sn 189.927†	1272.4	1232.8	519.94 µg/L	519.94 ppb	02:18:00
1	Ti 334.940†	231319.8	224021.3	495.27 µg/L	495.27 ppb	02:17:34
1	Tl 190.801†	376.6	387.4	509.16 µg/L	509.16 ppb	02:18:00
1	U 409.014†	6214.7	6100.4	505.85 µg/L	505.85 ppb	02:17:39
1	V 292.402†	52685.7	51108.0	504.32 µg/L	504.32 ppb	02:17:39
1	Zn 213.857†	22801.0	21564.4	502.38 µg/L	502.38 ppb	02:17:39
2	Sc RADIAL	57525.9	57525.9	102 %		02:16:35
2	Al 396.153Radial†	7277.8	7140.1	4956.8 µg/L	4956.8 ppb	02:16:35
2	Ca 317.933Radial†	6126.2	5805.2	4958.7 µg/L	4958.7 ppb	02:16:56
2	Fe 238.204 Radial†	672.0	643.4	5085.2 µg/L	5085.2 ppb	02:16:56
2	K 766.490 Radial†	7755.8	7451.9	4867.0 µg/L	4867.0 ppb	02:16:35
2	Mg 279.077 IEC†	585.5	562.2	5028.2 µg/L	5028.2 ppb	02:16:56
2	Na 589.592 Radial†	33351.3	32281.8	9915.1 µg/L	9915.1 ppb	02:16:35
2	Sr 421.552†	53616.1	52627.1	485.49 µg/L	485.49 ppb	02:16:35
2	Sc 361.383	2033969.0	2033969.0	103.61 %		02:18:07
2	Y 371.029	1400420.2	1400420.2	103.52 %		02:18:07
2	Ag 328.068†	67959.2	65993.6	492.44 µg/L	492.44 ppb	02:18:12
2	As 188.979†	284.5	275.1	492.09 µg/L	492.09 ppb	02:18:33
2	B 249.677†	12757.5	11929.0	484.35 µg/L	484.35 ppb	02:18:12
2	Ba 233.527†	21433.3	20703.8	497.93 µg/L	497.93 ppb	02:18:12
2	Be 313.107†	861320.1	834173.5	494.90 µg/L	494.90 ppb	02:18:07
2	Cd 226.502†	20662.3	20084.3	500.85 µg/L	500.85 ppb	02:18:12
2	Co 228.616†	11498.8	11096.3	501.95 µg/L	501.95 ppb	02:18:12
2	Cr 267.716†	25809.5	24960.9	501.66 µg/L	501.66 ppb	02:18:12
2	Cu 324.752†	80678.2	75324.2	492.38 µg/L	492.38 ppb	02:18:12
2	Mn 257.610†	166428.8	160887.6	504.30 µg/L	504.30 ppb	02:18:07
2	Mo 202.031†	5249.7	5072.2	496.89 µg/L	496.89 ppb	02:18:33
2	Ni 231.604†	10769.8	10082.3	502.07 µg/L	502.07 ppb	02:18:12
2	P 214.914†	1313.2	1252.1	2431.7 µg/L	2431.7 ppb	02:18:33
2	Pb 220.353†	2202.4	2034.8	494.79 µg/L	494.79 ppb	02:18:33

2	S 181.975 Axial†	266.6	238.4	988.63 µg/L	988.63 ppb	02:18:33
2	Sb 206.836†	585.1	542.2	499.79 µg/L	499.79 ppb	02:18:33
2	Se 196.026†	381.2	348.6	497.62 µg/L	497.62 ppb	02:18:33
2	SiO2†	29426.7	27010.1	5331.4 µg/L	5331.4 ppb	02:18:12
2	Si 251.611†	34259.9	32755.9	2490.2 µg/L	2490.2 ppb	02:18:12
2	Sn 189.927†	1228.0	1184.9	499.71 µg/L	499.71 ppb	02:18:33
2	Ti 334.940†	231705.0	223459.0	494.02 µg/L	494.02 ppb	02:18:07
2	Tl 190.801†	373.9	383.2	503.72 µg/L	503.72 ppb	02:18:33
2	U 409.014†	6182.0	6043.8	501.14 µg/L	501.14 ppb	02:18:12
2	V 292.402†	52588.6	50801.6	501.18 µg/L	501.18 ppb	02:18:12
2	Zn 213.857†	22745.5	21418.8	498.98 µg/L	498.98 ppb	02:18:12
3	Sc RADIAL	58138.8	58138.8	103 %		02:17:01
3	Al 396.153Radial†	7248.0	7035.8	4886.2 µg/L	4886.2 ppb	02:17:01
3	Ca 317.933Radial†	6114.0	5729.9	4894.4 µg/L	4894.4 ppb	02:17:22
3	Fe 238.204 Radial†	673.1	637.5	5037.6 µg/L	5037.6 ppb	02:17:22
3	K 766.490 Radial†	7762.5	7378.1	4818.8 µg/L	4818.8 ppb	02:17:01
3	Mg 279.077 IEC†	580.3	551.1	4927.8 µg/L	4927.8 ppb	02:17:22
3	Na 589.592 Radial†	33225.8	31814.5	9771.6 µg/L	9771.6 ppb	02:17:01
3	Sr 421.552†	53434.2	51895.1	478.74 µg/L	478.74 ppb	02:17:01
3	Sc 361.383	2035150.5	2035150.5	103.67 %		02:18:40
3	Y 371.029	1400317.4	1400317.4	103.52 %		02:18:40
3	Ag 328.068†	62831.2	61009.0	455.07 µg/L	455.07 ppb	02:18:46
3	As 188.979†	237.9	229.9	411.33 µg/L	411.33 ppb	02:19:06
3	B 249.677†	11656.1	10859.4	440.65 µg/L	440.65 ppb	02:18:46
3	Ba 233.527†	18986.2	18331.2	440.85 µg/L	440.85 ppb	02:18:46
3	Be 313.107†	781601.2	756793.4	448.99 µg/L	448.99 ppb	02:18:40
3	Cd 226.502†	18258.6	17754.0	442.67 µg/L	442.67 ppb	02:18:46
3	Co 228.616†	10012.1	9655.8	436.73 µg/L	436.73 ppb	02:18:46
3	Cr 267.716†	21830.8	21108.5	424.24 µg/L	424.24 ppb	02:18:46
3	Cu 324.752†	71151.5	66089.5	432.10 µg/L	432.10 ppb	02:18:46
3	Mn 257.610†	151802.1	146685.3	459.82 µg/L	459.82 ppb	02:18:40
3	Mo 202.031†	4279.7	4133.6	404.98 µg/L	404.98 ppb	02:19:06
3	Ni 231.604†	9441.2	8794.7	437.96 µg/L	437.96 ppb	02:18:46
3	P 214.914†	1100.1	1045.9	2028.4 µg/L	2028.4 ppb	02:19:06
3	Pb 220.353†	1872.9	1715.6	417.12 µg/L	417.12 ppb	02:19:06
3	S 181.975 Axial†	229.9	202.8	841.16 µg/L	841.16 ppb	02:19:06
3	Sb 206.836†	490.6	450.8	415.21 µg/L	415.21 ppb	02:19:06
3	Se 196.026†	333.9	302.7	433.15 µg/L	433.15 ppb	02:19:06
3	SiO2†	26613.4	24279.9	4792.5 µg/L	4792.5 ppb	02:18:46
3	Si 251.611†	30927.8	29522.5	2244.4 µg/L	2244.4 ppb	02:18:46
3	Sn 189.927†	990.4	955.0	402.76 µg/L	402.76 ppb	02:19:06
3	Ti 334.940†	208593.4	201035.6	444.42 µg/L	444.42 ppb	02:18:40
3	Tl 190.801†	322.5	333.4	438.55 µg/L	438.55 ppb	02:19:06
3	U 409.014†	5231.2	5123.1	424.65 µg/L	424.65 ppb	02:18:46
3	V 292.402†	45492.3	43926.9	433.21 µg/L	433.21 ppb	02:18:46
3	Zn 213.857†	19973.8	18732.5	436.34 µg/L	436.34 ppb	02:18:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031538.2	103.49 %	0.268			0.26%
Sc RADIAL	57952.1	103 %	0.7			0.64%
Y 371.029	1398086.7	103.35 %	0.292			0.28%
Ag 328.068†	64453.4	480.89 µg/L	22.399	480.89 ppb	22.399	4.66%
QC value within limits for Ag 328.068 Recovery = 96.18%						
Al 396.153Radial†	7071.8	4909.8 µg/L	40.70	4909.8 ppb	40.70	0.83%
QC value within limits for Al 396.153Radial Recovery = 98.20%						
As 188.979†	263.5	471.46 µg/L	52.918	471.46 ppb	52.918	11.22%
QC value within limits for As 188.979 Recovery = 94.29%						
B 249.677†	11584.2	470.27 µg/L	25.661	470.27 ppb	25.661	5.46%
QC value within limits for B 249.677 Recovery = 94.05%						
Ba 233.527†	19941.2	479.59 µg/L	33.559	479.59 ppb	33.559	7.00%
QC value within limits for Ba 233.527 Recovery = 95.92%						
Be 313.107†	809185.4	480.07 µg/L	26.927	480.07 ppb	26.927	5.61%
QC value within limits for Be 313.107 Recovery = 96.01%						
Ca 317.933Radial†	5761.6	4921.5 µg/L	33.35	4921.5 ppb	33.35	0.68%
QC value within limits for Ca 317.933Radial Recovery = 98.43%						
Cd 226.502†	19342.3	482.33 µg/L	34.369	482.33 ppb	34.369	7.13%
QC value within limits for Cd 226.502 Recovery = 96.47%						
Co 228.616†	10627.2	480.71 µg/L	38.101	480.71 ppb	38.101	7.93%

QC value within limits for Co 228.616 Recovery = 96.14%							
Cr 267.716†	23733.6	476.99 µg/L	45.720	476.99 ppb	45.720	9.58%	
QC value within limits for Cr 267.716 Recovery = 95.40%							
Cu 324.752†	72423.1	473.44 µg/L	35.846	473.44 ppb	35.846	7.57%	
QC value within limits for Cu 324.752 Recovery = 94.69%							
Fe 238.204 Radial†	638.8	5048.5 µg/L	32.63	5048.5 ppb	32.63	0.65%	
QC value within limits for Fe 238.204 Radial Recovery = 100.97%							
K 766.490 Radial†	7418.2	4844.9 µg/L	24.37	4844.9 ppb	24.37	0.50%	
QC value within limits for K 766.490 Radial Recovery = 96.90%							
Mg 279.077 IEC†	556.2	4974.5 µg/L	50.53	4974.5 ppb	50.53	1.02%	
QC value within limits for Mg 279.077 IEC Recovery = 99.49%							
Mn 257.610†	156411.5	490.28 µg/L	26.404	490.28 ppb	26.404	5.39%	
QC value within limits for Mn 257.610 Recovery = 98.06%							
Mo 202.031†	4824.3	472.62 µg/L	59.353	472.62 ppb	59.353	12.56%	
QC value within limits for Mo 202.031 Recovery = 94.52%							
Na 589.592 Radial†	32000.5	9828.7 µg/L	76.12	9828.7 ppb	76.12	0.77%	
QC value within limits for Na 589.592 Radial Recovery = 98.29%							
Ni 231.604†	9679.3	482.00 µg/L	38.193	482.00 ppb	38.193	7.92%	
QC value within limits for Ni 231.604 Recovery = 96.40%							
P 214.914†	1199.3	2328.9 µg/L	264.54	2328.9 ppb	264.54	11.36%	
QC value within limits for P 214.914 Recovery = 93.16%							
Pb 220.353†	1950.9	474.39 µg/L	50.276	474.39 ppb	50.276	10.60%	
QC value within limits for Pb 220.353 Recovery = 94.88%							
S 181.975 Axial†	228.9	949.25 µg/L	94.750	949.25 ppb	94.750	9.98%	
QC value within limits for S 181.975 Axial Recovery = 94.93%							
Sb 206.836†	516.0	475.58 µg/L	52.614	475.58 ppb	52.614	11.06%	
QC value within limits for Sb 206.836 Recovery = 95.12%							
Se 196.026†	338.6	483.52 µg/L	45.006	483.52 ppb	45.006	9.31%	
QC value within limits for Se 196.026 Recovery = 96.70%							
SiO2†	26145.5	5160.8 µg/L	319.20	5160.8 ppb	319.20	6.19%	
QC value within limits for SiO2 Recovery = 96.51%							
Si 251.611†	31718.0	2411.3 µg/L	144.62	2411.3 ppb	144.62	6.00%	
QC value within limits for Si 251.611 Recovery = 96.45%							
Sn 189.927†	1124.2	474.14 µg/L	62.634	474.14 ppb	62.634	13.21%	
QC value within limits for Sn 189.927 Recovery = 94.83%							
Sr 421.552†	52154.3	481.13 µg/L	3.783	481.13 ppb	3.783	0.79%	
QC value within limits for Sr 421.552 Recovery = 96.23%							
Ti 334.940†	216172.0	477.91 µg/L	29.003	477.91 ppb	29.003	6.07%	
QC value within limits for Ti 334.940 Recovery = 95.58%							
Tl 190.801†	368.0	483.81 µg/L	39.291	483.81 ppb	39.291	8.12%	
QC value within limits for Tl 190.801 Recovery = 96.76%							
U 409.014†	5755.8	477.21 µg/L	45.578	477.21 ppb	45.578	9.55%	
QC value within limits for U 409.014 Recovery = 95.44%							
V 292.402†	48612.2	479.57 µg/L	40.178	479.57 ppb	40.178	8.38%	
QC value within limits for V 292.402 Recovery = 95.91%							
Zn 213.857†	20571.9	479.23 µg/L	37.184	479.23 ppb	37.184	7.76%	
QC value within limits for Zn 213.857 Recovery = 95.85%							

All analyte(s) passed QC.

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 02:19:15

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	57729.5	57729.5	102 %		02:19:48
1	Al 396.153Radial†	-17.4	-24.4	-17.001 µg/L	-17.001 ppb	02:19:48
1	Ca 317.933Radial†	191.9	-23.5	-20.043 µg/L	-20.043 ppb	02:20:08
1	Fe 238.204 Radial†	17.5	0.5	4.2213 µg/L	4.2213 ppb	02:20:08
1	K 766.490 Radial†	216.3	46.7	30.488 µg/L	30.488 ppb	02:19:48
1	Mg 279.077 IEC†	10.2	-2.8	-25.466 µg/L	-25.466 ppb	02:20:08
1	Na 589.592 Radial†	458.8	-23.2	-7.1181 µg/L	-7.1181 ppb	02:19:48
1	Sr 421.552†	41.6	11.9	0.1101 µg/L	0.1101 ppb	02:19:48
1	Sc 361.383	2012982.2	2012982.2	102.54 %		02:21:10
1	Y 371.029	1391221.6	1391221.6	102.84 %		02:21:10
1	Ag 328.068†	-376.4	34.5	0.2577 µg/L	0.2577 ppb	02:21:16
1	As 188.979†	0.9	1.3	2.4043 µg/L	2.4043 ppb	02:21:36
1	B 249.677†	358.4	-34.6	-1.4130 µg/L	-1.4130 ppb	02:21:36
1	Ba 233.527†	-13.7	3.8	0.0906 µg/L	0.0906 ppb	02:21:36
1	Be 313.107†	-2822.7	102.9	0.0610 µg/L	0.0610 ppb	02:21:16
1	Cd 226.502†	-143.6	1.7	0.0414 µg/L	0.0414 ppb	02:21:36
1	Co 228.616†	13.0	10.8	0.4870 µg/L	0.4870 ppb	02:21:36
1	Cr 267.716†	-60.0	-8.1	-0.1624 µg/L	-0.1624 ppb	02:21:16
1	Cu 324.752†	2581.5	-26.2	-0.1706 µg/L	-0.1706 ppb	02:21:16
1	Mn 257.610†	-191.2	69.6	0.2195 µg/L	0.2195 ppb	02:21:36
1	Mo 202.031†	-1.0	4.3	0.4238 µg/L	0.4238 ppb	02:21:36
1	Ni 231.604†	317.8	-2.4	-0.1193 µg/L	-0.1193 ppb	02:21:36
1	P 214.914†	18.9	3.1	6.0757 µg/L	6.0757 ppb	02:21:36
1	Pb 220.353†	86.2	-6.9	-1.6658 µg/L	-1.6658 ppb	02:21:36
1	S 181.975 Axial†	19.7	0.2	0.9452 µg/L	0.9452 ppb	02:21:36
1	Sb 206.836†	20.5	-2.5	-2.3172 µg/L	-2.3172 ppb	02:21:36
1	Se 196.026†	16.0	-3.7	-5.2215 µg/L	-5.2215 ppb	02:21:36
1	SiO2†	1492.0	63.5	12.534 µg/L	12.534 ppb	02:21:16
1	Si 251.611†	376.6	56.7	4.3078 µg/L	4.3078 ppb	02:21:36
1	Sn 189.927†	2.4	2.0	0.8365 µg/L	0.8365 ppb	02:21:36
1	Ti 334.940†	324.8	141.7	0.3151 µg/L	0.3151 ppb	02:21:16
1	Tl 190.801†	-19.9	3.0	3.8867 µg/L	3.8867 ppb	02:21:36
1	U 409.014†	-83.1	-4.0	-0.3304 µg/L	-0.3304 ppb	02:21:16
1	V 292.402†	-22.0	23.3	0.2303 µg/L	0.2303 ppb	02:21:16
1	Zn 213.857†	530.6	-16.9	-0.3954 µg/L	-0.3954 ppb	02:21:36
2	Sc RADIAL	57608.9	57608.9	102 %		02:20:14
2	Al 396.153Radial†	0.7	-6.7	-4.6630 µg/L	-4.6630 ppb	02:20:14
2	Ca 317.933Radial†	197.8	-17.3	-14.771 µg/L	-14.771 ppb	02:20:34
2	Fe 238.204 Radial†	16.4	-0.5	-4.1892 µg/L	-4.1892 ppb	02:20:34
2	K 766.490 Radial†	195.3	26.6	17.353 µg/L	17.353 ppb	02:20:14
2	Mg 279.077 IEC†	10.5	-2.5	-22.571 µg/L	-22.571 ppb	02:20:34
2	Na 589.592 Radial†	494.6	12.8	3.9451 µg/L	3.9451 ppb	02:20:14
2	Sr 421.552†	24.5	-4.7	-0.0437 µg/L	-0.0437 ppb	02:20:14
2	Sc 361.383	2039746.3	2039746.3	103.90 %		02:21:42
2	Y 371.029	1408964.2	1408964.2	104.16 %		02:21:42
2	Ag 328.068†	-401.8	14.9	0.1084 µg/L	0.1084 ppb	02:21:48
2	As 188.979†	-0.4	0.1	0.2035 µg/L	0.2035 ppb	02:22:08
2	B 249.677†	347.9	-49.3	-2.0073 µg/L	-2.0073 ppb	02:22:08
2	Ba 233.527†	-12.4	5.1	0.1221 µg/L	0.1221 ppb	02:22:08
2	Be 313.107†	-2753.3	205.8	0.1220 µg/L	0.1220 ppb	02:21:48
2	Cd 226.502†	-138.7	8.2	0.2052 µg/L	0.2052 ppb	02:22:08
2	Co 228.616†	10.5	8.2	0.3693 µg/L	0.3693 ppb	02:22:08
2	Cr 267.716†	-54.4	-2.0	-0.0396 µg/L	-0.0396 ppb	02:21:48
2	Cu 324.752†	2596.8	-44.5	-0.2909 µg/L	-0.2909 ppb	02:21:48
2	Mn 257.610†	-173.0	89.5	0.2807 µg/L	0.2807 ppb	02:22:08
2	Mo 202.031†	-1.2	4.2	0.4087 µg/L	0.4087 ppb	02:22:08
2	Ni 231.604†	312.3	-11.8	-0.5894 µg/L	-0.5894 ppb	02:22:08
2	P 214.914†	10.7	-5.1	-9.9877 µg/L	-9.9877 ppb	02:22:08
2	Pb 220.353†	88.9	-5.4	-1.3052 µg/L	-1.3052 ppb	02:22:08

2	S 181.975 Axial†	16.4	-3.2	-13.188 µg/L	-13.188 ppb	02:22:08
2	Sb 206.836†	18.9	-4.3	-3.9396 µg/L	-3.9396 ppb	02:22:08
2	Se 196.026†	15.1	-4.7	-6.6360 µg/L	-6.6360 ppb	02:22:08
2	SiO2†	1508.6	60.3	11.907 µg/L	11.907 ppb	02:21:48
2	Si 251.611†	367.0	42.6	3.2357 µg/L	3.2357 ppb	02:22:08
2	Sn 189.927†	0.9	0.5	0.1899 µg/L	0.1899 ppb	02:22:08
2	Ti 334.940†	306.0	119.5	0.2658 µg/L	0.2658 ppb	02:21:48
2	Tl 190.801†	-25.9	-2.5	-3.3006 µg/L	-3.3006 ppb	02:22:08
2	U 409.014†	-67.0	12.6	1.0522 µg/L	1.0522 ppb	02:21:48
2	V 292.402†	-80.4	-32.6	-0.3143 µg/L	-0.3143 ppb	02:21:48
2	Zn 213.857†	571.4	15.5	0.3686 µg/L	0.3686 ppb	02:22:08
3	Sc RADIAL	57056.8	57056.8	101 %		02:20:39
3	Al 396.153Radial†	10.1	2.7	1.8492 µg/L	1.8492 ppb	02:20:39
3	Ca 317.933Radial†	194.0	-19.2	-16.395 µg/L	-16.395 ppb	02:21:00
3	Fe 238.204 Radial†	18.0	1.2	9.8270 µg/L	9.8270 ppb	02:21:00
3	K 766.490 Radial†	183.0	16.2	10.602 µg/L	10.602 ppb	02:20:39
3	Mg 279.077 IEC†	7.4	-5.5	-49.112 µg/L	-49.112 ppb	02:21:00
3	Na 589.592 Radial†	427.2	-49.2	-15.115 µg/L	-15.115 ppb	02:20:39
3	Sr 421.552†	45.7	16.5	0.1520 µg/L	0.1520 ppb	02:20:39
3	Sc 361.383	2026055.5	2026055.5	103.21 %		02:22:14
3	Y 371.029	1399581.3	1399581.3	103.46 %		02:22:14
3	Ag 328.068†	-331.7	80.2	0.5939 µg/L	0.5939 ppb	02:22:20
3	As 188.979†	3.2	3.6	6.4530 µg/L	6.4530 ppb	02:22:41
3	B 249.677†	343.3	-51.5	-2.1037 µg/L	-2.1037 ppb	02:22:41
3	Ba 233.527†	-10.3	7.1	0.1709 µg/L	0.1709 ppb	02:22:41
3	Be 313.107†	-2694.2	245.2	0.1455 µg/L	0.1455 ppb	02:22:20
3	Cd 226.502†	-134.3	11.6	0.2871 µg/L	0.2871 ppb	02:22:41
3	Co 228.616†	-3.8	-5.6	-0.2528 µg/L	-0.2528 ppb	02:22:41
3	Cr 267.716†	-51.6	0.4	0.0084 µg/L	0.0084 ppb	02:22:20
3	Cu 324.752†	2562.7	-60.6	-0.3944 µg/L	-0.3944 ppb	02:22:20
3	Mn 257.610†	-154.6	106.3	0.3360 µg/L	0.3360 ppb	02:22:41
3	Mo 202.031†	-7.3	-1.7	-0.1657 µg/L	-0.1657 ppb	02:22:41
3	Ni 231.604†	302.2	-19.6	-0.9746 µg/L	-0.9746 ppb	02:22:41
3	P 214.914†	5.7	-9.8	-19.450 µg/L	-19.450 ppb	02:22:41
3	Pb 220.353†	86.4	-7.2	-1.7506 µg/L	-1.7506 ppb	02:22:41
3	S 181.975 Axial†	17.5	-2.0	-8.2198 µg/L	-8.2198 ppb	02:22:41
3	Sb 206.836†	25.0	1.7	1.5508 µg/L	1.5508 ppb	02:22:41
3	Se 196.026†	15.6	-4.2	-5.8230 µg/L	-5.8230 ppb	02:22:41
3	SiO2†	1484.7	47.0	9.2857 µg/L	9.2857 ppb	02:22:20
3	Si 251.611†	397.1	74.1	5.6334 µg/L	5.6334 ppb	02:22:41
3	Sn 189.927†	-1.7	-2.0	-0.8540 µg/L	-0.8540 ppb	02:22:41
3	Ti 334.940†	284.1	100.3	0.2254 µg/L	0.2254 ppb	02:22:20
3	Tl 190.801†	-25.2	-2.0	-2.5688 µg/L	-2.5688 ppb	02:22:41
3	U 409.014†	-12.8	64.7	5.3749 µg/L	5.3749 ppb	02:22:20
3	V 292.402†	-61.2	-14.6	-0.1365 µg/L	-0.1365 ppb	02:22:20
3	Zn 213.857†	539.8	-11.4	-0.2593 µg/L	-0.2593 ppb	02:22:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2026261.4	103.22 %	0.682			0.66%
Sc RADIAL	57465.1	102 %	0.6			0.62%
Y 371.029	1399922.4	103.49 %	0.656			0.63%
Ag 328.068†	43.2	0.3200 µg/L	0.24871	0.3200 ppb	0.24871	77.73%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-9.5	-6.6051 µg/L	9.57422	-6.6051 ppb	9.57422	144.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.7	3.0203 µg/L	3.16995	3.0203 ppb	3.16995	104.96%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-45.1	-1.8413 µg/L	0.37408	-1.8413 ppb	0.37408	20.32%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.3	0.1278 µg/L	0.04049	0.1278 ppb	0.04049	31.68%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	184.7	0.1095 µg/L	0.04361	0.1095 ppb	0.04361	39.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-20.0	-17.070 µg/L	2.7003	-17.070 ppb	2.7003	15.82%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	7.2	0.1779 µg/L	0.12511	0.1779 ppb	0.12511	70.33%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.4	0.2012 µg/L	0.39754	0.2012 ppb	0.39754	197.62%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	-3.2	-0.0645 µg/L	0.08809	-0.0645 ppb 0.08809 136.54%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	-43.8	-0.2853 µg/L	0.11199	-0.2853 ppb 0.11199 39.25%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	0.4	3.2864 µg/L	7.05469	3.2864 ppb 7.05469 214.66%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	29.8	19.481 µg/L	10.1120	19.481 ppb 10.1120 51.91%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	-3.6	-32.383 µg/L	14.5597	-32.383 ppb 14.5597 44.96%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	88.5	0.2787 µg/L	0.05831	0.2787 ppb 0.05831 20.92%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	2.3	0.2223 µg/L	0.33607	0.2223 ppb 0.33607 151.21%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	-19.8	-6.0959 µg/L	9.57098	-6.0959 ppb 9.57098 157.01%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	-11.3	-0.5611 µg/L	0.42835	-0.5611 ppb 0.42835 76.34%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	-3.9	-7.7874 µg/L	12.90433	-7.7874 ppb 12.90433 165.71%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	-6.5	-1.5739 µg/L	0.23649	-1.5739 ppb 0.23649 15.03%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	-1.6	-6.8209 µg/L	7.16966	-6.8209 ppb 7.16966 105.11%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	-1.7	-1.5686 µg/L	2.82072	-1.5686 ppb 2.82072 179.82%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	-4.2	-5.8935 µg/L	0.70989	-5.8935 ppb 0.70989 12.05%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	57.0	11.242 µg/L	1.7233	11.242 ppb 1.7233 15.33%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	57.8	4.3923 µg/L	1.20111	4.3923 ppb 1.20111 27.35%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	0.1	0.0575 µg/L	0.85300	0.0575 ppb 0.85300 >999.9%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	7.9	0.0728 µg/L	0.10305	0.0728 ppb 0.10305 141.61%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	120.5	0.2688 µg/L	0.04493	0.2688 ppb 0.04493 16.72%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	-0.5	-0.6609 µg/L	3.95533	-0.6609 ppb 3.95533 598.46%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	24.5	2.0322 µg/L	2.97621	2.0322 ppb 2.97621 146.45%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	-8.0	-0.0735 µg/L	0.27772	-0.0735 ppb 0.27772 377.95%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	-4.3	-0.0954 µg/L	0.40752	-0.0954 ppb 0.40752 427.38%
	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: Thursday, February 25, 2010 21:10:56

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1673

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	4426.7	4426.686	125.624	2.8
Mg	24.0	33968.1	33968.140	360.627	1.1
Co	58.9	55712.4	55712.441	767.844	1.4
Rh	102.9	102017.2	102017.216	1333.173	1.3
In	114.9	112334.6	112334.589	1361.480	1.2
Pb	208.0	82895.7	82895.659	1277.395	1.5
[> Ba	137.9	106971.7	106971.669	1685.235	1.6
[Ba++	69.0	2397.2	0.022	0.001	3.1
[> Ce	139.9	138161.7	138161.712	925.788	0.7
[CeO	155.9	2844.6	0.021	0.000	1.6
Bkgd	220.0	6.4	6.400	1.817	28.4

Current Optimization File Data

Current Value	Description
0.80	Nebulizer Gas Flow
4.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
25.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	5.3	4785.5
Co	59	11	6.0	51167.5
In	115	11	6.8	111813.5

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	582	2080	0.638
Be	9.0	9.0	2035	2080	0.652
Mg	24.0	24.0	5692	2124	0.597
Mg	25.0	25.1	5932	2080	0.693
Mg	26.0	26.1	6174	2120	0.666
Co	58.9	59.0	14165	2170	0.619
Rh	102.9	102.9	24868	2230	0.691
In	114.9	114.9	27795	2260	0.675
Ce	139.9	139.9	33858	2280	0.745
Pb	206.0	206.0	49960	2428	0.744
Pb	207.0	207.0	50135	2385	0.687
Pb	208.0	208.0	50463	2430	0.733
U	238.1	238.0	57717	2470	0.741

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, February 26, 2010 10:27:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\Blank.173

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		130	
Be	9		ug/L		9	
B	11		ug/L		452	
Na	23		ug/L		22018	
Mg	24		ug/L		5334	
Al	27		ug/L		10671	
P	31		ug/L		7716	
K	39		ug/L		425928	
Ca	43		ug/L		246	
> Sc	45		ug/L		1149928	
V	51		ug/L		10857	
Cr	52		ug/L		6558	
Cr	53		ug/L		117514	
Mn	55		ug/L		2287	
Fe	57		ug/L		5199	
Co	59		ug/L		124	
Ni	60		ug/L		76	
Cu	63		ug/L		150	
Cu	65		ug/L		93	
Zn	66		ug/L		224	
Zn	67		ug/L		16879	
Zn	68		ug/L		1074	
> Ge	74		ug/L		252899	
As	75		ug/L		131	
Se	77		ug/L		6736	
Se	82		ug/L		8	
Kr	83		ug/L		65	
Sr	88		ug/L		247	
Y	89		ug/L		65	
Ag	107		ug/L		49	
Cd	111		ug/L		10	
Cd	114		ug/L		32	
> In	115		ug/L		141594	
Sn	120		ug/L		417	
Sb	121		ug/L		304	
Sb	123		ug/L		240	
Ba	135		ug/L		33	
Ba	137		ug/L		64	
Ho	165		ug/L		5	
> Lu	175		ug/L		213942	
Tl	205		ug/L		240	
Pb	208		ug/L		1960	
Bi	209		ug/L		40	
U	238		ug/L		231	

Sample ID: Blank

Report Date/Time: Friday, February 26, 2010 10:30:27

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115				
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175				
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	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#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, February 26, 2010 10:33:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\Standard 1.174

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	0.156	14814	0.013
Be	9	10.000	ug/L	2.376	4221	0.004
B	11	20.000	ug/L	2.339	9031	0.008
Na	23	1000.000	ug/L	5.589	3502699	3.045
Mg	24	1000.000	ug/L	7.751	2831285	2.472
Al	27	1000.000	ug/L	2.568	4116671	3.592
P	31	1000.000	ug/L	0.679	224032	0.189
K	39	1000.000	ug/L	4.331	4607846	3.661
Ca	43	1000.000	ug/L	3.347	10597	0.009
> Sc	45		ug/L		1142990	1142989.871
V	51	10.000	ug/L	5.248	60087	0.043
Cr	52	10.000	ug/L	0.426	46927	0.035
Cr	53		ug/L		104482	-0.011
Mn	55	10.000	ug/L	0.730	62314	0.053
Fe	57	1000.000	ug/L	0.786	125849	0.106
Co	59	10.000	ug/L	0.287	46086	0.040
Ni	60	10.000	ug/L	1.286	9791	0.008
Cu	63		ug/L		23024	0.020
Cu	65	10.000	ug/L	0.630	11515	0.010
Zn	66	10.000	ug/L	1.132	7712	0.030
Zn	67		ug/L		14660	-0.009
Zn	68		ug/L		6423	0.021
> Ge	74		ug/L		252600	252599.645
As	75	10.000	ug/L	2.626	8194	0.032
Se	77		ug/L		6519	-0.001
Se	82	10.000	ug/L	3.286	735	0.003
Kr	83		ug/L		66	0.000
Sr	88	10.000	ug/L	1.667	94215	0.659
Y	89		ug/L		87	0.000
Ag	107	10.000	ug/L	0.995	35981	0.252
Cd	111	10.000	ug/L	0.280	8608	0.060
Cd	114		ug/L		19967	0.140
> In	115		ug/L		142587	142586.557
Sn	120	10.000	ug/L	1.276	36788	0.255
Sb	121	10.000	ug/L	0.867	31766	0.221
Sb	123		ug/L		25091	0.174
Ba	135		ug/L		9165	0.042
Ba	137	10.000	ug/L	0.823	16162	0.075
Ho	165		ug/L		8	0.000
> Lu	175		ug/L		215170	215170.444
Tl	205	10.000	ug/L	0.898	74269	0.344
Pb	208	10.000	ug/L	1.893	139984	0.642
Bi	209		ug/L		48	0.000
U	238	10.000	ug/L	2.523	147080	0.683

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>|	Sc	45					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
[	Zn	66					
|	Zn	67					
|	Zn	68					
>|	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>|	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>|	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	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#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, February 26, 2010 10:39:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\Standard 2.175

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.005	ug/L	2.658	132567	0.129
Be	9	100.004	ug/L	1.040	37937	0.037
B	11	200.075	ug/L	1.063	80389	0.078
Na	23	10001.512	ug/L	1.689	31713056	30.926
Mg	24	9998.277	ug/L	5.140	24898017	24.299
Al	27	9997.190	ug/L	8.022	35839900	34.932
P	31	9998.732	ug/L	0.700	1922513	1.869
K	39	10011.039	ug/L	16.812	42585151	41.196
Ca	43	9998.491	ug/L	1.540	91673	0.089
> Sc	45		ug/L		1025026	1025026.368
V	51	100.006	ug/L	0.834	454386	0.434
Cr	52	100.032	ug/L	0.530	380466	0.365
Cr	53		ug/L		138926	0.033
Mn	55	99.993	ug/L	0.644	536483	0.521
Fe	57	9996.000	ug/L	0.679	1044861	1.015
Co	59	99.983	ug/L	0.444	405255	0.395
Ni	60	99.990	ug/L	0.385	86361	0.084
Cu	63		ug/L		205029	0.200
Cu	65	100.000	ug/L	0.665	102564	0.100
Zn	66	99.948	ug/L	0.553	64369	0.282
Zn	67		ug/L		23719	0.037
Zn	68		ug/L		48046	0.207
> Ge	74		ug/L		227904	227904.129
As	75	100.014	ug/L	0.920	73901	0.324
Se	77		ug/L		11276	0.023
Se	82	99.995	ug/L	0.712	6531	0.029
Kr	83		ug/L		81	0.000
Sr	88	99.983	ug/L	0.570	832591	6.480
Y	89		ug/L		144	0.001
Ag	107	99.989	ug/L	0.535	320130	2.492
Cd	111	100.005	ug/L	0.937	77830	0.606
Cd	114		ug/L		180972	1.409
> In	115		ug/L		128441	128440.647
Sn	120	100.036	ug/L	0.313	340457	2.648
Sb	121	100.047	ug/L	1.106	297860	2.317
Sb	123		ug/L		232878	1.812
Ba	135		ug/L		86438	0.434
Ba	137	100.014	ug/L	0.606	151207	0.759
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		199132	199131.729
Tl	205	99.986	ug/L	0.945	675376	3.391
Pb	208	99.993	ug/L	0.532	1270146	6.369
Bi	209		ug/L		138	0.001
U	238	99.964	ug/L	1.177	1311717	6.586

Sample ID: Standard 2

Report Date/Time: Friday, February 26, 2010 10:42:12

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
|	Li		7					
|	Be		9					
|	B		11					
|	Na		23					
|	Mg		24					
|	Al		27					
|	P		31					
|	K		39					
|	Ca		43					
>	Sc		45					
|	V		51					
|	Cr		52					
|	Cr		53					
|	Mn		55					
|	Fe		57					
|	Co		59					
|	Ni		60					
|	Cu		63					
|	Cu		65					
|	Zn		66					
|	Zn		67					
|	Zn		68					
>	Ge		74					
|	As		75					
|	Se		77					
|	Se		82					
|	Kr		83					
|	Sr		88					
|	Y		89					
|	Ag		107					
|	Cd		111					
|	Cd		114					
>	In		115					
|	Sn		120					
|	Sb		121					
|	Sb		123					
|	Ba		135					
|	Ba		137					
|	Ho		165					
>	Lu		175					
|	Tl		205					
|	Pb		208					
|	Bi		209					
|	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#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, February 26, 2010 10:45:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 1.176

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.903	ug/L	1.508	71592	0.066
Be	9	50.285	ug/L	2.061	20229	0.019
B	11	101.160	ug/L	2.319	43314	0.039
Na	23	4750.927	ug/L	2.335	15987617	14.690
Mg	24	4872.676	ug/L	5.902	12875863	11.842
Al	27	4602.202	ug/L	4.384	17488342	16.081
P	31	4924.321	ug/L	0.188	1007746	0.920
K	39	4288.880	ug/L	4.180	19584733	17.649
Ca	43	4816.692	ug/L	0.144	46942	0.043
> Sc	45		ug/L		1086892	1086891.934
V	51	50.099	ug/L	1.527	246481	0.217
Cr	52	50.831	ug/L	1.512	208048	0.186
Cr	53		ug/L		123962	0.012
Mn	55	51.103	ug/L	1.629	291802	0.266
Fe	57	4893.822	ug/L	1.056	544915	0.497
Co	59	49.993	ug/L	0.867	214930	0.198
Ni	60	51.745	ug/L	0.586	47426	0.044
Cu	63		ug/L		109948	0.101
Cu	65	50.205	ug/L	1.298	54645	0.050
Zn	66	51.522	ug/L	0.645	35019	0.145
Zn	67		ug/L		18740	0.011
Zn	68		ug/L		26641	0.107
> Ge	74		ug/L		239822	239821.652
As	75	47.560	ug/L	0.340	37050	0.154
Se	77		ug/L		9413	0.013
Se	82	49.741	ug/L	0.958	3422	0.014
Kr	83		ug/L		92	0.000
Sr	88	52.094	ug/L	0.907	454554	3.376
Y	89		ug/L		118	0.000
Ag	107	51.300	ug/L	1.028	172099	1.279
Cd	111	50.036	ug/L	0.744	40803	0.303
Cd	114		ug/L		94770	0.704
> In	115		ug/L		134574	134574.271
Sn	120	53.045	ug/L	1.872	189326	1.404
Sb	121	53.077	ug/L	2.205	165689	1.229
Sb	123		ug/L		130110	0.965
Ba	135		ug/L		44968	0.218
Ba	137	50.935	ug/L	1.156	79704	0.387
Ho	165		ug/L		20	0.000
> Lu	175		ug/L		206020	206019.736
Tl	205	49.100	ug/L	2.087	343247	1.665
Pb	208	50.491	ug/L	0.952	664475	3.216
Bi	209		ug/L		160	0.001
U	238	53.646	ug/L	0.710	728335	3.534

Sample ID: QC Std 1

Report Date/Time: Friday, February 26, 2010 10:48:04

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dif	Duplicate	Rel. % Difference
|	Li	7		101.807								
|	Be	9		100.569								
|	B	11		101.160								
|	Na	23		95.019								
|	Mg	24		97.454								
|	Al	27		91.133								
|	P	31		98.486								
|	K	39		85.778								
|	Ca	43		96.334								
>	Sc	45									94.5	
|	V	51		100.197								
|	Cr	52		101.662								
|	Cr	53										
|	Mn	55		102.207								
|	Fe	57		97.876								
|	Co	59		99.985								
|	Ni	60		103.490								
|	Cu	63										
|	Cu	65		100.410								
|	Zn	66		103.043								
|	Zn	67										
|	Zn	68										
>	Ge	74									94.8	
|	As	75		95.119								
|	Se	77										
|	Se	82		99.482								
|	Kr	83										
|	Sr	88		104.187								
|	Y	89										
|	Ag	107		102.599								
|	Cd	111		100.071								
|	Cd	114										
>	In	115									95.0	
|	Sn	120		106.091								
|	Sb	121		106.154								
|	Sb	123										
|	Ba	135										
|	Ba	137		101.870								
|	Ho	165										
>	Lu	175									96.3	
|	Tl	205		98.199								
|	Pb	208		100.983								
|	Bi	209										
|	U	238		107.292								

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 QC Std 1 K 39ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, February 26, 2010 10:51:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 2.177

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.015	ug/L	85.181	165	0.000
Be	9	0.009	ug/L	20.736	14	0.000
B	11	3.172	ug/L	19.937	2014	0.001
Na	23	0.096	ug/L	1316.941	24021	0.000
Mg	24	1.534	ug/L	83.247	10337	0.004
Al	27	1.363	ug/L	62.937	17344	0.005
P	31	-1.750	ug/L	126.768	7892	-0.000
K	39	-4.123	ug/L	41.014	437262	-0.017
Ca	43	0.955	ug/L	331.188	275	0.000
> Sc	45		ug/L		1237026	1237025.967
V	51	0.183	ug/L	277.796	12656	0.001
Cr	52	0.427	ug/L	8.764	8985	0.002
Cr	53		ug/L		130670	0.003
Mn	55	-0.031	ug/L	20.041	2260	-0.000
Fe	57	-0.036	ug/L	2092.536	5588	-0.000
Co	59	0.006	ug/L	45.865	165	0.000
Ni	60	-0.002	ug/L	309.893	80	-0.000
Cu	63		ug/L		157	-0.000
Cu	65	0.004	ug/L	102.272	105	0.000
Zn	66	0.015	ug/L	80.514	248	0.000
Zn	67		ug/L		17012	-0.003
Zn	68		ug/L		1056	-0.000
> Ge	74		ug/L		267310	267309.764
As	75	0.750	ug/L	83.917	789	0.002
Se	77		ug/L		8720	0.006
Se	82	0.090	ug/L	59.946	15	0.000
Kr	83		ug/L		66	-0.000
Sr	88	0.003	ug/L	47.659	291	0.000
Y	89		ug/L		61	-0.000
Ag	107	0.010	ug/L	47.183	89	0.000
Cd	111	0.012	ug/L	9.225	22	0.000
Cd	114		ug/L		41	0.000
> In	115		ug/L		148573	148573.320
Sn	120	0.062	ug/L	26.017	680	0.002
Sb	121	0.514	ug/L	23.701	2086	0.012
Sb	123		ug/L		1585	0.009
Ba	135		ug/L		37	0.000
Ba	137	0.001	ug/L	865.040	68	0.000
Ho	165		ug/L		6	0.000
> Lu	175		ug/L		221868	221868.173
Tl	205	0.055	ug/L	28.167	663	0.002
Pb	208	-0.005	ug/L	54.839	1962	-0.000
Bi	209		ug/L		33	-0.000
U	238	0.008	ug/L	25.376	354	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	107.6			
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	105.7			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	104.9			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	103.7			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	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#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, February 26, 2010 10:57:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 3.178

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.819	ug/L	1.053	19066	0.015
Be	9	0.564	ug/L	2.393	268	0.000
B	11	17.114	ug/L	2.365	8761	0.007
Na	23	281.733	ug/L	12.574	1103794	0.871
Mg	24	16.493	ug/L	4.632	55441	0.040
Al	27	33.333	ug/L	13.062	155854	0.116
P	31	46.652	ug/L	3.549	19127	0.009
K	39	296.806	ug/L	8.435	1973189	1.221
Ca	43	226.798	ug/L	1.805	2774	0.002
> Sc	45		ug/L		1239547	1239547.307
V	51	11.162	ug/L	4.289	71734	0.048
Cr	52	10.998	ug/L	1.169	56876	0.040
Cr	53		ug/L		116562	-0.008
Mn	55	5.732	ug/L	1.477	39512	0.030
Fe	57	112.751	ug/L	0.854	19792	0.011
Co	59	1.130	ug/L	1.865	5670	0.004
Ni	60	2.230	ug/L	1.298	2409	0.002
Cu	63		ug/L		2989	0.002
Cu	65	1.145	ug/L	1.529	1519	0.001
Zn	66	12.123	ug/L	1.329	9417	0.034
Zn	67		ug/L		15333	-0.010
Zn	68		ug/L		7411	0.023
> Ge	74		ug/L		268794	268794.237
As	75	6.003	ug/L	5.412	5362	0.019
Se	77		ug/L		7465	0.001
Se	82	5.573	ug/L	1.283	437	0.002
Kr	83		ug/L		65	-0.000
Sr	88	11.876	ug/L	0.600	116493	0.770
Y	89		ug/L		51	-0.000
Ag	107	0.991	ug/L	0.420	3783	0.025
Cd	111	1.125	ug/L	3.629	1040	0.007
Cd	114		ug/L		2429	0.016
> In	115		ug/L		151000	151000.373
Sn	120	4.947	ug/L	1.143	20215	0.131
Sb	121	2.979	ug/L	2.996	10743	0.069
Sb	123		ug/L		8365	0.054
Ba	135		ug/L		2122	0.009
Ba	137	2.155	ug/L	3.477	3707	0.016
Ho	165		ug/L		6	0.000
> Lu	175		ug/L		222569	222569.435
Tl	205	1.098	ug/L	2.093	8536	0.037
Pb	208	2.220	ug/L	0.699	33509	0.141
Bi	209		ug/L		43	0.000
U	238	0.246	ug/L	3.370	3849	0.016

Sample ID: QC Std 3

Report Date/Time: Friday, February 26, 2010 10:59:54

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
|	Li	7	118.194				
|	Be	9	112.784				
|	B	11	114.094				
|	Na	23	112.693				
|	Mg	24	109.954				
|	Al	27	111.109				
|	P	31	93.305				
|	K	39	98.935				
|	Ca	43	113.399				
>	Sc	45		107.8			
|	V	51	111.618				
|	Cr	52	109.983				
|	Cr	53					
|	Mn	55	114.635				
|	Fe	57	112.751				
|	Co	59	112.964				
|	Ni	60	111.484				
|	Cu	63					
|	Cu	65	114.481				
|	Zn	66	121.230				
|	Zn	67					
|	Zn	68					
>	Ge	74		106.3			
|	As	75	120.053				
|	Se	77					
|	Se	82	111.468				
|	Kr	83					
|	Sr	88	118.764				
|	Y	89					
|	Ag	107	99.121				
|	Cd	111	112.464				
|	Cd	114					
>	In	115		106.6			
|	Sn	120	98.943				
|	Sb	121	99.287				
|	Sb	123					
|	Ba	135					
|	Ba	137	107.763				
|	Ho	165					
>	Lu	175		104.0			
|	Tl	205	109.801				
|	Pb	208	110.992				
|	Bi	209					
|	U	238	123.020				

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: Friday, February 26, 2010 11:03:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 4.179

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.135	ug/L	18.463	237	0.000
Be	9	0.105	ug/L	17.070	38	0.000
B	11	1.806	ug/L	8.785	903	0.001
Na	23	107225.659	ug/L	5.180	273000756	331.551
Mg	24	98519.606	ug/L	2.717	197109304	239.433
Al	27	103871.702	ug/L	0.394	298782389	362.942
P	31	100571.041	ug/L	0.624	15481154	18.799
K	39	90687.903	ug/L	0.947	307500275	373.183
Ca	43	95303.469	ug/L	0.604	700168	0.850
> Sc	45		ug/L		823185	823185.268
V	51	0.913	ug/L	13.937	11035	0.004
Cr	52	4.082	ug/L	0.590	16972	0.015
Cr	53		ug/L		77547	-0.008
Mn	55	5.808	ug/L	0.607	26570	0.030
Fe	57	95751.033	ug/L	1.203	8006277	9.721
Co	59	0.506	ug/L	3.561	1735	0.002
Ni	60	4.842	ug/L	0.727	3411	0.004
Cu	63		ug/L		4895	0.006
Cu	65	4.925	ug/L	2.567	4119	0.005
Zn	66	6.591	ug/L	3.680	3480	0.019
Zn	67		ug/L		11358	-0.003
Zn	68		ug/L		1354	0.003
> Ge	74		ug/L		178949	178949.349
As	75	0.801	ug/L	39.577	556	0.003
Se	77		ug/L		7422	0.015
Se	82	-3.021	ug/L	27.706	-149	-0.001
Kr	83		ug/L		240	0.001
Sr	88	2.971	ug/L	0.379	20700	0.193
Y	89		ug/L		325	0.003
Ag	107	0.162	ug/L	2.564	466	0.004
Cd	111	0.662	ug/L	17.558	435	0.004
Cd	114		ug/L		7328	0.069
> In	115		ug/L		106535	106535.408
Sn	120	0.234	ug/L	6.315	972	0.006
Sb	121	0.110	ug/L	16.732	500	0.003
Sb	123		ug/L		453	0.003
Ba	135		ug/L		596	0.003
Ba	137	0.733	ug/L	8.263	1026	0.006
Ho	165		ug/L		4042	0.023
> Lu	175		ug/L		174808	174808.474
Tl	205	0.009	ug/L	31.243	248	0.000
Pb	208	0.215	ug/L	2.394	3996	0.014
Bi	209		ug/L		1811	0.010
U	238	-0.014	ug/L	5.151	32	-0.001

Sample ID: QC Std 4

Report Date/Time: Friday, February 26, 2010 11:05:48

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23	107.226				
Mg	24	98.520				
Al	27	103.872				
P	31	100.571				
K	39	90.688				
Ca	43	95.303				
> Sc	45		71.6			
V	51					
Cr	52	123.697				
Cr	53					
Mn	55	100.141				
Fe	57	95.751				
Co	59	215.239				
Ni	60	146.292				
Cu	63					
Cu	65	147.442				
Zn	66	175.280				
Zn	67					
Zn	68					
> Ge	74		70.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	100.374				
Y	89					
Ag	107					
Cd	111	149.203				
Cd	114					
> In	115		75.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	91.912				
Ho	165					
> Lu	175		81.7			
Tl	205					
Pb	208	113.770				
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
Ge 74 Int Std for QC	Ge	74	
In 115 Int Std for QC	In	115	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, February 26, 2010 11:09:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 5.180

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	21.418	ug/L	0.283	23303	0.028
Be	9	20.657	ug/L	1.848	6417	0.008
B	11	20.453	ug/L	3.643	7021	0.008
Na	23	97300.327	ug/L	2.335	252362100	300.861
Mg	24	93896.306	ug/L	1.857	191403509	228.197
Al	27	93587.936	ug/L	0.253	274306359	327.009
P	31	89906.849	ug/L	1.166	14101523	16.806
K	39	83828.151	ug/L	5.452	289579024	344.955
Ca	43	89088.480	ug/L	1.571	666865	0.795
> Sc	45		ug/L		838803	838803.027
V	51	20.415	ug/L	1.600	82208	0.089
Cr	52	21.895	ug/L	1.055	71879	0.080
Cr	53		ug/L		80655	-0.006
Mn	55	25.281	ug/L	1.106	112244	0.132
Fe	57	89493.312	ug/L	0.781	7624479	9.086
Co	59	19.800	ug/L	0.221	65750	0.078
Ni	60	23.365	ug/L	1.332	16557	0.020
Cu	63		ug/L		35644	0.042
Cu	65	23.036	ug/L	0.331	19387	0.023
Zn	66	24.696	ug/L	0.562	12975	0.070
Zn	67		ug/L		12811	0.003
Zn	68		ug/L		8460	0.042
> Ge	74		ug/L		184167	184166.680
As	75	21.425	ug/L	4.304	12869	0.069
Se	77		ug/L		7275	0.013
Se	82	18.789	ug/L	0.617	996	0.005
Kr	83		ug/L		223	0.001
Sr	88	22.613	ug/L	1.274	161540	1.466
Y	89		ug/L		287	0.002
Ag	107	18.940	ug/L	1.078	52010	0.472
Cd	111	19.473	ug/L	1.671	12997	0.118
Cd	114		ug/L		36583	0.332
> In	115		ug/L		110092	110092.417
Sn	120	19.785	ug/L	0.824	57974	0.524
Sb	121	20.574	ug/L	0.616	52697	0.477
Sb	123		ug/L		40986	0.371
Ba	135		ug/L		15310	0.085
Ba	137	19.582	ug/L	1.034	26892	0.149
Ho	165		ug/L		3783	0.021
> Lu	175		ug/L		180591	180591.456
Tl	205	18.879	ug/L	0.883	115819	0.640
Pb	208	19.543	ug/L	0.734	226456	1.245
Bi	209		ug/L		1931	0.011
U	238	21.980	ug/L	0.807	261702	1.448

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	107.092				
Be	9	103.283				
B	11	102.265				
Na	23	97.300				
Mg	24	93.896				
Al	27	93.588				
P	31	89.907				
K	39	83.828				
Ca	43	89.088				
> Sc	45		72.9			
V	51	102.076				
Cr	52	93.969				
Cr	53					
Mn	55	97.989				
Fe	57	89.493				
Co	59	97.849				
Ni	60	102.928				
Cu	63					
Cu	65	98.697				
Zn	66	103.940				
Zn	67					
Zn	68					
> Ge	74		72.8			
As	75	107.127				
Se	77					
Se	82	93.946				
Kr	83					
Sr	88	98.490				
Y	89					
Ag	107	94.702				
Cd	111	95.253				
Cd	114					
> In	115		77.8			
Sn	120	98.923				
Sb	121	102.869				
Sb	123					
Ba	135					
Ba	137	94.152				
Ho	165					
> Lu	175		84.4			
Tl	205	94.393				
Pb	208	96.747				
Bi	209					
U	238	109.899				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	
In 115 Int Std for QC In		115	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 11:15:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.181

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.478	ug/L	0.886	76083	0.069
Be	9	50.851	ug/L	0.904	20695	0.019
B	11	98.892	ug/L	3.695	42848	0.039
Na	23	4985.107	ug/L	9.813	16970785	15.414
Mg	24	4781.731	ug/L	5.645	12784008	11.621
Al	27	5220.532	ug/L	2.325	20067066	18.241
P	31	4829.754	ug/L	2.180	1000060	0.903
K	39	4581.719	ug/L	4.079	21137317	18.854
Ca	43	4959.407	ug/L	0.774	48889	0.044
> Sc	45		ug/L		1099548	1099548.118
V	51	48.467	ug/L	1.245	241566	0.210
Cr	52	49.801	ug/L	0.351	206334	0.182
Cr	53		ug/L		117813	0.005
Mn	55	51.780	ug/L	1.013	299082	0.270
Fe	57	5020.129	ug/L	1.607	565369	0.510
Co	59	49.808	ug/L	1.274	216630	0.197
Ni	60	51.602	ug/L	1.874	47847	0.043
Cu	63		ug/L		110648	0.100
Cu	65	49.943	ug/L	0.312	54993	0.050
Zn	66	52.331	ug/L	1.402	36210	0.147
Zn	67		ug/L		17769	0.006
Zn	68		ug/L		26864	0.106
> Ge	74		ug/L		244170	244170.189
As	75	46.838	ug/L	1.876	37148	0.152
Se	77		ug/L		8954	0.010
Se	82	50.464	ug/L	0.800	3535	0.014
Kr	83		ug/L		62	-0.000
Sr	88	51.360	ug/L	1.600	464522	3.329
Y	89		ug/L		107	0.000
Ag	107	50.590	ug/L	1.479	175919	1.261
Cd	111	49.294	ug/L	1.706	41666	0.299
Cd	114		ug/L		97218	0.697
> In	115		ug/L		139482	139482.276
Sn	120	52.258	ug/L	1.006	193336	1.383
Sb	121	51.941	ug/L	1.296	168095	1.203
Sb	123		ug/L		131905	0.944
Ba	135		ug/L		45932	0.217
Ba	137	50.451	ug/L	0.795	81066	0.383
Ho	165		ug/L		24	0.000
> Lu	175		ug/L		211542	211542.223
Tl	205	47.810	ug/L	1.070	343231	1.621
Pb	208	50.125	ug/L	0.707	677343	3.193
Bi	209		ug/L		174	0.001
U	238	52.915	ug/L	0.740	737692	3.486

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	106.956				
Be	9	101.702				
B	11	98.892				
Na	23	99.702				
Mg	24	95.635				
Al	27	103.377				
P	31	96.595				
K	39	91.634				
Ca	43	99.188				
> Sc	45		95.6			
V	51	96.934				
Cr	52	99.602				
Cr	53					
Mn	55	103.561				
Fe	57	100.403				
Co	59	99.615				
Ni	60	103.205				
Cu	63					
Cu	65	99.885				
Zn	66	104.661				
Zn	67					
Zn	68					
> Ge	74		96.5			
As	75	93.676				
Se	77					
Se	82	100.929				
Kr	83					
Sr	88	102.720				
Y	89					
Ag	107	101.180				
Cd	111	98.589				
Cd	114					
> In	115		98.5			
Sn	120	104.516				
Sb	121	103.882				
Sb	123					
Ba	135					
Ba	137	100.901				
Ho	165					
> Lu	175		98.9			
Tl	205	95.620				
Pb	208	100.250				
Bi	209					
U	238	105.831				

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, February 26, 2010 11:21:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.182

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.101	ug/L	17.440	304	0.000
Be	9	0.009	ug/L	128.886	14	0.000
B	11	2.228	ug/L	21.187	1571	0.001
Na	23	4.538	ug/L	16.366	41393	0.014
Mg	24	2.066	ug/L	75.704	12006	0.005
Al	27	1.250	ug/L	21.814	17010	0.004
P	31	-1.063	ug/L	332.402	8113	-0.000
K	39	-0.043	ug/L	18157.358	461357	-0.000
Ca	43	1.845	ug/L	58.274	287	0.000
> Sc	45		ug/L		1247167	1247167.138
V	51	0.574	ug/L	58.224	14875	0.002
Cr	52	-0.004	ug/L	1813.122	7093	-0.000
Cr	53		ug/L		127620	0.000
Mn	55	-0.074	ug/L	9.088	2000	-0.000
Fe	57	-3.679	ug/L	11.415	5173	-0.000
Co	59	0.008	ug/L	74.453	172	0.000
Ni	60	0.003	ug/L	184.120	86	0.000
Cu	63		ug/L		323	0.000
Cu	65	0.009	ug/L	129.872	112	0.000
Zn	66	0.004	ug/L	904.113	242	0.000
Zn	67		ug/L		15931	-0.008
Zn	68		ug/L		1048	-0.000
> Ge	74		ug/L		269589	269588.675
As	75	0.286	ug/L	71.978	388	0.001
Se	77		ug/L		8682	0.006
Se	82	0.099	ug/L	213.548	16	0.000
Kr	83		ug/L		58	-0.000
Sr	88	0.000	ug/L	507.496	268	0.000
Y	89		ug/L		58	-0.000
Ag	107	0.009	ug/L	17.197	88	0.000
Cd	111	0.014	ug/L	102.444	24	0.000
Cd	114		ug/L		43	0.000
> In	115		ug/L		151055	151055.448
Sn	120	0.031	ug/L	36.793	569	0.001
Sb	121	0.309	ug/L	27.420	1409	0.007
Sb	123		ug/L		1088	0.006
Ba	135		ug/L		40	0.000
Ba	137	0.002	ug/L	125.570	72	0.000
Ho	165		ug/L		6	0.000
> Lu	175		ug/L		226451	226450.505
Tl	205	0.054	ug/L	22.926	671	0.002
Pb	208	-0.006	ug/L	30.997	1984	-0.000
Bi	209		ug/L		26	-0.000
U	238	0.008	ug/L	32.760	371	0.001

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 11:23:32

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
|	Sc	45	108.5			
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
|	Ge	74	106.6			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
|	In	115	106.7			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
|	Lu	175	105.8			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	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#6 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Friday, February 26, 2010 11:26:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 10.183

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	1057.731	ug/L	0.507	1151081	1.366
Be	9	1065.921	ug/L	0.432	332218	0.394
B	11	1.200	ug/L	4.668	725	0.000
Na	23	54166.644	ug/L	1.079	141114711	167.488
Mg	24	50918.373	ug/L	4.512	104260448	123.747
Al	27	53332.096	ug/L	6.466	156996246	186.350
P	31	23950.728	ug/L	0.692	3777008	4.477
K	39	49206.123	ug/L	1.964	170872917	202.484
Ca	43	49863.194	ug/L	0.781	374950	0.445
> Sc	45		ug/L		842409	842408.995
V	51	977.032	ug/L	0.674	3578618	4.239
Cr	52	970.910	ug/L	0.444	2993111	3.547
Cr	53		ug/L		448814	0.431
Mn	55	959.763	ug/L	0.553	4217726	5.005
Fe	57	48479.430	ug/L	0.694	4149839	4.922
Co	59	959.204	ug/L	0.339	3194547	3.792
Ni	60	970.853	ug/L	0.772	688677	0.817
Cu	63		ug/L		1517178	1.801
Cu	65	928.041	ug/L	0.362	781691	0.928
Zn	66	2318.207	ug/L	0.805	1214576	6.530
Zn	67		ug/L		220571	1.119
Zn	68		ug/L		891512	4.789
> Ge	74		ug/L		185978	185977.700
As	75	937.371	ug/L	0.595	564461	3.035
Se	77		ug/L		25826	0.112
Se	82	505.082	ug/L	1.130	26896	0.145
Kr	83		ug/L		136	0.000
Sr	88	942.604	ug/L	0.625	6683989	61.092
Y	89		ug/L		319	0.002
Ag	107	245.457	ug/L	0.376	669387	6.118
Cd	111	959.861	ug/L	1.027	636242	5.816
Cd	114		ug/L		1439406	13.157
> In	115		ug/L		109411	109410.527
Sn	120	973.189	ug/L	0.558	2818475	25.759
Sb	121	261.514	ug/L	1.084	662882	6.057
Sb	123		ug/L		522853	4.778
Ba	135		ug/L		727752	4.216
Ba	137	951.308	ug/L	1.211	1246345	7.220
Ho	165		ug/L		62	0.000
> Lu	175		ug/L		172623	172623.448
Tl	205	454.902	ug/L	0.064	2663208	15.427
Pb	208	4815.701	ug/L	1.214	52951392	306.751
Bi	209		ug/L		1372	0.008
U	238	5130.176	ug/L	1.000	58341974	337.988

Sample ID: QC Std 10

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	105.773				
Be	9	106.592				
B	11					
Na	23	108.333				
Mg	24	101.837				
Al	27	106.664				
P	31	95.803				
K	39	98.412				
Ca	43	99.726				
> Sc	45		73.3			
V	51	97.703				
Cr	52	97.091				
Cr	53					
Mn	55	95.976				
Fe	57	96.959				
Co	59	95.920				
Ni	60	97.085				
Cu	63					
Cu	65	92.804				
Zn	66	92.728				
Zn	67					
Zn	68					
> Ge	74		73.5			
As	75	93.737				
Se	77					
Se	82	101.016				
Kr	83					
Sr	88	94.260				
Y	89					
Ag	107	98.183				
Cd	111	95.986				
Cd	114					
> In	115		77.3			
Sn	120	97.319				
Sb	121	104.606				
Sb	123					
Ba	135					
Ba	137	95.131				
Ho	165					
> Lu	175		80.7			
Tl	205	90.980				
Pb	208	96.314				
Bi	209					
U	238	102.604				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits	Message
Sc 45 Int Std for QC	Sc	45		
Ge 74 Int Std for QC	Ge	74		
In 115 Int Std for QC	In	115		

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Friday, February 26, 2010 11:32:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 11.184

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.056	ug/L	1.635	72323	0.069
Be	9	51.704	ug/L	2.447	20161	0.019
B	11	97.936	ug/L	2.772	40657	0.038
Na	23	4844.509	ug/L	4.820	15796227	14.980
Mg	24	4662.352	ug/L	0.881	11943808	11.331
Al	27	4653.473	ug/L	0.647	17141416	16.260
P	31	4718.596	ug/L	0.099	936359	0.882
K	39	4748.653	ug/L	2.662	20982059	19.541
Ca	43	4858.033	ug/L	0.435	45894	0.043
> Sc	45		ug/L		1053600	1053600.078
V	51	49.538	ug/L	1.209	236367	0.215
Cr	52	50.036	ug/L	0.342	198619	0.183
Cr	53		ug/L		110792	0.003
Mn	55	51.801	ug/L	0.475	286704	0.270
Fe	57	4994.782	ug/L	0.889	538987	0.507
Co	59	50.549	ug/L	0.496	210656	0.200
Ni	60	52.314	ug/L	0.868	46475	0.044
Cu	63		ug/L		108174	0.103
Cu	65	51.280	ug/L	0.901	54100	0.051
Zn	66	55.012	ug/L	0.387	36417	0.155
Zn	67		ug/L		18733	0.013
Zn	68		ug/L		27018	0.111
> Ge	74		ug/L		233664	233663.818
As	75	49.131	ug/L	0.987	37287	0.159
Se	77		ug/L		7582	0.006
Se	82	51.680	ug/L	1.854	3464	0.015
Kr	83		ug/L		71	0.000
Sr	88	51.264	ug/L	1.647	453315	3.323
Y	89		ug/L		106	0.000
Ag	107	50.596	ug/L	1.210	172026	1.261
Cd	111	50.589	ug/L	1.960	41806	0.307
Cd	114		ug/L		98902	0.725
> In	115		ug/L		136381	136381.362
Sn	120	52.539	ug/L	1.489	190038	1.391
Sb	121	52.789	ug/L	2.159	167018	1.223
Sb	123		ug/L		130972	0.959
Ba	135		ug/L		44712	0.211
Ba	137	49.562	ug/L	1.483	79611	0.376
Ho	165		ug/L		25	0.000
> Lu	175		ug/L		211474	211474.204
Tl	205	48.957	ug/L	1.871	351313	1.660
Pb	208	53.801	ug/L	2.348	726664	3.427
Bi	209		ug/L		161	0.001
U	238	56.334	ug/L	0.692	785107	3.711

Sample ID: QC Std 11

Report Date/Time: Friday, February 26, 2010 11:35:17

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	106.112				
Be	9	103.408				
B	11	97.936				
Na	23	96.890				
Mg	24	93.247				
Al	27	92.148				
P	31	94.372				
K	39	94.973				
Ca	43	97.161				
> Sc	45		91.6			
V	51	99.075				
Cr	52	100.071				
Cr	53					
Mn	55	103.602				
Fe	57	99.896				
Co	59	101.097				
Ni	60	104.627				
Cu	63					
Cu	65	102.561				
Zn	66	110.025				
Zn	67					
Zn	68					
> Ge	74		92.4			
As	75	98.261				
Se	77					
Se	82	103.359				
Kr	83					
Sr	88	102.528				
Y	89					
Ag	107	101.192				
Cd	111	101.178				
Cd	114					
> In	115		96.3			
Sn	120	105.078				
Sb	121	105.578				
Sb	123					
Ba	135					
Ba	137	99.124				
Ho	165					
> Lu	175		98.8			
Tl	205	97.913				
Pb	208	107.601				
Bi	209					
U	238	112.669				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Zn	66	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Friday, February 26, 2010 11:38:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 12.185

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.165	ug/L	10.077	382	0.000
Be	9	0.041	ug/L	7.294	27	0.000
B	11	2.101	ug/L	19.811	1417	0.001
Na	23	3.287	ug/L	65.578	34376	0.010
Mg	24	1.968	ug/L	33.885	11004	0.005
Al	27	1.003	ug/L	122.670	15009	0.004
P	31	0.935	ug/L	59.898	8054	0.000
K	39	15.658	ug/L	64.617	508253	0.064
Ca	43	3.165	ug/L	92.700	283	0.000
> Sc	45		ug/L		1170119	1170119.298
V	51	0.316	ug/L	167.201	12663	0.001
Cr	52	-0.054	ug/L	24.764	6442	-0.000
Cr	53		ug/L		117167	-0.002
Mn	55	-0.076	ug/L	13.635	1865	-0.000
Fe	57	-5.693	ug/L	26.084	4612	-0.001
Co	59	0.034	ug/L	23.470	284	0.000
Ni	60	0.029	ug/L	31.200	106	0.000
Cu	63		ug/L		242	0.000
Cu	65	0.046	ug/L	7.600	149	0.000
Zn	66	0.027	ug/L	94.351	246	0.000
Zn	67		ug/L		16352	-0.003
Zn	68		ug/L		1133	0.000
> Ge	74		ug/L		255541	255541.205
As	75	0.561	ug/L	17.082	596	0.002
Se	77		ug/L		6988	0.001
Se	82	0.071	ug/L	273.281	13	0.000
Kr	83		ug/L		71	0.000
Sr	88	0.008	ug/L	25.214	329	0.001
Y	89		ug/L		50	-0.000
Ag	107	0.018	ug/L	33.686	115	0.000
Cd	111	0.017	ug/L	20.139	26	0.000
Cd	114		ug/L		57	0.000
> In	115		ug/L		145534	145533.832
Sn	120	0.240	ug/L	13.684	1353	0.006
Sb	121	0.442	ug/L	22.394	1801	0.010
Sb	123		ug/L		1404	0.008
Ba	135		ug/L		55	0.000
Ba	137	0.014	ug/L	61.289	89	0.000
Ho	165		ug/L		7	0.000
> Lu	175		ug/L		218695	218695.096
Tl	205	0.228	ug/L	14.651	1936	0.008
Pb	208	0.031	ug/L	32.789	2429	0.002
Bi	209		ug/L		35	-0.000
U	238	0.073	ug/L	16.815	1285	0.005

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		101.8			
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		101.0			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		102.8			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		102.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	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#6 - Summary Report

Sample ID: 1202032646

Sample Date/Time: Friday, February 26, 2010 11:44:38

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\1202032646.186

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.047	ug/L	10.840	204	0.000	
Be	9	0.028	ug/L	25.307	21	0.000	
B	11	0.514	ug/L	29.536	695	0.000	
Na	23	6.446	ug/L	27.704	45741	0.020	
Mg	24	7.802	ug/L	160.987	27724	0.019	
Al	27	3.381	ug/L	26.653	24688	0.012	
P	31	13.172	ug/L	11.440	10743	0.002	
K	39	2.649	ug/L	219.638	446555	0.011	
Ca	43	2.295	ug/L	88.244	275	0.000	
> Sc	45		ug/L		1171270	1171270.089	
V	51	-0.842	ug/L	33.266	6776	-0.004	
Cr	52	-0.463	ug/L	43.202	4696	-0.002	
Cr	53		ug/L		73614	-0.039	
Mn	55	0.234	ug/L	8.653	3761	0.001	
Fe	57	16.190	ug/L	1.361	7220	0.002	
Co	59	0.038	ug/L	24.538	302	0.000	
Ni	60	0.090	ug/L	6.709	166	0.000	
Cu	63		ug/L		386	0.000	
Cu	65	0.102	ug/L	10.158	214	0.000	
Zn	66	1.215	ug/L	3.648	1106	0.003	
Zn	67		ug/L		9824	-0.028	
Zn	68		ug/L		1430	0.001	
> Ge	74		ug/L		256922	256921.834	
As	75	0.182	ug/L	125.713	283	0.001	
Se	77		ug/L		4040	-0.011	
Se	82	-0.027	ug/L	1268.041	6	-0.000	
Kr	83		ug/L		61	-0.000	
Sr	88	0.025	ug/L	1.727	511	0.002	
Y	89		ug/L		96	0.000	
Ag	107	-0.001	ug/L	194.539	49	-0.000	
Cd	111	0.006	ug/L	62.234	16	0.000	
Cd	114		ug/L		28	-0.000	
> In	115		ug/L		150530	150530.088	
Sn	120	0.242	ug/L	12.163	1407	0.006	
Sb	121	0.026	ug/L	38.291	414	0.001	
Sb	123		ug/L		340	0.001	
Ba	135		ug/L		147	0.000	
Ba	137	0.106	ug/L	3.986	258	0.001	
Ho	165		ug/L		11	0.000	
> Lu	175		ug/L		234104	234104.279	
Tl	205	0.128	ug/L	5.573	1280	0.004	
Pb	208	0.069	ug/L	44.082	3172	0.004	
Bi	209		ug/L		71	0.000	
U	238	0.019	ug/L	10.637	540	0.001	

Sample ID: 1202032646

Report Date/Time: Friday, February 26, 2010 11:47:10

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		101.9			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		101.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		106.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		109.4			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: 1202032651

Sample Date/Time: Friday, February 26, 2010 11:50:35

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948782|40|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\1202032651.187

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	2.840 ug/L	0.962	4453	0.004
|	Be	9	20.165 ug/L	0.305	8793	0.007
|	B	11	37.513 ug/L	2.809	17690	0.015
|	Na	23	269.127 ug/L	9.646	1002135	0.832
|	Mg	24	982.084 ug/L	6.520	2815075	2.387
|	Al	27	3194.574 ug/L	5.166	13153134	11.162
|	P	31	189.314 ug/L	1.405	49564	0.035
|	K	39	1120.205 ug/L	11.796	5863776	4.610
|	Ca	43	2536.232 ug/L	1.403	26894	0.023
>	Sc	45	ug/L		1177439	1177438.589
|	V	51	27.365 ug/L	2.892	150875	0.119
|	Cr	52	58.280 ug/L	0.958	257415	0.213
|	Cr	53	ug/L		128672	0.007
|	Mn	55	139.774 ug/L	0.464	860536	0.729
|	Fe	57	4480.887 ug/L	0.755	540937	0.455
|	Co	59	23.986 ug/L	0.583	111776	0.095
|	Ni	60	35.485 ug/L	1.627	35255	0.030
|	Cu	63	ug/L		107717	0.091
[	Cu	65	44.736 ug/L	0.324	52758	0.045
|	Zn	66	158.833 ug/L	0.574	114541	0.447
|	Zn	67	ug/L		31145	0.055
|	Zn	68	ug/L		83085	0.321
>	Ge	74	ug/L		255491	255490.630
|	As	75	27.435 ug/L	2.911	22827	0.089
|	Se	77	ug/L		9804	0.012
|	Se	82	76.762 ug/L	1.688	5623	0.022
[	Kr	83	ug/L		78	0.000
|	Sr	88	59.790 ug/L	1.536	567534	3.875
|	Y	89	ug/L		30173	0.206
|	Ag	107	4.845 ug/L	1.559	17730	0.121
|	Cd	111	15.588 ug/L	2.634	13836	0.094
|	Cd	114	ug/L		33293	0.227
>	In	115	ug/L		146389	146388.836
|	Sn	120	7.471 ug/L	0.352	29377	0.198
|	Sb	121	12.461 ug/L	0.544	42563	0.289
[	Sb	123	ug/L		33202	0.225
|	Ba	135	ug/L		47145	0.218
|	Ba	137	50.351 ug/L	3.116	82530	0.382
|	Ho	165	ug/L		1546	0.007
>	Lu	175	ug/L		215901	215901.319
|	Tl	205	31.497 ug/L	2.104	230823	1.068
|	Pb	208	21.170 ug/L	0.929	293082	1.349
|	Bi	209	ug/L		2445	0.011
[	U	238	0.547 ug/L	1.746	8014	0.036

Sample ID: 1202032651

Report Date/Time: Friday, February 26, 2010 11:53:06

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		102.4			
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		101.0			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		103.4			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		100.9			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	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#6 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, February 26, 2010 11:56:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 8.188

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.971	ug/L	1.344	77175	0.071
Be	9	54.346	ug/L	0.974	21828	0.020
B	11	102.366	ug/L	2.511	43751	0.040
Na	23	4950.200	ug/L	3.700	16632575	15.306
Mg	24	4877.665	ug/L	5.156	12865056	11.854
Al	27	5195.440	ug/L	5.391	19714677	18.154
P	31	4910.355	ug/L	0.501	1003307	0.918
K	39	4322.655	ug/L	8.119	19695632	17.788
Ca	43	5002.269	ug/L	0.739	48662	0.045
> Sc	45		ug/L		1085153	1085153.371
V	51	50.458	ug/L	1.704	247789	0.219
Cr	52	51.444	ug/L	0.922	210152	0.188
Cr	53		ug/L		117726	0.006
Mn	55	53.459	ug/L	0.984	304659	0.279
Fe	57	5102.960	ug/L	1.581	567058	0.518
Co	59	51.969	ug/L	0.576	223070	0.205
Ni	60	53.345	ug/L	1.057	48810	0.045
Cu	63		ug/L		114652	0.106
Cu	65	52.117	ug/L	0.911	56629	0.052
Zn	66	55.931	ug/L	1.552	38065	0.158
Zn	67		ug/L		19248	0.013
Zn	68		ug/L		28191	0.113
> Ge	74		ug/L		240256	240255.694
As	75	50.810	ug/L	1.039	39647	0.164
Se	77		ug/L		8207	0.008
Se	82	53.255	ug/L	1.258	3671	0.015
Kr	83		ug/L		65	0.000
Sr	88	53.431	ug/L	2.051	474065	3.463
Y	89		ug/L		118	0.000
Ag	107	53.016	ug/L	1.278	180895	1.321
Cd	111	53.060	ug/L	1.206	44005	0.321
Cd	114		ug/L		102082	0.746
> In	115		ug/L		136858	136857.806
Sn	120	53.988	ug/L	1.133	195950	1.429
Sb	121	55.891	ug/L	2.046	177417	1.295
Sb	123		ug/L		140053	1.022
Ba	135		ug/L		47101	0.222
Ba	137	51.332	ug/L	0.603	82729	0.390
Ho	165		ug/L		19	0.000
> Lu	175		ug/L		212190	212190.081
Tl	205	49.796	ug/L	0.957	358552	1.689
Pb	208	51.179	ug/L	0.568	693666	3.260
Bi	209		ug/L		156	0.001
U	238	54.851	ug/L	0.667	766993	3.614

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
|	Li	7		109.942								
|	Be	9		108.692								
|	B	11		102.366								
|	Na	23		99.004								
|	Mg	24		97.553								
|	Al	27		102.880								
|	P	31		98.207								
|	K	39		86.453								
|	Ca	43		100.045								
>	Sc	45				94.4						
|	V	51		100.916								
|	Cr	52		102.888								
|	Cr	53										
|	Mn	55		106.918								
|	Fe	57		102.059								
|	Co	59		103.938								
|	Ni	60		106.691								
|	Cu	63										
|	Cu	65		104.234								
|	Zn	66		111.862								
|	Zn	67										
|	Zn	68										
>	Ge	74				95.0						
|	As	75		101.619								
|	Se	77										
|	Se	82		106.509								
|	Kr	83										
|	Sr	88		106.862								
|	Y	89										
|	Ag	107		106.032								
|	Cd	111		106.120								
|	Cd	114										
>	In	115				96.7						
|	Sn	120		107.977								
|	Sb	121		111.782								
|	Sb	123										
|	Ba	135										
|	Ba	137		102.664								
|	Ho	165										
>	Lu	175				99.2						
|	Tl	205		99.591								
|	Pb	208		102.357								
|	Bi	209										
|	U	238		109.701								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	K	39	CCV is out of limits (+/- 10%)
QC Std 8	Zn	66	CCV is out of limits (+/- 10%)
QC Std 8	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, February 26, 2010 12:02:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no tht\mozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 9.189

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.058	ug/L	14.775	226	0.000
Be	9	0.028	ug/L	21.777	22	0.000
B	11	2.305	ug/L	25.054	1548	0.001
Na	23	1.640	ug/L	60.507	29030	0.005
Mg	24	2.789	ug/L	56.512	13674	0.007
Al	27	1.325	ug/L	11.667	16676	0.005
P	31	-0.813	ug/L	136.929	7863	-0.000
K	39	10.650	ug/L	78.965	496514	0.044
Ca	43	0.887	ug/L	69.161	266	0.000
> Sc	45		ug/L		1199045	1199045.410
V	51	0.242	ug/L	133.062	12579	0.001
Cr	52	0.047	ug/L	18.190	7045	0.000
Cr	53		ug/L		121169	-0.001
Mn	55	-0.082	ug/L	4.625	1873	-0.000
Fe	57	-4.400	ug/L	3.442	4886	-0.000
Co	59	0.020	ug/L	3.940	224	0.000
Ni	60	0.015	ug/L	68.625	95	0.000
Cu	63		ug/L		197	0.000
Cu	65	0.025	ug/L	9.941	127	0.000
Zn	66	0.020	ug/L	96.295	244	0.000
Zn	67		ug/L		16427	-0.003
Zn	68		ug/L		1144	0.000
> Ge	74		ug/L		259290	259289.612
As	75	0.589	ug/L	27.475	628	0.002
Se	77		ug/L		7225	0.001
Se	82	1.439	ug/L	15.451	115	0.000
Kr	83		ug/L		65	-0.000
Sr	88	0.007	ug/L	26.761	321	0.000
Y	89		ug/L		45	-0.000
Ag	107	0.012	ug/L	45.498	96	0.000
Cd	111	0.026	ug/L	21.288	34	0.000
Cd	114		ug/L		57	0.000
> In	115		ug/L		146875	146875.038
Sn	120	0.103	ug/L	20.700	834	0.003
Sb	121	0.176	ug/L	38.194	915	0.004
Sb	123		ug/L		701	0.003
Ba	135		ug/L		46	0.000
Ba	137	0.009	ug/L	13.264	81	0.000
Ho	165		ug/L		7	0.000
> Lu	175		ug/L		221072	221071.719
Tl	205	0.141	ug/L	15.738	1303	0.005
Pb	208	0.030	ug/L	5.618	2443	0.002
Bi	209		ug/L		31	-0.000
U	238	0.030	ug/L	15.116	670	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		104.3			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		102.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		103.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.3			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: 245998001

Sample Date/Time: Friday, February 26, 2010 12:08:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782[2]rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998001.190

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	96.241	ug/L	0.763	123072	0.124
Be	9	6.294	ug/L	1.153	2311	0.002
B	11	22.512	ug/L	2.688	9067	0.009
Na	23	822.182	ug/L	5.995	2537883	2.542
Mg	24	16104.889	ug/L	1.393	38730249	39.140
Al	27	111823.779	ug/L	1.687	386546437	390.728
P	31	614.667	ug/L	2.255	120200	0.115
K	39	10060.763	ug/L	2.332	41343084	41.400
Ca	43	23873.898	ug/L	0.702	210904	0.213
> Sc	45		ug/L		989093	989093.470
V	51	142.959	ug/L	1.436	622468	0.620
Cr	52	69.588	ug/L	1.170	257023	0.254
Cr	53		ug/L		87445	-0.014
Mn	55	2270.809	ug/L	0.239	11714190	11.841
Fe	57	74515.106	ug/L	0.487	7485720	7.565
Co	59	35.712	ug/L	0.417	139766	0.141
Ni	60	50.011	ug/L	0.643	41718	0.042
Cu	63		ug/L		73527	0.074
Cu	65	38.662	ug/L	0.661	38307	0.039
Zn	66	161.739	ug/L	0.439	91546	0.456
Zn	67		ug/L		29252	0.079
Zn	68		ug/L		83148	0.411
> Ge	74		ug/L		200514	200513.537
As	75	13.548	ug/L	1.251	8897	0.044
Se	77		ug/L		3564	-0.009
Se	82	-2.717	ug/L	2.875	-149	-0.001
Kr	83		ug/L		393	0.002
Sr	88	213.861	ug/L	1.650	1700299	13.861
Y	89		ug/L		565455	4.611
Ag	107	0.655	ug/L	2.242	2044	0.016
Cd	111	2.110	ug/L	4.742	1575	0.013
Cd	114		ug/L		425	0.003
> In	115		ug/L		122622	122622.224
Sn	120	0.653	ug/L	3.456	2480	0.017
Sb	121	0.181	ug/L	7.886	778	0.004
Sb	123		ug/L		690	0.004
Ba	135		ug/L		1025277	5.065
Ba	137	1136.739	ug/L	0.384	1746355	8.627
Ho	165		ug/L		33178	0.164
> Lu	175		ug/L		202412	202412.482
Tl	205	1.323	ug/L	3.133	9303	0.045
Pb	208	76.911	ug/L	0.703	993398	4.899
Bi	209		ug/L		10513	0.052
U	238	4.845	ug/L	2.538	64814	0.319

Sample ID: 245998001

Report Date/Time: Friday, February 26, 2010 12:10:54

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		86.0			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		79.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		86.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		94.6			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

V 51 Upper, S, EEE V

Mn 55 Upper, S, EEE Mn

Fe 57 Upper, S, EEE Fe

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

51 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

57 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202032647

Sample Date/Time: Friday, February 26, 2010 12:14:19

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\1202032647.191

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	84.947	ug/L	0.993	99055	0.110
Be	9	5.408	ug/L	1.184	1811	0.002
B	11	20.428	ug/L	1.276	7540	0.008
Na	23	704.550	ug/L	5.979	1981017	2.179
Mg	24	14503.647	ug/L	6.278	31814133	35.248
Al	27	101334.499	ug/L	5.696	319237356	354.077
P	31	480.823	ug/L	0.657	87097	0.090
K	39	8229.532	ug/L	5.278	30874234	33.865
Ca	43	20689.825	ug/L	0.860	166665	0.185
> Sc	45		ug/L		901695	901695.266
V	51	113.713	ug/L	0.477	453293	0.493
Cr	52	65.153	ug/L	0.794	219783	0.238
Cr	53		ug/L		80558	-0.013
Mn	55	1102.466	ug/L	1.707	5184715	5.749
Fe	57	63116.483	ug/L	2.309	5781171	6.408
Co	59	26.687	ug/L	2.412	95213	0.106
Ni	60	44.709	ug/L	1.499	34000	0.038
Cu	63		ug/L		60017	0.066
Cu	65	34.882	ug/L	0.708	31517	0.035
Zn	66	140.357	ug/L	0.780	73850	0.395
Zn	67		ug/L		24369	0.064
Zn	68		ug/L		65955	0.350
> Ge	74		ug/L		186387	186387.067
As	75	9.665	ug/L	2.958	5930	0.031
Se	77		ug/L		3451	-0.008
Se	82	-2.670	ug/L	15.400	-137	-0.001
Kr	83		ug/L		325	0.001
Sr	88	184.313	ug/L	0.492	1368343	11.946
Y	89		ug/L		438073	3.825
Ag	107	0.549	ug/L	3.615	1607	0.014
Cd	111	1.923	ug/L	4.967	1343	0.012
Cd	114		ug/L		274	0.002
> In	115		ug/L		114535	114534.798
Sn	120	0.714	ug/L	3.018	2500	0.019
Sb	121	0.118	ug/L	7.299	560	0.003
Sb	123		ug/L		483	0.003
Ba	135		ug/L		754343	3.894
Ba	137	880.978	ug/L	0.877	1295232	6.686
Ho	165		ug/L		26332	0.136
> Lu	175		ug/L		193726	193725.899
Tl	205	1.133	ug/L	3.638	7660	0.038
Pb	208	56.221	ug/L	0.869	695481	3.581
Bi	209		ug/L		9300	0.048
U	238	4.578	ug/L	1.668	58627	0.302

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		78.4			
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		73.7			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		80.9			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		90.6			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
AI 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202032649

Sample Date/Time: Friday, February 26, 2010 12:20:15

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948782[2]rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\1202032649.192

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	169.818	ug/L	0.605	180908	0.219
Be	9	31.952	ug/L	0.790	9750	0.012
B	11	76.060	ug/L	3.910	24762	0.030
Na	23	2146.979	ug/L	4.768	5490008	6.639
Mg	24	24078.979	ug/L	1.368	48239909	58.519
Al	27	169016.459	ug/L	4.625	486548501	590.567
P	31	1670.039	ug/L	1.172	262811	0.312
K	39	14558.280	ug/L	3.850	49682676	59.908
Ca	43	32490.092	ug/L	0.243	239148	0.290
> Sc	45		ug/L		824350	824349.860
V	51	216.872	ug/L	0.517	783269	0.941
Cr	52	126.142	ug/L	0.306	384604	0.461
Cr	53		ug/L		93155	0.011
Mn	55	2483.359	ug/L	0.731	10675670	12.950
Fe	57	100525.396	ug/L	0.777	8416058	10.206
Co	59	76.361	ug/L	0.864	248939	0.302
Ni	60	92.022	ug/L	0.801	63920	0.077
Cu	63		ug/L		124407	0.151
Cu	65	76.826	ug/L	0.329	63388	0.077
Zn	66	246.304	ug/L	0.729	112811	0.694
Zn	67		ug/L		33837	0.142
Zn	68		ug/L		104894	0.642
> Ge	74		ug/L		162376	162375.642
As	75	50.647	ug/L	0.751	26705	0.164
Se	77		ug/L		3603	-0.004
Se	82	0.470	ug/L	194.081	28	0.000
Kr	83		ug/L		497	0.003
Sr	88	314.981	ug/L	0.298	2063780	20.415
Y	89		ug/L		626539	6.198
Ag	107	23.918	ug/L	0.705	60291	0.596
Cd	111	8.203	ug/L	3.952	5028	0.050
Cd	114		ug/L		7250	0.072
> In	115		ug/L		101082	101081.741
Sn	120	4.859	ug/L	1.268	13299	0.129
Sb	121	13.621	ug/L	1.418	32100	0.315
Sb	123		ug/L		25439	0.250
Ba	135		ug/L		1321510	7.416
Ba	137	1819.180	ug/L	0.514	2460117	13.807
Ho	165		ug/L		39990	0.224
> Lu	175		ug/L		178179	178178.605
Tl	205	49.216	ug/L	0.942	297559	1.669
Pb	208	201.971	ug/L	1.318	2293644	12.865
Bi	209		ug/L		13327	0.075
U	238	35.859	ug/L	1.608	421081	2.362

Sample ID: 1202032649

Report Date/Time: Friday, February 26, 2010 12:22:47

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		71.7			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		64.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		71.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		83.3			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEE	Al	27	Sample is out of limits (over linear range)
V 51 Upper, S, EEE	V	51	Sample is out of limits (over linear range)
Mn 55 Upper, S, EEE	Mn	55	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202032650

Sample Date/Time: Friday, February 26, 2010 12:26:12

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\1202032650.193

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	164.290 ug/L	0.179	173236	0.212
|	Be	9	30.786 ug/L	0.839	9300	0.011
|	B	11	74.023 ug/L	1.472	23874	0.029
|	Na	23	2064.004 ug/L	0.619	5222587	6.382
|	Mg	24	23467.132 ug/L	4.201	46510880	57.032
|	Al	27	171418.266 ug/L	0.385	488646446	598.959
|	P	31	1653.606 ug/L	1.149	257616	0.309
|	K	39	13970.010 ug/L	2.717	47198542	57.487
|	Ca	43	40897.265 ug/L	0.431	297855	0.365
>	Sc	45	ug/L		815842	815842.416
|	V	51	194.112 ug/L	0.036	694713	0.842
|	Cr	52	123.416 ug/L	0.460	372503	0.451
|	Cr	53	ug/L		92699	0.011
|	Mn	55	1393.347 ug/L	0.755	5928813	7.266
|	Fe	57	95267.878 ug/L	0.375	7894001	9.672
|	Co	59	54.057 ug/L	0.742	174426	0.214
|	Ni	60	88.304 ug/L	1.146	60706	0.074
|	Cu	63	ug/L		118575	0.145
|	Cu	65	74.333 ug/L	0.590	60700	0.074
[	Zn	66	241.370 ug/L	0.833	109492	0.680
|	Zn	67	ug/L		32400	0.135
|	Zn	68	ug/L		100234	0.619
>	Ge	74	ug/L		160821	160820.791
|	As	75	46.307 ug/L	0.889	24194	0.150
|	Se	77	ug/L		4055	-0.001
|	Se	82	0.462 ug/L	7.573	26	0.000
|	Kr	83	ug/L		488	0.003
[	Sr	88	306.043 ug/L	1.367	1995152	19.835
|	Y	89	ug/L		621659	6.180
|	Ag	107	22.683 ug/L	0.780	56901	0.565
|	Cd	111	7.980 ug/L	3.462	4869	0.048
|	Cd	114	ug/L		6807	0.067
>	In	115	ug/L		100594	100593.783
|	Sn	120	4.653 ug/L	1.012	12685	0.123
|	Sb	121	12.082 ug/L	1.225	28366	0.280
|	Sb	123	ug/L		22494	0.222
[	Ba	135	ug/L		1168769	6.617
|	Ba	137	1464.693 ug/L	0.690	1963484	11.116
|	Ho	165	ug/L		38455	0.218
>	Lu	175	ug/L		176635	176634.855
|	Tl	205	47.098 ug/L	1.840	282268	1.597
|	Pb	208	172.139 ug/L	0.891	1938242	10.965
|	Bi	209	ug/L		12824	0.072
|	U	238	34.922 ug/L	1.092	406557	2.301

Sample ID: 1202032650

Report Date/Time: Friday, February 26, 2010 12:28:44

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		70.9			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		63.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		71.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		82.6			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

V 51 Upper, S, EEE V

Mn 55 Upper, S, EEE Mn

Fe 57 Upper, S, EEE Fe

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

51 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

57 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 1202032650

Report Date/Time: Friday, February 26, 2010 12:28:44

ICPMS#6 - Summary Report

Sample ID: 1202032648

Sample Date/Time: Friday, February 26, 2010 12:32:09

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948782|10|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\1202032648.194

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	19.032	ug/L	0.830	21870	0.025
Be	9	1.277	ug/L	2.269	425	0.000
B	11	6.624	ug/L	4.773	2635	0.003
Na	23	187.414	ug/L	4.627	529995	0.579
Mg	24	3354.787	ug/L	10.098	7221398	8.153
Al	27	24570.649	ug/L	7.155	76050520	85.853
P	31	135.215	ug/L	2.235	28324	0.025
K	39	1924.968	ug/L	2.915	7341503	7.921
Ca	43	4964.570	ug/L	1.422	39413	0.044
> Sc	45		ug/L		885474	885473.867
V	51	30.616	ug/L	1.616	125967	0.133
Cr	52	14.680	ug/L	0.775	52542	0.054
Cr	53		ug/L		82500	-0.009
Mn	55	465.138	ug/L	1.994	2149417	2.426
Fe	57	15550.234	ug/L	1.069	1401863	1.579
Co	59	7.619	ug/L	1.660	26765	0.030
Ni	60	10.788	ug/L	1.388	8101	0.009
Cu	63		ug/L		14523	0.016
Cu	65	8.463	ug/L	2.048	7563	0.008
Zn	66	31.482	ug/L	1.560	17607	0.089
Zn	67		ug/L		14596	0.008
Zn	68		ug/L		16815	0.081
> Ge	74		ug/L		196592	196591.980
As	75	3.160	ug/L	12.701	2116	0.010
Se	77		ug/L		5151	-0.000
Se	82	-0.605	ug/L	33.039	-28	-0.000
Kr	83		ug/L		118	0.000
Sr	88	44.982	ug/L	1.745	341221	2.915
Y	89		ug/L		108852	0.930
Ag	107	0.139	ug/L	8.079	445	0.003
Cd	111	0.350	ug/L	13.558	256	0.002
Cd	114		ug/L		96	0.001
> In	115		ug/L		116977	116976.602
Sn	120	0.104	ug/L	4.115	666	0.003
Sb	121	0.005	ug/L	113.123	264	0.000
Sb	123		ug/L		211	0.000
Ba	135		ug/L		203801	1.067
Ba	137	246.095	ug/L	0.588	356649	1.868
Ho	165		ug/L		6223	0.033
> Lu	175		ug/L		190919	190918.511
Tl	205	0.387	ug/L	3.475	2722	0.013
Pb	208	15.586	ug/L	0.957	191291	0.993
Bi	209		ug/L		2070	0.011
U	238	0.953	ug/L	0.923	12194	0.063

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
|>	Sc	45	77.0			
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
|>	Ge	74	77.7			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
|>	In	115	82.6			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
|>	Lu	175	89.2			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	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#6 - Summary Report

Sample ID: 245998002

Sample Date/Time: Friday, February 26, 2010 12:38:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998002.195

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	66.232	ug/L	1.621	74879	0.086
Be	9	4.221	ug/L	1.732	1372	0.002
B	11	20.141	ug/L	4.994	7207	0.008
Na	23	403.727	ug/L	3.216	1107688	1.248
Mg	24	9701.402	ug/L	8.337	20621372	23.577
Al	27	74773.722	ug/L	3.528	228326389	261.270
P	31	758.965	ug/L	1.705	129858	0.142
K	39	9140.366	ug/L	8.959	33180930	37.613
Ca	43	9409.215	ug/L	0.809	73572	0.084
> Sc	45		ug/L		874245	874244.724
V	51	83.786	ug/L	1.900	325944	0.363
Cr	52	39.146	ug/L	1.346	129996	0.143
Cr	53		ug/L		63581	-0.029
Mn	55	1266.308	ug/L	1.280	5773403	6.603
Fe	57	43913.106	ug/L	1.465	3900503	4.458
Co	59	22.475	ug/L	0.887	77763	0.089
Ni	60	34.721	ug/L	1.176	25613	0.029
Cu	63		ug/L		65018	0.074
Cu	65	37.693	ug/L	0.610	33014	0.038
Zn	66	111.929	ug/L	0.339	58288	0.315
Zn	67		ug/L		20035	0.042
Zn	68		ug/L		52739	0.282
> Ge	74		ug/L		184342	184342.418
As	75	7.951	ug/L	2.212	4840	0.026
Se	77		ug/L		2886	-0.011
Se	82	-2.100	ug/L	29.119	-105	-0.001
Kr	83		ug/L		267	0.001
Sr	88	112.689	ug/L	0.656	838533	7.304
Y	89		ug/L		365374	3.183
Ag	107	0.546	ug/L	0.715	1601	0.014
Cd	111	1.813	ug/L	6.230	1269	0.011
Cd	114		ug/L		626	0.005
> In	115		ug/L		114783	114782.848
Sn	120	0.755	ug/L	3.132	2633	0.020
Sb	121	0.197	ug/L	4.482	770	0.005
Sb	123		ug/L		643	0.004
Ba	135		ug/L		611325	3.098
Ba	137	702.714	ug/L	0.889	1052360	5.333
Ho	165		ug/L		22079	0.112
> Lu	175		ug/L		197303	197302.850
Tl	205	0.867	ug/L	0.308	6021	0.029
Pb	208	57.601	ug/L	1.665	725654	3.669
Bi	209		ug/L		8166	0.041
U	238	34.162	ug/L	2.291	444223	2.251

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.0			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		72.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		81.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.2			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

Mn 55 Upper, S, EEE Mn

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 245998002

Report Date/Time: Friday, February 26, 2010 12:40:37

ICPMS#6 - Summary Report

Sample ID: 245998003

Sample Date/Time: Friday, February 26, 2010 12:44:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998003.196

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	95.550 ug/L	2.433	103242	0.123
|	Be	9	5.613 ug/L	2.752	1742	0.002
|	B	11	21.121 ug/L	3.176	7213	0.008
|	Na	23	896.056 ug/L	6.032	2333385	2.771
|	Mg	24	12342.947 ug/L	2.891	25070920	29.997
|	Al	27	109660.935 ug/L	0.886	320286329	383.170
|	P	31	562.671 ug/L	1.177	93517	0.105
|	K	39	9758.243 ug/L	6.934	33890682	40.155
|	Ca	43	14115.670 ug/L	1.166	105466	0.126
>	Sc	45	ug/L		835917	835916.998
|	V	51	98.420 ug/L	1.493	364763	0.427
|	Cr	52	46.958 ug/L	0.593	148185	0.172
|	Cr	53	ug/L		62767	-0.027
|	Mn	55	1082.007 ug/L	0.470	4718195	5.642
|	Fe	57	54797.229 ug/L	0.793	4653779	5.563
|	Co	59	20.977 ug/L	0.902	69408	0.083
|	Ni	60	38.355 ug/L	0.599	27049	0.032
|	Cu	63	ug/L		48960	0.058
|	Cu	65	30.849 ug/L	0.973	25851	0.031
|	Zn	66	117.092 ug/L	0.248	57680	0.330
|	Zn	67	ug/L		20544	0.051
|	Zn	68	ug/L		55254	0.313
>	Ge	74	ug/L		174410	174409.753
|	As	75	8.347 ug/L	2.919	4803	0.027
|	Se	77	ug/L		2942	-0.010
|	Se	82	-4.283 ug/L	12.732	-208	-0.001
|	Kr	83	ug/L		350	0.002
|	Sr	88	145.337 ug/L	1.254	1024214	9.420
|	Y	89	ug/L		385629	3.547
|	Ag	107	0.611 ug/L	1.937	1692	0.015
|	Cd	111	2.027 ug/L	7.660	1343	0.012
|	Cd	114	ug/L		278	0.002
>	In	115	ug/L		108727	108727.050
|	Sn	120	0.690 ug/L	2.268	2305	0.018
|	Sb	121	0.105 ug/L	10.624	497	0.002
|	Sb	123	ug/L		397	0.002
|	Ba	135	ug/L		776285	4.161
|	Ba	137	937.045 ug/L	0.189	1326862	7.112
|	Ho	165	ug/L		23145	0.124
>	Lu	175	ug/L		186562	186562.240
|	Tl	205	0.973 ug/L	0.827	6365	0.033
|	Pb	208	57.114 ug/L	0.183	680430	3.638
|	Bi	209	ug/L		9495	0.051
|	U	238	4.575 ug/L	1.558	56424	0.301

Sample ID: 245998003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			72.7		
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			69.0		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115			76.8		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			87.2		
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEEAl

Mn 55 Upper, S, EEE Mn

Fe 57 Upper, S, EEE Fe

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

57 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245998004

Sample Date/Time: Friday, February 26, 2010 12:49:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998004.197

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	66.352 ug/L	0.526	70782	0.086
|	Be	9	3.928 ug/L	2.349	1205	0.001
|	B	11	15.465 ug/L	1.340	5300	0.006
|	Na	23	448.206 ug/L	12.599	1157780	1.386
|	Mg	24	7902.768 ug/L	4.853	15844930	19.206
|	Al	27	66580.664 ug/L	5.838	191787174	232.642
|	P	31	645.640 ug/L	0.766	105066	0.121
|	K	39	7754.327 ug/L	5.930	26615719	31.909
|	Ca	43	6983.511 ug/L	0.436	51567	0.062
>	Sc	45	ug/L		824772	824771.792
|	V	51	71.575 ug/L	0.963	263859	0.311
|	Cr	52	32.504 ug/L	2.129	102633	0.119
|	Cr	53	ug/L		56009	-0.034
|	Mn	55	1035.140 ug/L	0.878	4453294	5.398
|	Fe	57	39323.951 ug/L	0.383	3296323	3.992
|	Co	59	18.151 ug/L	0.321	59271	0.072
|	Ni	60	30.190 ug/L	1.620	21018	0.025
|	Cu	63	ug/L		53316	0.065
|	Cu	65	33.152 ug/L	0.339	27405	0.033
[	Zn	66	115.563 ug/L	0.608	57572	0.326
|	Zn	67	ug/L		18574	0.039
|	Zn	68	ug/L		49766	0.278
>	Ge	74	ug/L		176374	176373.848
|	As	75	6.886 ug/L	4.748	4023	0.022
|	Se	77	ug/L		2621	-0.012
|	Se	82	-2.233 ug/L	9.914	-107	-0.001
[	Kr	83	ug/L		239	0.001
[	Sr	88	88.126 ug/L	1.080	628695	5.712
|	Y	89	ug/L		305333	2.774
|	Ag	107	0.485 ug/L	0.970	1369	0.012
|	Cd	111	1.713 ug/L	3.089	1150	0.010
|	Cd	114	ug/L		480	0.004
>	In	115	ug/L		110044	110043.784
|	Sn	120	0.811 ug/L	5.849	2687	0.021
|	Sb	121	0.119 ug/L	14.562	540	0.003
[	Sb	123	ug/L		477	0.003
[	Ba	135	ug/L		476239	2.472
|	Ba	137	561.424 ug/L	1.411	820978	4.261
|	Ho	165	ug/L		19034	0.099
>	Lu	175	ug/L		192672	192672.249
|	Tl	205	0.872 ug/L	0.708	5912	0.030
|	Pb	208	51.898 ug/L	0.298	638714	3.306
|	Bi	209	ug/L		7086	0.037
[	U	238	44.189 ug/L	0.344	561120	2.911

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		71.7			
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		69.7			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		77.7			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		90.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

Mn 55 Upper, S, EEE Mn

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, February 26, 2010 12:55:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 8.198

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.567	ug/L	1.990	60664	0.070
Be	9	53.323	ug/L	2.406	16959	0.020
B	11	106.266	ug/L	2.886	35971	0.041
Na	23	5282.678	ug/L	7.612	14065852	16.334
Mg	24	4681.771	ug/L	5.591	9777119	11.378
Al	27	5248.730	ug/L	5.521	15778298	18.340
P	31	5153.674	ug/L	0.707	833740	0.963
K	39	4453.969	ug/L	3.108	16072013	18.328
Ca	43	4896.501	ug/L	0.520	37730	0.044
> Sc	45		ug/L		859468	859468.125
V	51	52.106	ug/L	0.962	202372	0.226
Cr	52	52.891	ug/L	0.990	170981	0.193
Cr	53		ug/L		93602	0.007
Mn	55	52.965	ug/L	1.211	239055	0.276
Fe	57	5091.673	ug/L	1.447	448091	0.517
Co	59	52.091	ug/L	1.132	177066	0.206
Ni	60	54.308	ug/L	1.356	39351	0.046
Cu	63		ug/L		91879	0.107
Cu	65	52.570	ug/L	1.758	45235	0.053
Zn	66	52.286	ug/L	0.594	28445	0.147
Zn	67		ug/L		15165	0.012
Zn	68		ug/L		21249	0.106
> Ge	74		ug/L		191975	191975.273
As	75	50.273	ug/L	0.458	31344	0.163
Se	77		ug/L		6838	0.009
Se	82	53.423	ug/L	1.185	2942	0.015
Kr	83		ug/L		64	0.000
Sr	88	50.858	ug/L	1.986	382589	3.296
Y	89		ug/L		170	0.001
Ag	107	52.151	ug/L	1.384	150835	1.300
Cd	111	49.715	ug/L	3.557	34943	0.301
Cd	114		ug/L		82792	0.714
> In	115		ug/L		116022	116021.707
Sn	120	54.366	ug/L	0.572	167284	1.439
Sb	121	54.327	ug/L	2.518	146203	1.258
Sb	123		ug/L		115800	0.997
Ba	135		ug/L		41298	0.220
Ba	137	50.991	ug/L	0.880	72588	0.387
Ho	165		ug/L		24	0.000
> Lu	175		ug/L		187429	187429.458
Tl	205	51.274	ug/L	1.085	326096	1.739
Pb	208	52.315	ug/L	0.923	626265	3.332
Bi	209		ug/L		132	0.001
U	238	57.226	ug/L	1.240	706793	3.770

Sample ID: QC Std 8

Report Date/Time: Friday, February 26, 2010 12:58:25

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	109.133				
Be	9	106.646				
B	11	106.266				
Na	23	105.654				
Mg	24	93.635				
Al	27	103.935				
P	31	103.073				
K	39	89.079				
Ca	43	97.930				
> Sc	45		74.7			
V	51	104.213				
Cr	52	105.782				
Cr	53					
Mn	55	105.930				
Fe	57	101.833				
Co	59	104.182				
Ni	60	108.615				
Cu	63					
Cu	65	105.139				
Zn	66	104.571				
Zn	67					
Zn	68					
> Ge	74		75.9			
As	75	100.545				
Se	77					
Se	82	106.846				
Kr	83					
Sr	88	101.716				
Y	89					
Ag	107	104.302				
Cd	111	99.429				
Cd	114					
> In	115		81.9			
Sn	120	108.732				
Sb	121	108.654				
Sb	123					
Ba	135					
Ba	137	101.981				
Ho	165					
> Lu	175		87.6			
Tl	205	102.548				
Pb	208	104.630				
Bi	209					
U	238	114.451				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	K		39CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	
QC Std 8	U		238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, February 26, 2010 13:01:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 9.199

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.072	ug/L		13.671	207	0.000
Be	9	0.032	ug/L		20.805	20	0.000
B	11	2.318	ug/L		22.811	1301	0.001
Na	23	1.322	ug/L		119.220	23353	0.004
Mg	24	3.567	ug/L		34.388	13340	0.009
Al	27	3.052	ug/L		10.240	20014	0.011
P	31	2.084	ug/L		16.897	7125	0.000
K	39	2.530	ug/L		573.687	381770	0.010
Ca	43	0.528	ug/L		365.488	219	0.000
> Sc	45		ug/L			1003660	1003660.132
V	51	0.219	ug/L		221.467	10425	0.001
Cr	52	0.136	ug/L		4.477	6223	0.000
Cr	53		ug/L			100083	-0.002
Mn	55	0.080	ug/L		9.320	2413	0.000
Fe	57	1.809	ug/L		27.874	4722	0.000
Co	59	0.016	ug/L		12.348	172	0.000
Ni	60	0.039	ug/L		8.783	99	0.000
Cu	63		ug/L			151	0.000
Cu	65	-0.002	ug/L		1215.033	80	-0.000
Zn	66	-0.020	ug/L		164.407	182	-0.000
Zn	67		ug/L			14283	-0.002
Zn	68		ug/L			871	-0.000
> Ge	74		ug/L			219757	219757.091
As	75	0.712	ug/L		21.044	620	0.002
Se	77		ug/L			6266	0.002
Se	82	-0.074	ug/L		188.640	2	-0.000
Kr	83		ug/L			64	0.000
Sr	88	0.012	ug/L		38.367	331	0.001
Y	89		ug/L			70	0.000
Ag	107	0.011	ug/L		37.552	82	0.000
Cd	111	0.022	ug/L		74.111	27	0.000
Cd	114		ug/L			54	0.000
> In	115		ug/L			129697	129696.939
Sn	120	0.058	ug/L		21.446	580	0.002
Sb	121	0.219	ug/L		36.792	937	0.005
Sb	123		ug/L			747	0.004
Ba	135		ug/L			52	0.000
Ba	137	0.015	ug/L		66.949	83	0.000
Ho	165		ug/L			8	0.000
> Lu	175		ug/L			203367	203367.364
Tl	205	0.079	ug/L		25.082	771	0.003
Pb	208	0.046	ug/L		15.745	2454	0.003
Bi	209		ug/L			35	-0.000
U	238	0.034	ug/L		4.441	679	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		87.3			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		86.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		95.1			
Tl	205					
Pb	208					
Bi	209					
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#6 - Summary Report

Sample ID: 245998005

Sample Date/Time: Friday, February 26, 2010 13:07:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998005.200

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	115.472	ug/L	2.429	132167	0.149
Be	9	6.566	ug/L	2.626	2158	0.002
B	11	27.285	ug/L	3.412	9769	0.011
Na	23	1924.399	ug/L	6.428	5280266	5.950
Mg	24	15168.061	ug/L	4.413	32678648	36.863
Al	27	130811.703	ug/L	2.380	404903459	457.074
P	31	1070.948	ug/L	2.147	183210	0.200
K	39	10324.114	ug/L	0.976	37971759	42.484
Ca	43	43192.969	ug/L	0.614	341625	0.385
> Sc	45		ug/L		885941	885940.551
V	51	109.427	ug/L	0.837	428863	0.475
Cr	52	59.226	ug/L	1.138	196700	0.216
Cr	53		ug/L		75383	-0.017
Mn	55	935.900	ug/L	1.239	4324131	4.880
Fe	57	59549.024	ug/L	1.366	5358172	6.046
Co	59	21.301	ug/L	1.016	74714	0.084
Ni	60	46.832	ug/L	0.424	34989	0.039
Cu	63		ug/L		56710	0.064
Cu	65	33.198	ug/L	1.266	29468	0.033
Zn	66	135.989	ug/L	0.680	68647	0.383
Zn	67		ug/L		25814	0.078
Zn	68		ug/L		72407	0.401
> Ge	74		ug/L		178767	178766.858
As	75	10.975	ug/L	2.889	6444	0.036
Se	77		ug/L		4317	-0.002
Se	82	-3.010	ug/L	8.538	-149	-0.001
Kr	83		ug/L		337	0.002
Sr	88	240.528	ug/L	1.130	1719402	15.589
Y	89		ug/L		507825	4.605
Ag	107	0.693	ug/L	0.630	1944	0.017
Cd	111	2.010	ug/L	5.990	1352	0.012
Cd	114		ug/L		284	0.002
> In	115		ug/L		110261	110260.695
Sn	120	0.671	ug/L	4.323	2285	0.018
Sb	121	0.163	ug/L	10.407	655	0.004
Sb	123		ug/L		544	0.003
Ba	135		ug/L		1273230	6.766
Ba	137	1653.678	ug/L	0.725	2361715	12.551
Ho	165		ug/L		28528	0.152
> Lu	175		ug/L		188190	188189.913
Tl	205	1.096	ug/L	1.920	7206	0.037
Pb	208	56.547	ug/L	1.256	679479	3.602
Bi	209		ug/L		9317	0.049
U	238	3.953	ug/L	1.095	49213	0.260

Sample ID: 245998005

Report Date/Time: Friday, February 26, 2010 13:10:18

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	77.0			
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	70.7			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	77.9			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	88.0			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	U	238				

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

V 51 Upper, S, EEE V

Fe 57 Upper, S, EEE Fe

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

51 Sample is out of limits (over linear range)

57 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245998006

Sample Date/Time: Friday, February 26, 2010 13:13:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998006.201

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	53.344 ug/L	0.766	58444	0.069
|	Be	9	3.341 ug/L	3.425	1053	0.001
|	B	11	23.364 ug/L	1.683	8049	0.009
|	Na	23	355.104 ug/L	7.357	946477	1.098
|	Mg	24	8364.843 ug/L	3.952	17220048	20.329
|	Al	27	61867.643 ug/L	1.474	183045735	216.174
|	P	31	1220.806 ug/L	0.714	198925	0.228
|	K	39	8313.721 ug/L	2.979	29277291	34.211
|	Ca	43	12245.676 ug/L	0.250	92703	0.109
>	Sc	45	ug/L		846804	846803.755
|	V	51	78.963 ug/L	1.622	298042	0.343
|	Cr	52	35.754 ug/L	1.182	115442	0.131
|	Cr	53	ug/L		59400	-0.032
|	Mn	55	1827.652 ug/L	1.278	8071392	9.531
|	Fe	57	41223.614 ug/L	1.416	3547432	4.185
|	Co	59	20.357 ug/L	1.489	68234	0.080
|	Ni	60	28.713 ug/L	0.986	20527	0.024
|	Cu	63	ug/L		129383	0.153
|	Cu	65	76.455 ug/L	0.766	64794	0.076
[	Zn	66	128.840 ug/L	0.309	64272	0.363
|	Zn	67	ug/L		19916	0.046
|	Zn	68	ug/L		55500	0.310
>	Ge	74	ug/L		176664	176663.551
|	As	75	9.848 ug/L	6.286	5721	0.032
|	Se	77	ug/L		2968	-0.010
|	Se	82	-1.821 ug/L	26.511	-87	-0.001
[	Kr	83	ug/L		227	0.001
[	Sr	88	111.169 ug/L	1.383	809271	7.205
|	Y	89	ug/L		274342	2.443
|	Ag	107	0.493 ug/L	2.928	1418	0.012
|	Cd	111	2.276 ug/L	6.684	1556	0.014
|	Cd	114	ug/L		1509	0.013
>	In	115	ug/L		112315	112315.103
|	Sn	120	1.050 ug/L	3.958	3450	0.028
|	Sb	121	0.324 ug/L	3.937	1084	0.008
[	Sb	123	ug/L		851	0.006
[	Ba	135	ug/L		525893	2.720
|	Ba	137	617.292 ug/L	0.482	905857	4.685
|	Ho	165	ug/L		17191	0.089
>	Lu	175	ug/L		193340	193339.835
|	Tl	205	0.634 ug/L	1.745	4373	0.021
|	Pb	208	99.599 ug/L	0.999	1228310	6.344
|	Bi	209	ug/L		7460	0.038
[	U	238	63.953 ug/L	0.791	814794	4.213

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		73.6			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		69.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		79.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		90.4			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

Mn 55 Upper, S, EEE Mn

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245998007

Sample Date/Time: Friday, February 26, 2010 13:19:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998007.202

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	93.347	ug/L	0.535	101515	0.121
Be	9	5.398	ug/L	2.664	1686	0.002
B	11	24.384	ug/L	0.206	8331	0.010
Na	23	683.127	ug/L	11.111	1794455	2.112
Mg	24	15816.958	ug/L	1.591	32332842	38.440
Al	27	102368.070	ug/L	2.131	300880334	357.688
P	31	701.812	ug/L	0.917	115978	0.131
K	39	8776.566	ug/L	8.199	30696796	36.116
Ca	43	30466.701	ug/L	0.728	228820	0.272
> Sc	45		ug/L		841130	841130.148
V	51	115.845	ug/L	0.141	430648	0.503
Cr	52	69.240	ug/L	0.383	217574	0.253
Cr	53		ug/L		71668	-0.017
Mn	55	1034.216	ug/L	1.182	4537600	5.393
Fe	57	63827.916	ug/L	0.795	5454229	6.480
Co	59	26.539	ug/L	1.047	88341	0.105
Ni	60	46.138	ug/L	0.764	32729	0.039
Cu	63		ug/L		65566	0.078
Cu	65	40.157	ug/L	0.546	33837	0.040
Zn	66	144.496	ug/L	0.945	68745	0.407
Zn	67		ug/L		24704	0.080
Zn	68		ug/L		71756	0.422
> Ge	74		ug/L		168515	168514.812
As	75	9.423	ug/L	4.721	5229	0.031
Se	77		ug/L		3682	-0.005
Se	82	-2.561	ug/L	18.222	-118	-0.001
Kr	83		ug/L		295	0.001
Sr	88	220.595	ug/L	1.097	1505651	14.297
Y	89		ug/L		515149	4.891
Ag	107	0.595	ug/L	1.542	1598	0.015
Cd	111	1.771	ug/L	7.296	1137	0.011
Cd	114		ug/L		273	0.002
> In	115		ug/L		105312	105312.377
Sn	120	0.635	ug/L	2.282	2080	0.017
Sb	121	0.134	ug/L	12.549	554	0.003
Sb	123		ug/L		446	0.003
Ba	135		ug/L		1191035	6.425
Ba	137	1516.517	ug/L	5.239	2134577	11.510
Ho	165		ug/L		30649	0.165
> Lu	175		ug/L		185369	185368.883
Tl	205	1.099	ug/L	1.213	7118	0.037
Pb	208	55.237	ug/L	0.591	653892	3.519
Bi	209		ug/L		8777	0.047
U	238	5.005	ug/L	2.546	61307	0.330

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		73.1			
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		66.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		74.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		86.6			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

V 51 Upper, S, EEE V

Mn 55 Upper, S, EEE Mn

Fe 57 Upper, S, EEE Fe

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

51 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

57 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245998008

Sample Date/Time: Friday, February 26, 2010 13:25:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998008.203

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	98.493	ug/L	2.670	100394	0.127
Be	9	5.728	ug/L	3.607	1678	0.002
B	11	23.326	ug/L	1.633	7484	0.009
Na	23	561.875	ug/L	0.974	1385048	1.737
Mg	24	12637.826	ug/L	3.324	24230720	30.714
Al	27	110418.082	ug/L	2.996	304202081	385.816
P	31	822.363	ug/L	1.243	126496	0.154
K	39	11779.126	ug/L	5.035	38504074	48.471
Ca	43	11604.122	ug/L	1.322	81836	0.104
> Sc	45		ug/L		788629	788628.545
V	51	114.262	ug/L	1.309	398308	0.496
Cr	52	50.627	ug/L	0.369	150359	0.185
Cr	53		ug/L		60427	-0.026
Mn	55	1922.456	ug/L	0.921	7906332	10.025
Fe	57	60582.216	ug/L	1.513	4852833	6.150
Co	59	31.195	ug/L	0.447	97345	0.123
Ni	60	46.270	ug/L	2.924	30766	0.039
Cu	63		ug/L		70496	0.089
Cu	65	45.516	ug/L	0.257	35951	0.046
Zn	66	163.185	ug/L	0.580	75389	0.460
Zn	67		ug/L		22535	0.071
Zn	68		ug/L		67598	0.409
> Ge	74		ug/L		163682	163681.758
As	75	10.030	ug/L	7.724	5400	0.032
Se	77		ug/L		2889	-0.009
Se	82	-4.565	ug/L	9.375	-208	-0.001
Kr	83		ug/L		362	0.002
Sr	88	140.571	ug/L	0.299	940114	9.111
Y	89		ug/L		382999	3.712
Ag	107	0.706	ug/L	2.760	1851	0.018
Cd	111	2.538	ug/L	8.133	1593	0.015
Cd	114		ug/L		794	0.007
> In	115		ug/L		103172	103172.162
Sn	120	1.014	ug/L	0.913	3073	0.027
Sb	121	0.170	ug/L	10.108	628	0.004
Sb	123		ug/L		499	0.003
Ba	135		ug/L		734719	4.114
Ba	137	929.179	ug/L	0.859	1259391	7.052
Ho	165		ug/L		24381	0.137
> Lu	175		ug/L		178571	178571.002
Tl	205	1.172	ug/L	3.049	7295	0.040
Pb	208	89.024	ug/L	0.622	1014235	5.671
Bi	209		ug/L		10176	0.057
U	238	128.230	ug/L	0.534	1508732	8.448

Sample ID: 245998008

Report Date/Time: Friday, February 26, 2010 13:28:09

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
Li	7						
Be	9						
B	11						
Na	23						
Mg	24						
Al	27						
P	31						
K	39						
Ca	43						
> Sc	45		68.6				
V	51						
Cr	52						
Cr	53						
Mn	55						
Fe	57						
Co	59						
Ni	60						
Cu	63						
Cu	65						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		64.7				
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Ag	107						
Cd	111						
Cd	114						
> In	115		72.9				
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175		83.5				
Tl	205						
Pb	208						
Bi	209						
U	238						

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

V 51 Upper, S, EEE V

Mn 55 Upper, S, EEE Mn

Fe 57 Upper, S, EEE Fe

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

51 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

57 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 245998008

ICPMS#6 - Summary Report

Sample ID: 245998009

Sample Date/Time: Friday, February 26, 2010 13:31:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782[2]rmj

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\245998009.204

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	58.070	ug/L	1.376	58505	0.075
Be	9	3.745	ug/L	2.458	1085	0.001
B	11	16.781	ug/L	1.301	5403	0.007
Na	23	424.549	ug/L	5.575	1037048	1.313
Mg	24	7321.272	ug/L	6.459	13861950	17.793
Al	27	65730.386	ug/L	5.198	178849844	229.671
P	31	605.540	ug/L	0.980	93371	0.113
K	39	7550.925	ug/L	1.961	24486462	31.072
Ca	43	7036.366	ug/L	1.079	49055	0.063
Sc	45		ug/L		778746	778745.530
V	51	74.554	ug/L	1.988	259206	0.323
Cr	52	36.178	ug/L	0.604	107373	0.132
Cr	53		ug/L		56063	-0.030
Mn	55	1244.654	ug/L	0.104	5055928	6.490
Fe	57	38272.784	ug/L	0.799	3029313	3.886
Co	59	20.895	ug/L	0.622	64413	0.083
Ni	60	30.566	ug/L	2.146	20093	0.026
Cu	63		ug/L		66759	0.086
Cu	65	43.530	ug/L	0.399	33955	0.044
Zn	66	96.476	ug/L	0.604	45131	0.272
Zn	67		ug/L		16238	0.031
Zn	68		ug/L		40243	0.239
Ge	74		ug/L		165530	165530.168
As	75	7.371	ug/L	3.331	4036	0.024
Se	77		ug/L		2667	-0.011
Se	82	-2.619	ug/L	7.351	-119	-0.001
Kr	83		ug/L		244	0.001
Sr	88	90.216	ug/L	2.391	615125	5.847
Y	89		ug/L		270852	2.575
Ag	107	0.450	ug/L	2.165	1216	0.011
Cd	111	1.768	ug/L	3.945	1135	0.011
Cd	114		ug/L		707	0.006
In	115		ug/L		105207	105207.219
Sn	120	0.626	ug/L	5.390	2053	0.017
Sb	121	0.152	ug/L	7.941	596	0.004
Sb	123		ug/L		483	0.003
Ba	135		ug/L		440657	2.395
Ba	137	548.803	ug/L	0.184	766503	4.165
Ho	165		ug/L		16933	0.092
Lu	175		ug/L		184011	184011.352
Tl	205	0.695	ug/L	1.643	4543	0.024
Pb	208	50.953	ug/L	0.677	598906	3.246
Bi	209		ug/L		6490	0.035
U	238	70.026	ug/L	0.384	849131	4.613

Sample ID: 245998009

Report Date/Time: Friday, February 26, 2010 13:34:05

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		67.7			
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		65.5			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		74.3			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		86.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type Analyte

Al 27 Upper, S, EEE Al

Mn 55 Upper, S, EEE Mn

Mass Out of Limits Message

27 Sample is out of limits (over linear range)

55 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, February 26, 2010 13:49:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 8.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	58.901	ug/L	0.618	68155	0.076
Be	9	53.548	ug/L	1.458	17727	0.020
B	11	106.044	ug/L	2.856	37353	0.041
Na	23	5361.753	ug/L	1.442	14847143	16.579
Mg	24	4966.663	ug/L	1.017	10801028	12.071
Al	27	4990.281	ug/L	5.115	15608932	17.437
P	31	4922.433	ug/L	1.194	829024	0.920
K	39	4568.226	ug/L	3.990	17147732	18.798
Ca	43	5018.459	ug/L	0.711	40240	0.045
> Sc	45		ug/L		894452	894452.021
V	51	52.026	ug/L	0.639	210321	0.226
Cr	52	52.054	ug/L	0.565	175209	0.190
Cr	53		ug/L		86530	-0.005
Mn	55	53.471	ug/L	0.817	251169	0.279
Fe	57	5092.240	ug/L	0.205	466454	0.517
Co	59	52.061	ug/L	1.182	184178	0.206
Ni	60	53.879	ug/L	1.455	40634	0.045
Cu	63		ug/L		95375	0.107
Cu	65	52.138	ug/L	0.196	46698	0.052
Zn	66	52.935	ug/L	1.121	29896	0.149
Zn	67		ug/L		14105	0.004
Zn	68		ug/L		22137	0.107
> Ge	74		ug/L		199311	199311.080
As	75	49.299	ug/L	0.573	31913	0.160
Se	77		ug/L		6345	0.005
Se	82	52.023	ug/L	1.890	2974	0.015
Kr	83		ug/L		71	0.000
Sr	88	51.718	ug/L	0.913	402162	3.352
Y	89		ug/L		222	0.001
Ag	107	52.232	ug/L	1.299	156154	1.302
Cd	111	50.999	ug/L	0.505	37062	0.309
Cd	114		ug/L		86853	0.724
> In	115		ug/L		119917	119917.373
Sn	120	54.264	ug/L	1.126	172587	1.436
Sb	121	54.105	ug/L	1.118	150529	1.253
Sb	123		ug/L		117733	0.980
Ba	135		ug/L		41285	0.215
Ba	137	50.179	ug/L	0.366	73298	0.381
Ho	165		ug/L		25	0.000
> Lu	175		ug/L		192318	192317.525
Tl	205	49.352	ug/L	0.980	322071	1.674
Pb	208	51.277	ug/L	1.069	629900	3.266
Bi	209		ug/L		143	0.001
U	238	55.534	ug/L	0.366	703851	3.659

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	117.802				
Be	9	107.096				
B	11	106.044				
Na	23	107.235				
Mg	24	99.333				
Al	27	98.817				
P	31	98.449				
K	39	91.365				
Ca	43	100.369				
> Sc	45		77.8			
V	51	104.051				
Cr	52	104.107				
Cr	53					
Mn	55	106.942				
Fe	57	101.845				
Co	59	104.122				
Ni	60	107.759				
Cu	63					
Cu	65	104.276				
Zn	66	105.871				
Zn	67					
Zn	68					
> Ge	74		78.8			
As	75	98.598				
Se	77					
Se	82	104.047				
Kr	83					
Sr	88	103.436				
Y	89					
Ag	107	104.463				
Cd	111	101.999				
Cd	114					
> In	115		84.7			
Sn	120	108.528				
Sb	121	108.211				
Sb	123					
Ba	135					
Ba	137	100.359				
Ho	165					
> Lu	175		89.9			
Tl	205	98.705				
Pb	208	102.554				
Bi	209					
U	238	111.068				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li		7CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	
QC Std 8	U		238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, February 26, 2010 13:55:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 no thtimozr.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 9.208

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.080	ug/L	7.656	221	0.000
Be	9	0.012	ug/L	101.309	12	0.000
B	11	2.027	ug/L	19.890	1206	0.001
Na	23	3.447	ug/L	62.192	30367	0.011
Mg	24	2.656	ug/L	21.375	11338	0.006
Al	27	2.117	ug/L	26.255	17010	0.007
P	31	0.774	ug/L	214.544	6996	0.000
K	39	-1.226	ug/L	212.981	373150	-0.005
Ca	43	-0.947	ug/L	168.486	210	-0.000
> Sc	45		ug/L		1021188	1021187.936
V	51	0.319	ug/L	19.335	11053	0.001
Cr	52	-0.198	ug/L	42.815	5083	-0.001
Cr	53		ug/L		88703	-0.015
Mn	55	0.056	ug/L	28.667	2326	0.000
Fe	57	-2.193	ug/L	74.735	4387	-0.000
Co	59	0.011	ug/L	17.872	154	0.000
Ni	60	0.006	ug/L	229.241	73	0.000
Cu	63		ug/L		157	0.000
Cu	65	0.003	ug/L	313.012	86	0.000
Zn	66	-0.023	ug/L	123.373	179	-0.000
Zn	67		ug/L		12560	-0.009
Zn	68		ug/L		733	-0.001
> Ge	74		ug/L		217928	217928.348
As	75	0.178	ug/L	165.084	237	0.001
Se	77		ug/L		5381	-0.002
Se	82	0.040	ug/L	79.869	9	0.000
Kr	83		ug/L		60	0.000
Sr	88	0.012	ug/L	25.807	328	0.001
Y	89		ug/L		77	0.000
Ag	107	0.012	ug/L	54.835	84	0.000
Cd	111	0.019	ug/L	35.111	24	0.000
Cd	114		ug/L		49	0.000
> In	115		ug/L		130518	130517.960
Sn	120	0.055	ug/L	10.971	576	0.001
Sb	121	0.217	ug/L	29.164	935	0.005
Sb	123		ug/L		710	0.004
Ba	135		ug/L		52	0.000
Ba	137	0.016	ug/L	53.691	86	0.000
Ho	165		ug/L		5	0.000
> Lu	175		ug/L		204400	204400.298
Tl	205	0.066	ug/L	31.803	689	0.002
Pb	208	0.048	ug/L	10.135	2491	0.003
Bi	209		ug/L		30	-0.000
U	238	0.033	ug/L	11.963	661	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate	Rel. % Difference
Li	7						
Be	9						
B	11						
Na	23						
Mg	24						
Al	27						
P	31						
K	39						
Ca	43						
> Sc	45			88.8			
V	51						
Cr	52						
Cr	53						
Mn	55						
Fe	57						
Co	59						
Ni	60						
Cu	63						
Cu	65						
Zn	66						
Zn	67						
Zn	68						
> Ge	74			86.2			
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Ag	107						
Cd	111						
Cd	114						
> In	115			92.2			
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175			95.5			
Tl	205						
Pb	208						
Bi	209						
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 #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Friday, February 26, 2010 21:33:32

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1676

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	2874.9	2874.890	102.453	3.6
Mg	24.0	18310.9	18310.933	447.610	2.4
Co	58.9	34076.2	34076.202	570.365	1.7
Rh	102.9	78681.9	78681.905	859.088	1.1
In	114.9	92589.9	92589.892	600.865	0.6
Pb	208.0	72499.7	72499.713	644.746	0.9
[> Ba	137.9	88745.2	88745.243	431.744	0.5
[Ba++	69.0	1220.3	0.014	0.000	3.4
[> Ce	139.9	117167.7	117167.746	815.209	0.7
[CeO	155.9	2319.6	0.020	0.000	2.5
Bkgd	220.0	3.1	3.100	1.194	38.5

Current Optimization File Data

Current Value	Description
0.80	Nebulizer Gas Flow
4.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
25.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	5.8	2790.6
Co	59	11	6.5	32715.1
In	115	11	7.5	87414.0

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	577	2080	0.649
Be	9.0	8.9	2022	2080	0.663
Mg	24.0	24.0	5686	2124	0.607
Mg	25.0	25.0	5914	2080	0.664
Mg	26.0	26.0	6168	2120	0.665
Co	58.9	58.9	14184	2170	0.640
Rh	102.9	102.9	24871	2230	0.698
In	114.9	114.9	27787	2260	0.683
Ce	139.9	139.9	33849	2280	0.761
Pb	206.0	206.0	49948	2430	0.696
Pb	207.0	207.0	50159	2385	0.705
Pb	208.0	207.9	50439	2430	0.745
U	238.1	238.1	57734	2470	0.743

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 27, 2010 07:11:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.mth

Dataset File: C:\elandata\Dataset\100226\Blank.156

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		199584	
[	U	238	ug/L		85	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175							
[	U	238							

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, February 27, 2010 07:15:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\Standard 1.157

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		193312	193312.473
[	U	238	10.000 ug/L	0.689	104283	0.539

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175				
[	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#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, February 27, 2010 07:18:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\Standard 2.158

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		187387	187386.607
[	U	238	99.998 ug/L	1.249	1008136	5.380

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recovery	Dilution %	Dil	Duplicate	Rel. % Difference
[>	Lu	175									
[	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#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 27, 2010 07:21:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 1.159

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		187640	187640.491
[	U	238	ug/L	1.883	537377	2.864

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		94.0		
[	U	238	106.456			

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 2

Sample Date/Time: Saturday, February 27, 2010 07:24:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 2.160

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		197739	197739.382
[U 238	0.011	ug/L	14.243	204	0.001

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175			99.1		
[U 238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 27, 2010 07:27:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\U.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 3.161

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		189852	189852.415
[	U	238	0.265 ug/L	1.804	2790	0.014

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		95.1		
[	U	238	132.577			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 27, 2010 07:30:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 4.162

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		175056	175056.207
[U	238	-0.003	ug/L	42.723	49	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			87.7		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, February 27, 2010 07:33:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\U.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 5.163

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		174044	174043.885
[	U	238	ug/L	1.009	203970	1.172

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		87.2			
[	U	238	108.888				

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, February 27, 2010 07:36:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\U.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.164

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		183668	183667.621
[	U	238	53.053 ug/L	1.261	524197	2.854

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[>	Lu	175		92.0		
[	U	238	106.105			

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, February 27, 2010 07:39:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.165

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		193476	193476.457
[U 238	0.008	ug/L	30.247	169	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[> Lu 175			96.9		
[U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032646

Sample Date/Time: Saturday, February 27, 2010 07:42:40

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\1202032646.166

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		198503	198502.518
[	U	238	0.062 ug/L	1.652	751	0.003

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		99.5		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032651

Sample Date/Time: Saturday, February 27, 2010 07:45:47

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948782|40|rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100226\1202032651.167

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		194026	194025.686
[	U	238	ug/L	2.581	5654	0.029

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		97.2		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 27, 2010 07:48:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\i.u.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.168

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		186500	186500.079
[	U	238	52.806 ug/L	1.249	529857	2.841

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		93.4		
[	U	238	105.613			

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, February 27, 2010 07:51:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.169

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		196261	196261.436
[	U	238	0.007 ug/L	14.038	154	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		98.3		
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998001

Sample Date/Time: Saturday, February 27, 2010 07:55:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\245998001.170

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		193381	193381.062
[U 238	4.862	ug/L	1.216	50667	0.262

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175			96.9		
[U 238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032647

Sample Date/Time: Saturday, February 27, 2010 07:58:09

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\1202032647.171

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		189943	189943.329
[	U	238	4.499 ug/L	0.800	46052	0.242

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		95.2		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032649

Sample Date/Time: Saturday, February 27, 2010 08:01:16

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\1202032649.172

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		182145	182144.798
[	U	238	35.962 ug/L	0.694	352443	1.935

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		91.3		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032650

Sample Date/Time: Saturday, February 27, 2010 08:04:23

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100226\1202032650.173

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		178064	178064.387
[U	238	35.846	ug/L	0.855	343451	1.928

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			89.2		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032648

Sample Date/Time: Saturday, February 27, 2010 08:07:30

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948782|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\1202032648.174

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		188102	188102.027
[	U 238	0.950	ug/L	2.771	9693	0.051

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu 175			94.2		
[	U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998002

Sample Date/Time: Saturday, February 27, 2010 08:10:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782[2]rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\245998002.175

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		185266	185266.175
[U	238	34.815	ug/L	0.951	347054	1.873

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[> Lu	175			92.8		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998003

Sample Date/Time: Saturday, February 27, 2010 08:13:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\U.mth

Dataset File: C:\elandata\Dataset\100226\245998003.176

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		179698	179697.506
[U 238	4.623	ug/L	1.091	44774	0.249

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175 Linear Thru Zero	
U	238 Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175			90.0		
[U 238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 27, 2010 08:16:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.177

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		177902	177901.708
[	U	238	54.404 ug/L	0.848	520721	2.927

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		89.1			
[	U	238	108.807				

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, February 27, 2010 08:19:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.178

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		188408	188407.525
[	U	238	0.006 ug/L	36.294	136	0.000

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		94.4		
[	U	238				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998004

Sample Date/Time: Saturday, February 27, 2010 08:23:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782[2]rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100226\245998004.179

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		188685	188684.794
[	U	238	44.485 ug/L	0.452	451632	2.393

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		94.5			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998005

Sample Date/Time: Saturday, February 27, 2010 08:26:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\245998005.180

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		185056	185055.886
[	U	238	4.008 ug/L	1.039	39976	0.216

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		92.7		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998006

Sample Date/Time: Saturday, February 27, 2010 08:29:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\245998006.181

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		183013	183013.324
[	U 238	66.794	ug/L	0.367	657677	3.593

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu 175			91.7		
[	U 238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998007

Sample Date/Time: Saturday, February 27, 2010 08:32:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\245998007.182

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		181468	181467.716
[	U	238	5.150 ug/L	1.011	50344	0.277

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		90.9		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998009

Sample Date/Time: Saturday, February 27, 2010 08:38:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100226\245998009.184

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		177095	177095.081
[	U	238	72.049 ug/L	0.376	686506	3.876

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		88.7		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 27, 2010 08:41:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.185

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		171160	171159.628
[	U	238	54.787 ug/L	0.135	504548	2.947

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		85.8		
[	U	238	109.574			

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, February 27, 2010 08:44:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.186

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		183241	183240.678
[U 238	0.011	ug/L	1.377	185	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175			91.8		
[U 238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 27, 2010 09:39:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asben\se.mth

Dataset File: C:\elandata\Dataset\100226\Blank.203

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	ug/L			5
> Sc	45	ug/L		890671	
Ni	60	ug/L		56	
> Ge	74	ug/L		188009	
As	75	ug/L		697	
Se	77	ug/L		4232	
Se	82	ug/L		12	
Kr	83	ug/L		42	

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	

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				

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: Saturday, February 27, 2010 09:43:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\Standard 1.204

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	0.965	2272	0.003
> Sc	45		ug/L		830044	830043.992
Ni	60	10.000	ug/L	4.106	5086	0.006
> Ge	74		ug/L		176502	176502.088
As	75	10.000	ug/L	4.495	5078	0.025
Se	77		ug/L		3682	-0.002
Se	82	10.000	ug/L	5.619	415	0.002
Kr	83		ug/L		38	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45										
Ni	60										
> Ge	74										
As	75										
Se	77										
Se	82										
Kr	83										

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, February 27, 2010 09:46:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\Standard 2.205

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.057	ug/L	2.246	22702	0.029
> Sc	45		ug/L		782992	782992.241
Ni	60	100.019	ug/L	1.380	48504	0.062
> Ge	74		ug/L		170383	170383.410
As	75	100.037	ug/L	3.395	45005	0.260
Se	77		ug/L		5912	0.012
Se	82	100.035	ug/L	0.866	4053	0.024
Kr	83		ug/L		51	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recovery	Dilution %	Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45										
Ni	60										
> Ge	74										
As	75										
Se	77										
Se	82										
Kr	83										

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 27, 2010 09:49:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 1.206

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	49.980 ug/L	1.775	11512	0.014
|>	Sc	45	ug/L		794794	794793.963
[	Ni	60	51.956 ug/L	1.984	25599	0.032
|>	Ge	74	ug/L		173723	173722.849
|	As	75	46.996 ug/L	1.675	21901	0.122
|	Se	77	ug/L		4183	0.002
|	Se	82	51.866 ug/L	4.096	2148	0.012
[	Kr	83	ug/L		37	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	99.960		
|>	Sc	45		89.2	
[	Ni	60	103.913		
|>	Ge	74		92.4	
|	As	75	93.992		
|	Se	77			
|	Se	82	103.732		
[	Kr	83			

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, February 27, 2010 09:53:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 2.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.010	ug/L	143.629	7	0.000
> Sc	45		ug/L		852782	852781.595
Ni	60	0.011	ug/L	130.378	60	0.000
> Ge	74		ug/L		182043	182043.328
As	75	-0.460	ug/L	89.568	459	-0.001
Se	77		ug/L		3077	-0.006
Se	82	0.090	ug/L	311.816	15	0.000
Kr	83		ug/L		36	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		95.7			
Ni	60					
> Ge	74		96.8			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 27, 2010 09:56:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 3.208

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.589	ug/L	9.150	141	0.000
|>	Sc 45		ug/L		799581	799580.688
[	Ni 60	2.214	ug/L	3.107	1146	0.001
|>	Ge 74		ug/L		173218	173217.596
|	As 75	5.402	ug/L	3.747	3078	0.014
|	Se 77		ug/L		2854	-0.006
|	Se 82	5.314	ug/L	7.151	229	0.001
[	Kr 83		ug/L		35	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be 9	117.821					
|>	Sc 45		89.8				
[	Ni 60	110.724					
|>	Ge 74		92.1				
|	As 75	108.038					
|	Se 77						
|	Se 82	106.273					
[	Kr 83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 27, 2010 10:00:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 4.209

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.115	ug/L	40.276	26	0.000
|>	Sc 45		ug/L		682399	682399.067
[	Ni 60	4.512	ug/L	3.948	1948	0.003
|>	Ge 74		ug/L		150676	150675.609
|	As 75	0.174	ug/L	105.552	627	0.000
|	Se 77		ug/L		2928	-0.003
|	Se 82	-2.665	ug/L	23.824	-86	-0.001
[	Kr 83		ug/L		148	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
|>	Sc 45		76.6		
[	Ni 60	167.109			
|>	Ge 74		80.1		
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Sc 45 Int Std for QC Sc		45

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, February 27, 2010 10:03:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 5.210

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	19.847	ug/L	2.199	3927	0.006
| >	Sc 45		ug/L		682284	682284.395
|	Ni 60	23.865	ug/L	2.686	10119	0.015
[>	Ge 74		ug/L		151046	151046.194
|	As 75	19.989	ug/L	2.590	8419	0.052
|	Se 77		ug/L		3454	0.000
|	Se 82	18.006	ug/L	5.608	655	0.004
|	Kr 83		ug/L		148	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	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9	99.237				
| >	Sc 45		76.6			
|	Ni 60	105.131				
[>	Ge 74		80.3			
|	As 75	99.944				
|	Se 77					
|	Se 82	90.028				
|	Kr 83					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 27, 2010 10:07:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.211

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.973	ug/L	1.720	11427	0.014
> Sc	45		ug/L		789020	789019.824
Ni	60	51.031	ug/L	0.373	24963	0.032
> Ge	74		ug/L		172165	172165.024
As	75	47.372	ug/L	2.108	21875	0.123
Se	77		ug/L		3910	0.000
Se	82	51.730	ug/L	3.136	2123	0.012
Kr	83		ug/L		36	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	99.945				
> Sc	45		88.6			
Ni	60	102.063				
> Ge	74		91.6			
As	75	94.743				
Se	77					
Se	82	103.460				
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 27, 2010 10:10:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.212

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.005	ug/L	42.523	6	0.000
> Sc	45		ug/L		851166	851166.138
Ni	60	-0.004	ug/L	360.279	51	-0.000
> Ge	74		ug/L		183491	183490.502
As	75	-0.670	ug/L	38.570	360	-0.002
Se	77		ug/L		2672	-0.008
Se	82	-0.012	ug/L	1312.714	11	-0.000
Kr	83		ug/L		34	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
Be	9						
> Sc	45		95.6				
Ni	60						
> Ge	74		97.6				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032646

Sample Date/Time: Saturday, February 27, 2010 10:14:02

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\1202032646.213

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.025	ug/L	68.536	10	0.000
|> Sc	45		ug/L		822872	822871.823
[Ni	60	0.075	ug/L	9.429	90	0.000
[> Ge	74		ug/L		178434	178433.971
| As	75	-0.659	ug/L	34.791	356	-0.002
| Se	77		ug/L		1704	-0.013
| Se	82	0.388	ug/L	80.599	28	0.000
[Kr	83		ug/L		30	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
|> Sc	45		92.4				
[Ni	60						
[> Ge	74		94.9				
| As	75						
| Se	77						
| Se	82						
[Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032651

Sample Date/Time: Saturday, February 27, 2010 10:18:00

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948782|40|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\1202032651.214

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	20.243	ug/L	2.644	4837	0.006
|>	Sc 45		ug/L		823983	823983.486
[	Ni 60	36.792	ug/L	1.446	18809	0.023
|>	Ge 74		ug/L		179296	179295.789
|	As 75	27.830	ug/L	2.517	13652	0.072
|	Se 77		ug/L		4751	0.004
|	Se 82	77.634	ug/L	0.821	3312	0.018
[	Kr 83		ug/L		39	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be 9					
|> Sc 45		92.5			
[Ni 60					
|> Ge 74		95.4			
| As 75					
| Se 77					
| Se 82					
[Kr 83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998001

Sample Date/Time: Saturday, February 27, 2010 10:21:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998001.215

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	6.229	ug/L	3.312	1462	0.002
|>	Sc 45		ug/L		807502	807502.417
[	Ni 60	51.576	ug/L	2.144	25818	0.032
|>	Ge 74		ug/L		163002	163001.829
|	As 75	13.339	ug/L	3.784	6262	0.035
|	Se 77		ug/L		1898	-0.011
|	Se 82	-2.243	ug/L	40.343	-77	-0.001
[	Kr 83		ug/L		273	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
|>	Sc 45		90.7		
[	Ni 60				
|>	Ge 74		86.7		
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032647

Sample Date/Time: Saturday, February 27, 2010 10:25:56

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\1202032647.216

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.176	ug/L	4.105	1217	0.001
> Sc	45		ug/L		808761	808760.631
Ni	60	45.394	ug/L	2.045	22769	0.028
> Ge	74		ug/L		167074	167074.000
As	75	8.712	ug/L	3.618	4409	0.023
Se	77		ug/L		1970	-0.011
Se	82	-2.762	ug/L	22.127	-99	-0.001
Kr	83		ug/L		252	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		90.8			
Ni	60					
> Ge	74		88.9			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032649

Sample Date/Time: Saturday, February 27, 2010 10:29:55

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\1202032649.217

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	32.817	ug/L	1.361	7271	0.010
> Sc	45		ug/L		764382	764382.295
Ni	60	96.339	ug/L	1.427	45615	0.060
> Ge	74		ug/L		153584	153584.399
As	75	53.700	ug/L	1.216	22039	0.140
Se	77		ug/L		2154	-0.008
Se	82	0.080	ug/L	1854.539	12	0.000
Kr	83		ug/L		413	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		85.8			
Ni	60					
> Ge	74		81.7			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032650

Sample Date/Time: Saturday, February 27, 2010 10:33:53

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\1202032650.218

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	30.666	ug/L	2.305	6753	0.009
> Sc	45		ug/L		759669	759669.120
Ni	60	93.400	ug/L	0.772	43950	0.058
> Ge	74		ug/L		154065	154064.890
As	75	48.685	ug/L	2.154	20097	0.127
Se	77		ug/L		2372	-0.007
Se	82	-0.349	ug/L	271.119	-3	-0.000
Kr	83		ug/L		401	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		85.3			
Ni	60					
> Ge	74		81.9			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202032648

Sample Date/Time: Saturday, February 27, 2010 10:37:52

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948782|10|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\1202032648.219

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	1.261	ug/L	4.515	310	0.000
[> Sc 45		ug/L		836667	836666.750
[Ni 60	10.587	ug/L	1.428	5533	0.007
[> Ge 74		ug/L		178330	178329.695
[As 75	2.704	ug/L	12.030	1917	0.007
[Se 77		ug/L		2782	-0.007
[Se 82	-0.479	ug/L	39.231	-9	-0.000
[Kr 83		ug/L		70	0.000

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	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be 9					
[> Sc 45		93.9			
[Ni 60					
[> Ge 74		94.9			
[As 75					
[Se 77					
[Se 82					
[Kr 83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998002

Sample Date/Time: Saturday, February 27, 2010 10:41:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998002.220

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.223	ug/L	8.629	990	0.001
> Sc	45		ug/L		805701	805701.132
Ni	60	35.754	ug/L	1.702	17876	0.022
> Ge	74		ug/L		167359	167359.304
As	75	7.654	ug/L	4.765	3955	0.020
Se	77		ug/L		1849	-0.011
Se	82	-2.918	ug/L	13.873	-105	-0.001
Kr	83		ug/L		204	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		90.5			
Ni	60					
> Ge	74		89.0			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 27, 2010 10:45:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.221

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	49.063 ug/L	1.121	11699	0.014
|>	Sc	45	ug/L		822664	822664.493
[	Ni	60	51.424 ug/L	1.901	26222	0.032
|>	Ge	74	ug/L		178959	178959.209
|	As	75	47.215 ug/L	1.215	22658	0.123
|	Se	77	ug/L		4335	0.002
|	Se	82	50.341 ug/L	0.661	2148	0.012
[	Kr	83	ug/L		36	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	98.125				
|>	Sc	45		92.4			
[	Ni	60	102.848				
|>	Ge	74		95.2			
|	As	75	94.429				
|	Se	77					
|	Se	82	100.683				
[	Kr	83					

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, February 27, 2010 10:49:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.222

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.000	ug/L	2183.338	5	-0.000
> Sc	45		ug/L		908986	908985.893
Ni	60	0.011	ug/L	89.823	63	0.000
> Ge	74		ug/L		190471	190471.080
As	75	0.011	ug/L	5887.656	710	0.000
Se	77		ug/L		3479	-0.004
Se	82	0.102	ug/L	165.602	17	0.000
Kr	83		ug/L		33	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		102.1				
Ni	60						
> Ge	74		101.3				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998003

Sample Date/Time: Saturday, February 27, 2010 10:52:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998003.223

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.529	ug/L	3.038	1291	0.002
> Sc	45		ug/L		803100	803100.374
Ni	60	39.712	ug/L	2.585	19784	0.025
> Ge	74		ug/L		166018	166017.565
As	75	8.247	ug/L	4.882	4179	0.021
Se	77		ug/L		1895	-0.011
Se	82	-5.423	ug/L	5.719	-203	-0.001
Kr	83		ug/L		288	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		90.2			
Ni	60					
> Ge	74		88.3			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Se	82	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245998004

Sample Date/Time: Saturday, February 27, 2010 10:56:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998004.224

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	3.928	ug/L	0.633	912	0.001
[> Sc	45		ug/L		797671	797670.688
[Ni	60	30.825	ug/L	1.840	15262	0.019
[> Ge	74		ug/L		167246	167246.099
| As	75	6.276	ug/L	1.697	3352	0.016
| Se	77		ug/L		1687	-0.012
| Se	82	-2.926	ug/L	6.640	-105	-0.001
[Kr	83		ug/L		184	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		89.6			
[Ni	60					
[> Ge	74		89.0			
| As	75					
| Se	77					
| Se	82					
[Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998005

Sample Date/Time: Saturday, February 27, 2010 11:00:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998005.225

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	6.830	ug/L	1.623	1552	0.002
> Sc	45		ug/L		782395	782395.220
Li Ni	60	49.830	ug/L	1.032	24171	0.031
> Ge	74		ug/L		159768	159768.097
As	75	11.067	ug/L	1.632	5195	0.029
Se	77		ug/L		2219	-0.009
Se	82	-4.100	ug/L	7.192	-145	-0.001
Kr	83		ug/L		257	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9					
> Sc	45		87.8			
Li Ni	60					
> Ge	74		85.0			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998006

Sample Date/Time: Saturday, February 27, 2010 11:04:38

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998006.226

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.532	ug/L	4.586	810	0.001
>	Sc 45		ug/L		787651	787651.396
[	Ni 60	29.676	ug/L	1.654	14513	0.018
>	Ge 74		ug/L		164311	164310.543
|	As 75	9.448	ug/L	1.871	4651	0.025
|	Se 77		ug/L		1854	-0.011
|	Se 82	-2.220	ug/L	10.260	-76	-0.001
[	Kr 83		ug/L		161	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	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
>	Sc 45		88.4		
[	Ni 60				
>	Ge 74		87.4		
|	As 75				
|	Se 77				
|	Se 82				
[	Kr 83				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998007

Sample Date/Time: Saturday, February 27, 2010 11:08:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998007.227

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.507	ug/L	2.984	1264	0.002
> Sc	45		ug/L		789513	789513.271
Ni	60	48.235	ug/L	1.965	23609	0.030
> Ge	74		ug/L		159619	159619.179
As	75	9.045	ug/L	6.760	4349	0.024
Se	77		ug/L		2052	-0.010
Se	82	-2.873	ug/L	30.370	-99	-0.001
Kr	83		ug/L		218	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		88.6			
Ni	60					
> Ge	74		84.9			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998008

Sample Date/Time: Saturday, February 27, 2010 11:12:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998008.228

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.939	ug/L	2.860	1302	0.002
> Sc	45		ug/L		754893	754893.333
Ni	60	47.808	ug/L	2.041	22372	0.030
> Ge	74		ug/L		156135	156135.366
As	75	10.454	ug/L	3.581	4827	0.027
Se	77		ug/L		1711	-0.012
Se	82	-5.029	ug/L	10.246	-176	-0.001
Kr	83		ug/L		280	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		84.8				
Ni	60						
> Ge	74		83.0				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Se	82	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 245998009

Sample Date/Time: Saturday, February 27, 2010 11:16:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\245998009.229

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.528	ug/L	0.973	781	0.001
> Sc	45		ug/L		760021	760020.883
Ni	60	31.258	ug/L	3.800	14741	0.019
> Ge	74		ug/L		163122	163122.245
As	75	6.176	ug/L	8.082	3225	0.016
Se	77		ug/L		1707	-0.012
Se	82	-2.647	ug/L	11.941	-92	-0.001
Kr	83		ug/L		177	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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		85.3			
Ni	60					
> Ge	74		86.8			
As	75					
Se	77					
Se	82					
Kr	83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 27, 2010 11:20:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenise.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 6.230

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.173	ug/L	0.486	11153	0.015
> Sc	45		ug/L		766964	766964.253
Ni	60	51.260	ug/L	1.085	24373	0.032
> Ge	74		ug/L		170034	170034.173
As	75	48.442	ug/L	1.482	22071	0.126
Se	77		ug/L		4099	0.002
Se	82	50.725	ug/L	2.286	2056	0.012
Kr	83		ug/L		34	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	100.346					
> Sc	45		86.1				
Ni	60	102.520					
> Ge	74		90.4				
As	75	96.885					
Se	77						
Se	82	101.449					
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 27, 2010 11:23:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asbenlse.mth

Dataset File: C:\elandata\Dataset\100226\QC Std 7.231

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.015	ug/L	94.161	8	0.000
> Sc	45		ug/L		842060	842059.865
Ni	60	0.001	ug/L	2546.067	53	0.000
> Ge	74		ug/L		183550	183550.170
As	75	-0.195	ug/L	239.684	588	-0.001
Se	77		ug/L		3198	-0.005
Se	82	-0.092	ug/L	92.260	8	-0.000
Kr	83		ug/L		40	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		94.5				
Ni	60						
> Ge	74		97.6				
As	75						
Se	77						
Se	82						
Kr	83						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, February 27, 2010 23:13:02

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1681

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		1646.5		1646.495		46.355		2.8
Mg	24.0		10161.0		10161.015		305.365		3.0
Co	58.9		21345.1		21345.142		496.401		2.3
Rh	102.9		55538.4		55538.377		1004.290		1.8
In	114.9		64911.2		64911.206		1580.503		2.4
Pb	208.0		43468.4		43468.440		528.057		1.2
[> Ba	137.9		53237.5		53237.540		1033.858		1.9
[Ba++	69.0		741.4		0.014		0.000		1.8
[> Ce	139.9		72230.6		72230.594		1349.694		1.9
[CeO	155.9		1056.0		0.015		0.001		4.3
Bkgd	220.0		2.8		2.800		1.204		43.0

Current Optimization File Data

Current Value	Description
0.78	Nebulizer Gas Flow
4.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
25.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	5.5	1504.1
Co	59	17	6.8	19845.8
In	115	17	8.0	65863.1

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	581	2080	0.633
Be	9.0	8.9	2028	2080	0.661
Mg	24.0	24.0	5682	2124	0.568
Mg	25.0	24.9	5898	2080	0.596
Mg	26.0	25.9	6177	2120	0.675
Co	58.9	59.0	14168	2170	0.629
Rh	102.9	102.9	24857	2230	0.691
In	114.9	114.9	27785	2260	0.707
Ce	139.9	140.0	33871	2280	0.770
Pb	206.0	206.0	49948	2430	0.715
Pb	207.0	207.0	50147	2385	0.737
Pb	208.0	207.9	50427	2430	0.749
U	238.1	238.1	57734	2470	0.760

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 28, 2010 00:33:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100227\Blank.016

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175	ug/L		148918	
[U	238	ug/L		14	

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175				
[U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 28, 2010 00:36:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\Standard 1.017

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		148735	148735.039
[	U	238	10.000 ug/L	0.692	75076	0.505

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175				
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 28, 2010 00:39:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100227\Standard 2.018

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		147243	147242.512
[U 238	100.011	ug/L	1.541	751738	5.106

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175					
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 28, 2010 00:42:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 1.019

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		152507	152507.209
[	U	238	51.014 ug/L	0.648	397190	2.604

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel.	% Difference
[>	Lu	175		102.4			
[	U	238	102.028				

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 2

Sample Date/Time: Sunday, February 28, 2010 00:45:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 2.020

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		157213	157212.923
[	U	238	0.011 ug/L	6.296	106	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		105.6		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 28, 2010 00:49:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 3.021

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		154659	154658.728
[	U	238	0.254 ug/L	3.547	2021	0.013

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		103.9		
[	U	238	127.122			

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: Sunday, February 28, 2010 00:52:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 4.022

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		138874	138873.796
[	U	238	0.002 ug/L	24.390	30	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		93.3		
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 28, 2010 00:55:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 5.023

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		139687	139686.517
[	U	238	21.298 ug/L	1.131	151879	1.087

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		93.8		
[	U	238	106.492			

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: Sunday, February 28, 2010 00:58:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.024

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		151165	151164.971
[U 238	50.249	ug/L	0.304	387797	2.565

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175		101.5			
[U 238	100.499				

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: Sunday, February 28, 2010 01:01:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.025

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		160296	160296.019
[	U	238	0.009 ug/L	18.494	87	0.000

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
[>	Lu	175		107.6			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 01:10:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.028

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		160843	160842.999
[	U	238	48.353 ug/L	1.248	396991	2.469

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		108.0			
[	U	238	96.706				

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: Sunday, February 28, 2010 01:13:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.029

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		163376	163375.763
[	U	238	0.011 ug/L	21.617	106	0.001

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		109.7		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
------------------	---------	----------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 01:44:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.039

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
| >	Lu	175	ug/L		150200	150200.224
|	U	238	48.288 ug/L	1.154	370236	2.465

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
| >	Lu	175		100.9		
|	U	238	96.576			

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: Sunday, February 28, 2010 01:47:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.040

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		151108	151107.726
[	U	238	0.010 ug/L	14.500	92	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		101.5		
[	U	238				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998008

Sample Date/Time: Sunday, February 28, 2010 01:53:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|4|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\245998008.041

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		151888	151887.883
[	U	238	71.364 ug/L	1.653	553219	3.643

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		102.0		
[	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 01:56:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.042

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		156446	156446.431
[	U	238	48.231 ug/L	0.411	385233	2.462

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		105.1		
[	U	238	96.461			

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: Sunday, February 28, 2010 01:59:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.043

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		160308	160307.875
[U 238	0.010	ug/L	14.273	101	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu 175		107.6			
[U 238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 28, 2010 02:05:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\Blank.044

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge	74	ug/L		208937	
|	As	75	ug/L		596	
|	Se	77	ug/L		2715	
|	Se	82	ug/L		12	
[	Kr	83	ug/L		31	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution %	Di	Duplicate Rel.	% Difference
[>	Ge	74								
|	As	75								
|	Se	77								
|	Se	82								
[	Kr	83								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 28, 2010 02:08:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\Standard 1.045

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Ge 74		ug/L		209826	209825.539
| As 75	10.000	ug/L	2.280	5614	0.024
| Se 77		ug/L		3092	0.002
| Se 82	10.000	ug/L	2.377	455	0.002
| Kr 83		ug/L		30	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
> Ge 74						
| As 75						
| Se 77						
| Se 82						
| Kr 83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 28, 2010 02:11:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\Standard 2.046

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		197894	197893.548
|	As 75	100.095	ug/L	1.564	52867	0.264
|	Se 77		ug/L		6379	0.019
|	Se 82	100.105	ug/L	1.954	4688	0.024
|	Kr 83		ug/L		43	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Ge 74					
|	As 75					
|	Se 77					
|	Se 82					
|	Kr 83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 28, 2010 02:13:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 1.047

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge 74		ug/L		204103	204102.735
| As 75	47.383	ug/L	1.997	26120	0.125
| Se 77		ug/L		4553	0.009
| Se 82	49.303	ug/L	2.979	2388	0.012
[Kr 83		ug/L		33	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Ge 74		97.7			
| As 75	94.765				
| Se 77					
| Se 82	98.606				
[Kr 83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, February 28, 2010 02:16:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 2.048

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge 74		ug/L		206310	206309.825
| As 75	0.142	ug/L	95.427	666	0.000
| Se 77		ug/L		2776	0.000
| Se 82	-0.107	ug/L	49.553	6	-0.000
| Kr 83		ug/L		37	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Ge 74			98.7		
| As 75					
| Se 77					
| Se 82					
| Kr 83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 28, 2010 02:19:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 3.049

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		204754	204754.297
|	As 75	6.174	ug/L	6.173	3923	0.016
|	Se 77		ug/L		2852	0.001
|	Se 82	5.983	ug/L	3.359	301	0.001
[	Kr 83		ug/L		32	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Ge 74			98.0			
|	As 75	123.486					
|	Se 77						
|	Se 82	119.656					
[	Kr 83						

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: Sunday, February 28, 2010 02:22:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 4.050

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		162746	162746.059
|	As 75	0.308	ug/L	125.424	597	0.001
|	Se 77		ug/L		2947	0.005
|	Se 82	-2.073	ug/L	9.032	-71	-0.000
[	Kr 83		ug/L		137	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Ge 74			77.9		
|	As 75					
|	Se 77					
|	Se 82					
[	Kr 83					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Ge 74 Int Std for QC	Ge	74

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 28, 2010 02:25:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 5.051

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Ge	74		ug/L		159720	159720.175
As	75	21.943	ug/L	1.791	9711	0.058
Se	77		ug/L		3518	0.009
Se	82	20.220	ug/L	6.511	771	0.005
Kr	83		ug/L		140	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Ge	74		76.4			
As	75	109.717				
Se	77					
Se	82	101.102				
Kr	83					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ge 74 Int Std for QC	Ge	74	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 02:27:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.052

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		191386	191386.079
|	As 75	48.318	ug/L	1.098	24965	0.128
|	Se 77		ug/L		4437	0.010
|	Se 82	49.706	ug/L	0.883	2257	0.012
|	Kr 83		ug/L		38	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Ge 74		91.6				
|	As 75	96.635					
|	Se 77						
|	Se 82	99.411					
|	Kr 83						

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: Sunday, February 28, 2010 02:30:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.053

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge 74		ug/L		197369	197369.278
| As 75	0.492	ug/L	120.861	823	0.001
| Se 77		ug/L		2879	0.002
| Se 82	0.091	ug/L	258.687	15	0.000
| Kr 83		ug/L		31	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Ge 74		94.5			
| As 75					
| Se 77					
| Se 82					
| Kr 83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998003

Sample Date/Time: Sunday, February 28, 2010 02:33:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\245998003.054

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		172121	172120.739
|	As 75	9.336	ug/L	4.976	4734	0.025
|	Se 77		ug/L		1887	-0.002
|	Se 82	-3.747	ug/L	3.588	-143	-0.001
[	Kr 83		ug/L		222	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Ge 74		82.4			
|	As 75					
|	Se 77					
|	Se 82					
[	Kr 83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 02:39:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.056

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Ge 74		ug/L		182023	182023.203
| As 75	48.681	ug/L	2.075	23914	0.129
| Se 77		ug/L		4564	0.012
| Se 82	50.819	ug/L	1.947	2194	0.012
| Kr 83		ug/L		41	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
> Ge 74		87.1				
| As 75	97.362					
| Se 77						
| Se 82	101.638					
| Kr 83						

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: Sunday, February 28, 2010 02:41:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.057

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		186801	186801.389
|	As 75	0.110	ug/L	213.876	587	0.000
|	Se 77		ug/L		2963	0.003
|	Se 82	-0.093	ug/L	272.296	6	-0.000
[	Kr 83		ug/L		36	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Ge 74		89.4				
|	As 75						
|	Se 77						
|	Se 82						
[	Kr 83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 245998008

Sample Date/Time: Sunday, February 28, 2010 02:47:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948782|2|rmj

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\245998008.058

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		158987	158987.432
|	As 75	9.402	ug/L	1.328	4401	0.025
|	Se 77		ug/L		1826	-0.002
|	Se 82	-2.292	ug/L	13.534	-77	-0.001
[	Kr 83		ug/L		163	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Ge 74		76.1			
|	As 75					
|	Se 77					
|	Se 82					
[	Kr 83					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 02:50:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 6.059

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge 74		ug/L		185039	185038.663
|	As 75	48.618	ug/L	0.974	24278	0.128
|	Se 77		ug/L		4510	0.011
|	Se 82	50.990	ug/L	3.080	2239	0.012
|	Kr 83		ug/L		44	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
>	Ge 74			88.6		
|	As 75	97.237				
|	Se 77					
|	Se 82	101.980				
|	Kr 83					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 28, 2010 02:53:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\asse.mth

Dataset File: C:\elandata\Dataset\100227\QC Std 7.060

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge 74		ug/L		188731	188731.035
|	As 75	0.880	ug/L	31.573	976	0.002
|	Se 77		ug/L		2893	0.002
|	Se 82	0.092	ug/L	60.806	15	0.000
|	Kr 83		ug/L		31	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9999
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
>	Ge 74		90.3			
|	As 75					
|	Se 77					
|	Se 82					
|	Kr 83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: SOIL
 Method Description: 7471A, ILM04 ANALYST JXL1
 Element: Hg

Date: 02/18/2010
 Technique: FI-MHS
 Calibration Type:
 Hg, Calc. Intercept : Linear
 Wavelength: 253.7 nm
 Sample Info Name: 021810S1.SIF

Results Data Set Name: 021810S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/18/2010
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0046	0.0046	09:45:19	No
2			0.0045	0.0045	09:45:54	No
Mean:			0.0046			
SD :			0.0001			
%RSD:			2.6075			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/18/2010
 Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0019	0.0065	09:47:17	No
2			0.0017	0.0063	09:47:51	No
Mean:			0.0018			
SD :			0.0001			
%RSD:			7.2627			

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.00908
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/18/2010
 Sample ID: S0.5

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0052	0.0098	09:49:14	No
2			0.0054	0.0099	09:49:48	No
Mean:			0.0053			
SD :			0.0001			
%RSD:			2.3316			

[Hg] Standard number 2 applied. [0.500]
 Correlation Coefficient: 0.99797 Slope: 0.01065
 Intercept : -0.00012

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/18/2010
 Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0209	0.0255	09:51:13	No
2			0.0210	0.0255	09:51:49	No
Mean:			0.0210			
SD :			0.0000			
%RSD:			0.1449			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99989
Intercept : -0.00009

Slope: 0.01053

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/18/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0521	0.0567	09:53:13	No
2			0.0519	0.0564	09:53:49	No
Mean:			0.0520			
SD :			0.0002			
%RSD:			0.3044			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99997 Slope: 0.01042
Intercept : -0.00003

=====

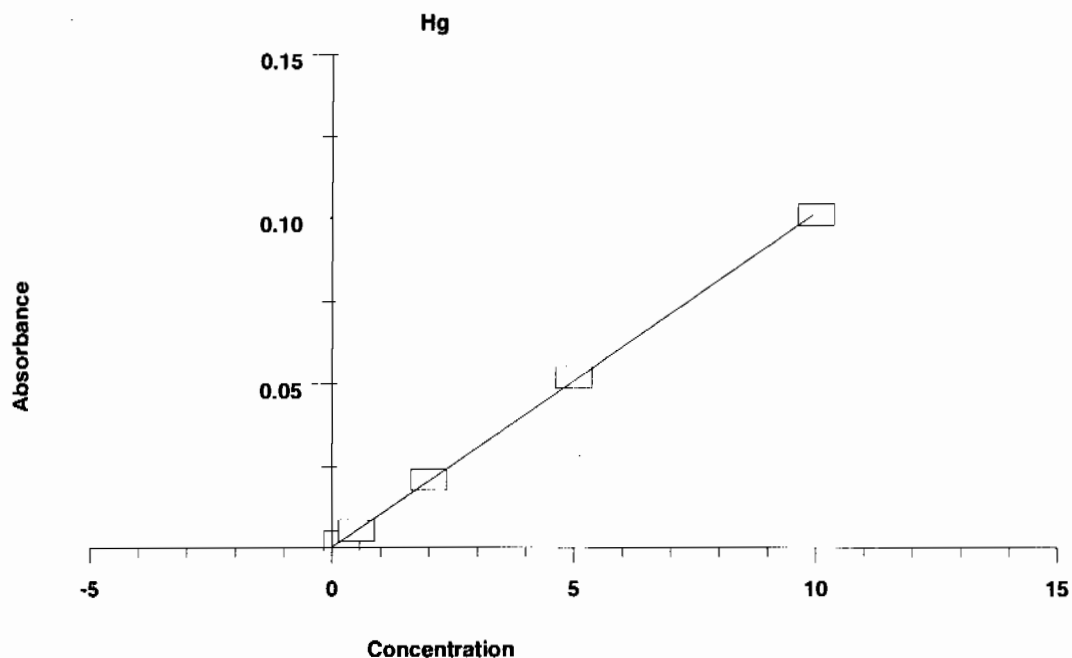
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/18/2010
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.1014	0.1060	09:55:15	No
2			0.1009	0.1054	09:55:50	No
Mean:			0.1011			
SD :			0.0004			
%RSD:			0.3679			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99989 Slope: 0.01014
Intercept : 0.00028

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0046	---	----	----	----
S0.2	0.0018	0.200	0.152	0.0001	7.3
S0.5	0.0053	0.500	0.494	0.0001	2.3
S2.0	0.0210	2.000	2.039	0.0000	0.1
S5.0	0.0520	5.000	5.098	0.0002	0.3
S10	0.1011	10.000	9.944	0.0004	0.4
Correlation Coefficient: 0.99989		Slope:	0.01014	Intercept: 0.0003	



=====

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 02/18/2010
 Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.154	5.154	0.0525	0.0571	09:57:18	No
2	5.108	5.108	0.0521	0.0566	09:57:53	No
Mean:	5.131	5.131	0.0523			
SD :	0.0323	0.0323	0.0003			
%RSD:	0.6	0.6	0.6260			

QC value within specified limits.

=====

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 02/18/2010
 Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.120	-0.120	-0.0009	0.0036	09:59:15	No
2	-0.138	-0.138	-0.0011	0.0034	09:59:50	No
Mean:	-0.129	-0.129	-0.0010			
SD :	0.0127	0.0127	0.0001			
%RSD:	9.9	9.9	12.5442			

QC value within specified limits.

=====

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 02/18/2010
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.225	0.225	0.0026	0.0071	10:01:12	No
2	0.211	0.211	0.0024	0.0070	10:01:47	No
Mean:	0.218	0.218	0.0025			
SD :	0.0095	0.0095	0.0001			
%RSD:	4.3	4.3	3.8605			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/18/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.040	5.040	0.0514	0.0559	10:03:12	No
2	5.078	5.078	0.0518	0.0563	10:03:46	No
Mean:	5.059	5.059	0.0516			
SD :	0.0274	0.0274	0.0003			
%RSD:	0.5	0.5	0.5390			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/18/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0001	0.0044	10:05:14	No
2	-0.052	-0.052	-0.0003	0.0043	10:05:49	No
Mean:	-0.046	-0.046	-0.0002			
SD :	0.0083	0.0083	0.0001			
%RSD:	18.0	18.0	43.9084			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/18/2010

Sample ID: 1202037115|i||950565|MB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.073	-0.073	-0.0005	0.0041	10:07:15	No
2	-0.088	-0.088	-0.0006	0.0039	10:07:50	No
Mean:	-0.080	-0.080	-0.0005			
SD :	0.0102	0.0102	0.0001			
%RSD:	12.7	12.7	19.1745			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/18/2010

Sample ID: 1202037116|i|10||LCS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.092	4.092	0.0418	0.0463	10:09:15	No
2	3.952	3.952	0.0404	0.0449	10:09:50	No
Mean:	4.022	4.022	0.0411			
SD :	0.0991	0.0991	0.0010			
%RSD:	2.5	2.5	2.4475			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/18/2010

Sample ID: 245969001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.246	0.246	0.0028	0.0073	10:11:18	No
2	0.244	0.244	0.0027	0.0073	10:11:53	No
Mean:	0.245	0.245	0.0028			
SD :	0.0019	0.0019	0.0000			
%RSD:	0.8	0.8	0.7089			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/18/2010

Sample ID: 1202037117|i|||DUP

%RSD: 1.2 1.2 1.1178

=====
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/18/2010
 Sample ID: 245969004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.121	0.121	0.0015	0.0061	10:25:06	No
2	0.086	0.086	0.0011	0.0057	10:25:41	No
Mean:	0.103	0.103	0.0013			
SD :	0.0247	0.0247	0.0003			
%RSD:	23.9	23.9	18.9148			

=====
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.046	5.046	0.0515	0.0560	10:27:06	No
2	5.089	5.089	0.0519	0.0565	10:27:40	No
Mean:	5.068	5.068	0.0517			
SD :	0.0301	0.0301	0.0003			
%RSD:	0.6	0.6	0.5903			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.064	-0.064	-0.0004	0.0042	10:29:09	No
2	-0.067	-0.067	-0.0004	0.0042	10:29:44	No
Mean:	-0.065	-0.065	-0.0004			
SD :	0.0021	0.0021	0.0000			
%RSD:	3.3	3.3	5.6045			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/18/2010
 Sample ID: 245969005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.140	0.140	0.0017	0.0063	10:31:09	No
2	0.120	0.120	0.0015	0.0061	10:31:44	No
Mean:	0.130	0.130	0.0016			
SD :	0.0141	0.0141	0.0001			
%RSD:	10.8	10.8	8.9311			

=====
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/18/2010
 Sample ID: 245969006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0012	0.0058	10:33:07	No
2	0.085	0.085	0.0011	0.0057	10:33:42	No
Mean:	0.090	0.090	0.0012			
SD :	0.0078	0.0078	0.0001			
%RSD:	8.6	8.6	6.6265			

=====
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/18/2010
 Sample ID: 245969007|i|||

%RSD: 3.1 3.1 2.4888

=====
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/18/2010
 Sample ID: 245969013|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.245	0.245	0.0028	0.0073	10:47:09	No
2	0.224	0.224	0.0025	0.0071	10:47:44	No
Mean:	0.234	0.234	0.0027			
SD :	0.0147	0.0147	0.0001			
%RSD:	6.3	6.3	5.6188			

=====
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/18/2010
 Sample ID: 245969014|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0017	0.0063	10:49:12	No
2	0.132	0.132	0.0016	0.0062	10:49:47	No
Mean:	0.138	0.138	0.0017			
SD :	0.0087	0.0087	0.0001			
%RSD:	6.3	6.3	5.2634			

=====
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.163	5.163	0.0526	0.0572	10:51:15	No
2	5.285	5.285	0.0539	0.0584	10:51:50	No
Mean:	5.224	5.224	0.0533			
SD :	0.0865	0.0865	0.0009			
%RSD:	1.7	1.7	1.6467			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0005	0.0041	10:53:18	No
2	-0.083	-0.083	-0.0006	0.0040	10:53:53	No
Mean:	-0.080	-0.080	-0.0005			
SD :	0.0044	0.0044	0.0000			
%RSD:	5.4	5.4	8.2472			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/18/2010
 Sample ID: 245969015|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.223	0.223	0.0025	0.0071	10:55:17	No
2	0.204	0.204	0.0023	0.0069	10:55:51	No
Mean:	0.213	0.213	0.0024			
SD :	0.0132	0.0132	0.0001			
%RSD:	6.2	6.2	5.4733			

=====
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/18/2010
 Sample ID: 1202039079|i||951467|MB

%RSD: 1.1 1.1 1.0627

=====
 Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/18/2010
 Sample ID: 1202039087|i|5||SDILT

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.127	-0.127	-0.0010	0.0035	11:08:50	No
2	-0.131	-0.131	-0.0011	0.0035	11:09:24	No
Mean:	-0.129	-0.129	-0.0010			
SD :	0.0029	0.0029	0.0000			
%RSD:	2.2	2.2	2.8265			

=====
 Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 02/18/2010
 Sample ID: 246285002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.103	0.103	0.0013	0.0059	11:10:48	No
2	0.090	0.090	0.0012	0.0058	11:11:23	No
Mean:	0.097	0.097	0.0013			
SD :	0.0086	0.0086	0.0001			
%RSD:	8.9	8.9	6.9719			

=====
 Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 02/18/2010
 Sample ID: 246285003|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.328	0.328	0.0036	0.0082	11:12:47	No
2	0.310	0.310	0.0034	0.0080	11:13:23	No
Mean:	0.319	0.319	0.0035			
SD :	0.0125	0.0125	0.0001			
%RSD:	3.9	3.9	3.6171			

=====
 Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0530	0.0575	11:14:47	No
2	5.107	5.107	0.0521	0.0566	11:15:22	No
Mean:	5.151	5.151	0.0525			
SD :	0.0627	0.0627	0.0006			
%RSD:	1.2	1.2	1.2114			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0008	0.0038	11:16:50	No
2	-0.107	-0.107	-0.0008	0.0037	11:17:25	No
Mean:	-0.106	-0.106	-0.0008			
SD :	0.0020	0.0020	0.0000			
%RSD:	1.9	1.9	2.5083			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 02/18/2010
 Sample ID: 246285004|i|||

%RSD: 2.1 2.1 1.9191

=====
 Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 02/18/2010
 Sample ID: 246285010|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.122	0.122	0.0015	0.0061	11:30:55	No
2	0.119	0.119	0.0015	0.0060	11:31:30	No
Mean:	0.121	0.121	0.0015			
SD :	0.0026	0.0026	0.0000			
%RSD:	2.2	2.2	1.7555			

=====
 Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 02/18/2010
 Sample ID: 246285011|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.024	-0.024	0.0000	0.0046	11:32:50	No
2	-0.033	-0.033	-0.0001	0.0045	11:33:24	No
Mean:	-0.028	-0.028	0.0000			
SD :	0.0065	0.0065	0.0001			
%RSD:	22.9	22.9	658.9645			

=====
 Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 02/18/2010
 Sample ID: 246291001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.580	0.580	0.0062	0.0107	11:34:44	No
2	0.579	0.579	0.0061	0.0107	11:35:19	No
Mean:	0.579	0.579	0.0062			
SD :	0.0007	0.0007	0.0000			
%RSD:	0.1	0.1	0.1126			

=====
 Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 02/18/2010
 Sample ID: 246291002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.075	-0.075	-0.0005	0.0041	11:36:41	No
2	-0.092	-0.092	-0.0007	0.0039	11:37:16	No
Mean:	-0.084	-0.084	-0.0006			
SD :	0.0120	0.0120	0.0001			
%RSD:	14.3	14.3	21.3135			

=====
 Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.997	4.997	0.0510	0.0555	11:38:40	No
2	5.018	5.018	0.0512	0.0557	11:39:15	No
Mean:	5.007	5.007	0.0511			
SD :	0.0152	0.0152	0.0002			
%RSD:	0.3	0.3	0.3010			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.154	-0.154	-0.0013	0.0033	11:40:43	No
2	-0.153	-0.153	-0.0013	0.0033	11:41:18	No
Mean:	-0.154	-0.154	-0.0013			
SD :	0.0011	0.0011	0.0000			
%RSD:	0.7	0.7	0.8705			

QC value within specified limits.

=====

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 02/18/2010
Sample ID: 246291003|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	1.117	1.117	0.0116	0.0162	11:42:43	No
2	1.113	1.113	0.0116	0.0161	11:43:18	No
Mean:	1.115	1.115	0.0116			
SD :	0.0031	0.0031	0.0000			
%RSD:	0.3	0.3	0.2711			

=====

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 02/18/2010
Sample ID: 246291004|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.954	0.954	0.0099	0.0145	11:44:40	No
2	0.930	0.930	0.0097	0.0143	11:45:15	No
Mean:	0.942	0.942	0.0098			
SD :	0.0168	0.0168	0.0002			
%RSD:	1.8	1.8	1.7363			

=====

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 02/18/2010
Sample ID: 246291005|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0005	0.0050	11:46:37	No
2	0.013	0.013	0.0004	0.0050	11:47:12	No
Mean:	0.016	0.016	0.0004			
SD :	0.0038	0.0038	0.0000			
%RSD:	24.1	24.1	8.8365			

=====

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 02/18/2010
Sample ID: 246291006|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0001	0.0047	11:48:34	No
2	-0.026	-0.026	0.0000	0.0046	11:49:09	No
Mean:	-0.020	-0.020	0.0001			
SD :	0.0078	0.0078	0.0001			
%RSD:	38.5	38.5	110.3645			

=====

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 02/18/2010
Sample ID: 246291007|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0002	0.0043	11:50:33	No
2	-0.052	-0.052	-0.0003	0.0043	11:51:08	No
Mean:	-0.050	-0.050	-0.0002			
SD :	0.0027	0.0027	0.0000			

%RSD: 5.5 5.5 11.9973

=====
 Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 02/18/2010
 Sample ID: 246291008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.378	0.378	0.0041	0.0087	11:52:32	No
2	0.374	0.374	0.0041	0.0086	11:53:06	No
Mean:	0.376	0.376	0.0041			
SD :	0.0033	0.0033	0.0000			
%RSD:	0.9	0.9	0.8199			

=====
 Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 02/18/2010
 Sample ID: 246291009|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	1.880	1.880	0.0193	0.0239	11:54:30	No
2	1.884	1.884	0.0194	0.0239	11:55:05	No
Mean:	1.882	1.882	0.0194			
SD :	0.0028	0.0028	0.0000			
%RSD:	0.1	0.1	0.1449			

=====
 Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 02/18/2010
 Sample ID: 1202039184|i||951512|MB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.178	-0.178	-0.0015	0.0030	11:56:29	No
2	-0.189	-0.189	-0.0016	0.0029	11:57:04	No
Mean:	-0.183	-0.183	-0.0016			
SD :	0.0082	0.0082	0.0001			
%RSD:	4.5	4.5	5.2496			

=====
 Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 02/18/2010
 Sample ID: 1202039185|i|10||LCS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.043	4.043	0.0413	0.0458	11:58:29	No
2	4.136	4.136	0.0422	0.0468	11:59:04	No
Mean:	4.090	4.090	0.0418			
SD :	0.0663	0.0663	0.0007			
%RSD:	1.6	1.6	1.6101			

=====
 Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 02/18/2010
 Sample ID: 245960001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.131	0.131	0.0016	0.0062	12:00:31	No
2	0.129	0.129	0.0016	0.0061	12:01:06	No
Mean:	0.130	0.130	0.0016			
SD :	0.0018	0.0018	0.0000			
%RSD:	1.4	1.4	1.1554			

=====
 Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
------	------------	---------	---------	------	------	------

#	µg/L	µg/L	Signal	Height		Stored
1	5.033	5.033	0.0513	0.0559	12:02:32	No
2	4.998	4.998	0.0510	0.0555	12:03:07	No
Mean:	5.015	5.015	0.0511			
SD :	0.0249	0.0249	0.0003			
%RSD:	0.5	0.5	0.4945			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.012	-0.012	0.0002	0.0047	12:04:35	No
2	-0.004	-0.004	0.0002	0.0048	12:05:09	No
Mean:	-0.008	-0.008	0.0002			
SD :	0.0053	0.0053	0.0001			
%RSD:	65.8	65.8	27.7211			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 02/18/2010
 Sample ID: 245960002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.081	0.081	0.0011	0.0057	12:06:35	No
2	0.068	0.068	0.0010	0.0055	12:07:10	No
Mean:	0.074	0.074	0.0010			
SD :	0.0085	0.0085	0.0001			
%RSD:	11.4	11.4	8.3596			

=====
 Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 02/18/2010
 Sample ID: 245960003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.196	0.196	0.0023	0.0068	12:08:32	No
2	0.194	0.194	0.0022	0.0068	12:09:06	No
Mean:	0.195	0.195	0.0023			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.3972			

=====
 Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 02/18/2010
 Sample ID: 245960004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.164	0.164	0.0019	0.0065	12:10:26	No
2	0.162	0.162	0.0019	0.0065	12:11:01	No
Mean:	0.163	0.163	0.0019			
SD :	0.0010	0.0010	0.0000			
%RSD:	0.6	0.6	0.5000			

=====
 Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 02/18/2010
 Sample ID: 245960005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.189	0.189	0.0022	0.0068	12:12:22	No
2	0.173	0.173	0.0020	0.0066	12:12:57	No
Mean:	0.181	0.181	0.0021			
SD :	0.0112	0.0112	0.0001			

#	µg/L	µg/L	Signal	Height		Stored
1	0.170	0.170	0.0020	0.0066	12:24:01	No
2	0.165	0.165	0.0020	0.0065	12:24:36	No
Mean:	0.168	0.168	0.0020			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.9	1.9	1.6534			

=====

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 02/18/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.047	5.047	0.0515	0.0560	12:26:01	No
2	5.085	5.085	0.0519	0.0564	12:26:36	No
Mean:	5.066	5.066	0.0517			
SD :	0.0274	0.0274	0.0003			
%RSD:	0.5	0.5	0.5371			

QC value within specified limits.

=====

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 02/18/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.010	-0.010	0.0002	0.0047	12:28:04	No
2	-0.005	-0.005	0.0002	0.0048	12:28:39	No
Mean:	-0.008	-0.008	0.0002			
SD :	0.0034	0.0034	0.0000			
%RSD:	43.5	43.5	17.5315			

QC value within specified limits.

=====

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 02/18/2010

Sample ID: 246470001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	9.300	9.300	0.0946	0.0992	12:30:05	No
2	9.140	9.140	0.0930	0.0975	12:30:40	No
Mean:	9.220	9.220	0.0938			
SD :	0.1128	0.1128	0.0011			
%RSD:	1.2	1.2	1.2200			

=====

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 02/18/2010

Sample ID: 1202039186|i|||DUP

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	9.013	9.013	0.0917	0.0962	12:32:04	No
2	9.029	9.029	0.0918	0.0964	12:32:39	No
Mean:	9.021	9.021	0.0918			
SD :	0.0110	0.0110	0.0001			
%RSD:	0.1	0.1	0.1221			

=====

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 02/18/2010

Sample ID: 1202039187|i|||MS

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	12.91	12.91	0.1312	0.1358	12:34:03	No
Sample absorbance is greater than that of the highest standard.						
2	12.95	12.95	0.1316	0.1362	12:34:37	No
Sample absorbance is greater than that of the highest standard.						

2 14.03 14.03 0.1426 0.1471 12:44:30 No
 Sample absorbance is greater than that of the highest standard.
 Mean: 14.03 14.03 0.1426
 SD : 0.0063 0.0063 0.0001
 %RSD:
 Sample absorbance is greater than that of the highest standard.

=====

Element: Hg Seq. No.: 92 AS Loc.: 80 Date: 02/18/2010
 Sample ID: 246470005|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	160.5	160.5	1.6280	1	1.6326	12:45:50 No
Sample absorbance is greater than that of the highest standard.						
2	148.3	148.3	1.5041	1	1.5087	12:46:24 No
Sample absorbance is greater than that of the highest standard.						
Mean:	154.4	154.4	1.5661			
SD :	8.640	8.640	0.0876			
%RSD:	5.6	5.6	5.5956			
Sample absorbance is greater than that of the highest standard.						

=====

Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 02/18/2010
 Sample ID: 246470006|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.699	0.699	0.0074	-	0.0119	12:47:45 No
2	1.028	1.028	0.0107		0.0153	12:48:20 No
Mean:	0.864	0.864	0.0090			
SD :	0.2332	0.2332	0.0024			
%RSD:	27.0	27.0	26.1783			

=====

Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.963	4.963	0.0506		0.0552	12:49:44 No
2	5.078	5.078	0.0518		0.0563	12:50:19 No
Mean:	5.020	5.020	0.0512			
SD :	0.0809	0.0809	0.0008			
%RSD:	1.6	1.6	1.6030			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0003		0.0049	12:51:47 No
2	0.006	0.006	0.0003		0.0049	12:52:21 No
Mean:	0.004	0.004	0.0003			
SD :	0.0038	0.0038	0.0000			
%RSD:	98.6	98.6	12.0691			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 02/18/2010
 Sample ID: 246470007|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.659	0.659	0.0070		0.0115	12:53:45 No

2	0.662	0.662	0.0070	0.0116	12:54:20	No
Mean:	0.661	0.661	0.0070			
SD :	0.0024	0.0024	0.0000			
%RSD:	0.4	0.4	0.3540			

=====

Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 02/18/2010
Sample ID: 246470008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	132.4	132.4	1.3427	1.3473	12:55:41	No
Sample absorbance is greater than that of the highest standard.						
2	129.8	129.8	1.3168	1.3214	12:56:15	No
Sample absorbance is greater than that of the highest standard.						
Mean:	131.1	131.1	1.3298			
SD :	1.806	1.806	0.0183			
%RSD:	1.4	1.4	1.3772			
Sample absorbance is greater than that of the highest standard.						

=====

Element: Hg Seq. No.: 98 AS Loc.: 84 Date: 02/18/2010
Sample ID: 1202039198|i||951518|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.258	-0.258	-0.0023	0.0022	12:57:37	No
2	-0.212	-0.212	-0.0019	0.0027	12:58:12	No
Mean:	-0.235	-0.235	-0.0021			
SD :	0.0325	0.0325	0.0003			
%RSD:	13.8	13.8	15.6227			

=====

Element: Hg Seq. No.: 99 AS Loc.: 7 Date: 02/18/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.855	4.855	0.0495	0.0541	13:07:12	No
2	5.001	5.001	0.0510	0.0556	13:07:48	No
Mean:	4.928	4.928	0.0503			
SD :	0.1032	0.1032	0.0010			
%RSD:	2.1	2.1	2.0829			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 100 AS Loc.: 8 Date: 02/18/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.060	-0.060	-0.0003	0.0042	13:09:15	No
2	-0.064	-0.064	-0.0004	0.0042	13:09:50	No
Mean:	-0.062	-0.062	-0.0004			
SD :	0.0033	0.0033	0.0000			
%RSD:	5.3	5.3	9.4330			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 101 AS Loc.: 77 Date: 02/18/2010
Sample ID: 246470002|i|50||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	1.359	1.359	0.0141	0.0186	13:11:17	No
2	1.328	1.328	0.0137	0.0183	13:11:52	No
Mean:	1.343	1.343	0.0139			

Element: Hg Seq. No.: 107 AS Loc.: 85 Date: 02/18/2010
 Sample ID: 1202039199|i|10||LCS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	3.945	3.945	0.0403	0.0449	13:22:55	No
2	3.805	3.805	0.0389	0.0434	13:23:30	No
Mean:	3.875	3.875	0.0396			
SD :	0.0991	0.0991	0.0010			
%RSD:	2.6	2.6	2.5383			

Element: Hg Seq. No.: 108 AS Loc.: 86 Date: 02/18/2010
 Sample ID: 245979001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.254	0.254	0.0029	0.0074	13:24:53	No
2	0.263	0.263	0.0029	0.0075	13:25:27	No
Mean:	0.259	0.259	0.0029			
SD :	0.0062	0.0062	0.0001			
%RSD:	2.4	2.4	2.1631			

Element: Hg Seq. No.: 109 AS Loc.: 87 Date: 02/18/2010
 Sample ID: 1202039200|i|||DUP

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.361	0.361	0.0039	0.0085	13:26:50	No
2	0.359	0.359	0.0039	0.0085	13:27:25	No
Mean:	0.360	0.360	0.0039			
SD :	0.0014	0.0014	0.0000			
%RSD:	0.4	0.4	0.3697			

Element: Hg Seq. No.: 110 AS Loc.: 88 Date: 02/18/2010
 Sample ID: 1202039201|i|||MS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	2.614	2.614	0.0268	0.0313	13:28:49	No
2	2.549	2.549	0.0261	0.0307	13:29:24	No
Mean:	2.581	2.581	0.0265			
SD :	0.0456	0.0456	0.0005			
%RSD:	1.8	1.8	1.7476			

Element: Hg Seq. No.: 111 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.837	4.837	0.0493	0.0539	13:30:49	No
2	4.919	4.919	0.0502	0.0547	13:31:24	No
Mean:	4.878	4.878	0.0497			
SD :	0.0586	0.0586	0.0006			
%RSD:	1.2	1.2	1.1946			

QC value within specified limits.

Element: Hg Seq. No.: 112 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0040	13:32:52	No

2 -0.081 -0.081 -0.0005 0.0040 13:33:28 No
 Mean: -0.082 -0.082 -0.0006
 SD : 0.0023 0.0023 0.0000
 %RSD: 2.8 2.8 4.2405
 QC value within specified limits.

=====

Element: Hg Seq. No.: 113 AS Loc.: 89 Date: 02/18/2010
 Sample ID: 1202039207|i|||MSD

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	2.588	2.588	0.0265	0.0311	13:34:54	No
2	2.636	2.636	0.0270	0.0316	13:35:28	No
Mean:	2.612	2.612	0.0268			
SD :	0.0337	0.0337	0.0003			
%RSD:	1.3	1.3	1.2787			

=====

Element: Hg Seq. No.: 114 AS Loc.: 90 Date: 02/18/2010
 Sample ID: 1202039206|i|5||SDILT

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.181	-0.181	-0.0016	0.0030	13:36:52	No
2	-0.194	-0.194	-0.0017	0.0029	13:37:27	No
Mean:	-0.187	-0.187	-0.0016			
SD :	0.0087	0.0087	0.0001			
%RSD:	4.7	4.7	5.4633			

=====

Element: Hg Seq. No.: 115 AS Loc.: 91 Date: 02/18/2010
 Sample ID: 245979002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0021	0.0066	13:38:53	No
2	0.163	0.163	0.0019	0.0065	13:39:27	No
Mean:	0.169	0.169	0.0020			
SD :	0.0091	0.0091	0.0001			
%RSD:	5.4	5.4	4.6298			

=====

Element: Hg Seq. No.: 116 AS Loc.: 92 Date: 02/18/2010
 Sample ID: 245979003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.163	-0.163	-0.0014	0.0032	13:40:50	No
2	-0.207	-0.207	-0.0018	0.0027	13:41:24	No
Mean:	-0.185	-0.185	-0.0016			
SD :	0.0313	0.0313	0.0003			
%RSD:	16.9	16.9	19.8151			

=====

Element: Hg Seq. No.: 117 AS Loc.: 93 Date: 02/18/2010
 Sample ID: 245979004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.191	-0.191	-0.0017	0.0029	13:42:43	No
2	-0.198	-0.198	-0.0017	0.0028	13:43:18	No
Mean:	-0.194	-0.194	-0.0017			
SD :	0.0050	0.0050	0.0001			
%RSD:	2.6	2.6	2.9823			

=====

Element: Hg Seq. No.: 118 AS Loc.: 94 Date: 02/18/2010
 Sample ID: 245979005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.056	-0.056	-0.0003	0.0043	13:44:38	No
2	-0.058	-0.058	-0.0003	0.0043	13:45:13	No
Mean:	-0.057	-0.057	-0.0003			
SD :	0.0012	0.0012	0.0000			
%RSD:	2.2	2.2	4.2318			

=====
 Element: Hg Seq. No.: 119 AS Loc.: 95 Date: 02/18/2010
 Sample ID: 245979006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.153	-0.153	-0.0013	0.0033	13:46:33	No
2	-0.166	-0.166	-0.0014	0.0032	13:47:08	No
Mean:	-0.159	-0.159	-0.0013			
SD :	0.0092	0.0092	0.0001			
%RSD:	5.8	5.8	6.9882			

=====
 Element: Hg Seq. No.: 120 AS Loc.: 96 Date: 02/18/2010
 Sample ID: 245979007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0002	0.0043	13:48:28	No
2	-0.051	-0.051	-0.0002	0.0043	13:49:03	No
Mean:	-0.050	-0.050	-0.0002			
SD :	0.0010	0.0010	0.0000			
%RSD:	2.1	2.1	4.5799			

=====
 Element: Hg Seq. No.: 121 AS Loc.: 97 Date: 02/18/2010
 Sample ID: 245979008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.235	-0.235	-0.0021	0.0025	13:50:24	No
2	-0.230	-0.230	-0.0021	0.0025	13:50:59	No
Mean:	-0.233	-0.233	-0.0021			
SD :	0.0034	0.0034	0.0000			
%RSD:	1.5	1.5	1.6542			

=====
 Element: Hg Seq. No.: 122 AS Loc.: 98 Date: 02/18/2010
 Sample ID: 245979009|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0009	0.0036	13:52:20	No
2	-0.123	-0.123	-0.0010	0.0036	13:52:55	No
Mean:	-0.121	-0.121	-0.0010			
SD :	0.0027	0.0027	0.0000			
%RSD:	2.2	2.2	2.8459			

=====
 Element: Hg Seq. No.: 123 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.340	2.340	0.0240	0.0286	13:54:19	No
2	2.314	2.314	0.0237	0.0283	13:54:55	No

Mean: 2.327 2.327 0.0239
 SD : 0.0187 0.0187 0.0002
 %RSD: 0.8 0.8 0.7933
 QC failed, value less than lower limit for Hg.
 Current analysis method being continued.

=====

Element: Hg Seq. No.: 124 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.244	-0.244	-0.0022	0.0024	13:56:23	No
2	-0.237	-0.237	-0.0021	0.0024	13:56:57	No
Mean:	-0.241	-0.241	-0.0022			
SD :	0.0044	0.0044	0.0000			
%RSD:	1.8	1.8	2.0728			

=====

Element: Hg Seq. No.: 125 AS Loc.: 7 Date: 02/18/2010
 Sample ID: Sample007

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.253	5.253	0.0535	0.0581	14:00:37	No
2	5.259	5.259	0.0536	0.0582	14:01:12	No
Mean:	5.256	5.256	0.0536			
SD :	0.0047	0.0047	0.0000			
%RSD:						

=====
Element: Hg Seq. No.: 126 AS Loc.: 7 Date: 02/18/2010
Sample ID: CCV

Repl SampleConc StndConc BlnkCorr Peak Time Peak
ug/L ug/L Signal Height Stored
1 5.315 5.315 0.0542 0.0587 14:05:21 No
2 5.331 5.331 0.0543 0.0589 14:05:57 No
Mean: 5.323 5.323 0.0543
SD : 0.0113 0.0113 0.0001
%RSD: 0.2 0.2 0.2119
QC value within specified limits.

=====
Element: Hg Seq. No.: 127 AS Loc.: 8 Date: 02/18/2010
Sample ID: CCB

Repl SampleConc StndConc BlnkCorr Peak Time Peak
ug/L ug/L Signal Height Stored
1 -0.090 -0.090 -0.0006 0.0039 14:07:24 No
2 -0.098 -0.098 -0.0007 0.0038 14:08:00 No
Mean: -0.094 -0.094 -0.0007
SD : 0.0052 0.0052 0.0001
%RSD: 5.6 5.6 7.8415
QC value within specified limits.

=====
Element: Hg Seq. No.: 128 AS Loc.: 80 Date: 02/18/2010
Sample ID: 246470005|i|400|951512|

Repl SampleConc StndConc BlnkCorr Peak Time Peak
ug/L ug/L Signal Height Stored
1 6.212 6.212 0.0633 0.0678 14:09:24 No
2 6.240 6.240 0.0636 0.0681 14:09:59 No
Mean: 6.226 6.226 0.0634
SD : 0.0200 0.0200 0.0002
%RSD: 0.3 0.3 0.3204

=====
Element: Hg Seq. No.: 129 AS Loc.: 89 Date: 02/18/2010
Sample ID: 1202039207|i||951518|MSD

Repl SampleConc StndConc BlnkCorr Peak Time Peak
ug/L ug/L Signal Height Stored
1 2.609 2.609 0.0267 0.0313 14:11:22 No
2 2.628 2.628 0.0269 0.0315 14:11:57 No
Mean: 2.619 2.619 0.0268
SD : 0.0134 0.0134 0.0001
%RSD: 0.5 0.5 0.5075

=====
Element: Hg Seq. No.: 130 AS Loc.: 90 Date: 02/18/2010
Sample ID: 1202039206|i|5||SDILT

Repl SampleConc StndConc BlnkCorr Peak Time Peak
ug/L ug/L Signal Height Stored
1 -0.085 -0.085 -0.0006 0.0040 14:13:22 No
2 -0.084 -0.084 -0.0006 0.0040 14:13:57 No
Mean: -0.085 -0.085 -0.0006
SD : 0.0010 0.0010 0.0000
%RSD: 1.1 1.1 1.6625

=====
Element: Hg Seq. No.: 131 AS Loc.: 91 Date: 02/18/2010
Sample ID: 245979002|i|||

Repl SampleConc StndConc BlnkCorr Peak Time Peak
ug/L ug/L Signal Height Stored
1 0.170 0.170 0.0020 0.0066 14:15:22 No

Sample ID: 245979008|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0002	0.0044	14:26:55	No
2	-0.066	-0.066	-0.0004	0.0042	14:27:30	No
Mean:	-0.054	-0.054	-0.0003			
SD :	0.0172	0.0172	0.0002			
%RSD:	31.6	31.6	63.5355			

=====

Element: Hg Seq. No.: 138 AS Loc.: 7 Date: 02/18/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.087	5.087	0.0519	0.0564	14:28:54	No
2	5.101	5.101	0.0520	0.0566	14:29:29	No
Mean:	5.094	5.094	0.0519			
SD :	0.0098	0.0098	0.0001			
%RSD:	0.2	0.2	0.1911			

QC value within specified limits.

=====

Element: Hg Seq. No.: 139 AS Loc.: 8 Date: 02/18/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0007	0.0039	14:30:56	No
2	-0.088	-0.088	-0.0006	0.0039	14:31:32	No
Mean:	-0.091	-0.091	-0.0006			
SD :	0.0043	0.0043	0.0000			
%RSD:	4.7	4.7	6.7349			

QC value within specified limits.

=====

Element: Hg Seq. No.: 140 AS Loc.: 98 Date: 02/18/2010

Sample ID: 245979009|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.118	0.118	0.0015	0.0060	14:32:57	No
2	0.081	0.081	0.0011	0.0057	14:33:32	No
Mean:	0.099	0.099	0.0013			
SD :	0.0257	0.0257	0.0003			
%RSD:	25.9	25.9	20.2774			

=====

Element: Hg Seq. No.: 141 AS Loc.: 99 Date: 02/18/2010

Sample ID: 245979010|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0006	0.0052	14:34:54	No
2	0.039	0.039	0.0007	0.0052	14:35:28	No
Mean:	0.038	0.038	0.0007			
SD :	0.0024	0.0024	0.0000			
%RSD:	6.3	6.3	3.6823			

=====

Element: Hg Seq. No.: 142 AS Loc.: 100 Date: 02/18/2010

Sample ID: 245979011|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0005	0.0040	14:36:50	No

```

  2      -0.092   -0.092   -0.0007   0.0039   14:37:25   No
Mean:    -0.086   -0.086   -0.0006
SD :      0.0087   0.0087   0.0001
%RSD:     10.1    10.1    14.8098

```

```

=====
Element: Hg      Seq. No.: 143      AS Loc.: 101      Date: 02/18/2010
Sample ID: 245979012|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Height    Stored
1      -0.121     -0.121    -0.0010   0.0036    14:38:48   No
2      -0.130     -0.130    -0.0010   0.0035    14:39:23   No
Mean:   -0.125     -0.125    -0.0010
SD :     0.0058     0.0058    0.0001
%RSD:      4.7      4.7     5.9459

```

```

=====
Element: Hg      Seq. No.: 144      AS Loc.: 102      Date: 02/18/2010
Sample ID: 245979013|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Height    Stored
1       0.173      0.173     0.0020    0.0066    14:40:46   No
2       0.151      0.151     0.0018    0.0064    14:41:21   No
Mean:   0.162      0.162     0.0019
SD :     0.0154     0.0154    0.0002
%RSD:      9.5      9.5     8.1041

```

```

=====
Element: Hg      Seq. No.: 145      AS Loc.: 103      Date: 02/18/2010
Sample ID: 245979014|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Height    Stored
1      -0.075     -0.075    -0.0005    0.0041    14:42:45   No
2      -0.078     -0.078    -0.0005    0.0040    14:43:20   No
Mean:   -0.077     -0.077    -0.0005
SD :     0.0021     0.0021    0.0000
%RSD:      2.8      2.8     4.3162

```

```

=====
Element: Hg      Seq. No.: 146      AS Loc.: 104      Date: 02/18/2010
Sample ID: 245979015|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Height    Stored
1       0.037      0.037     0.0007    0.0052    14:44:45   No
2       0.029      0.029     0.0006    0.0051    14:45:20   No
Mean:   0.033      0.033     0.0006
SD :     0.0057     0.0057    0.0001
%RSD:     17.3     17.3     9.4840

```

```

=====
Element: Hg      Seq. No.: 147      AS Loc.: 7        Date: 02/18/2010
Sample ID: CCV

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Height    Stored
1       4.935      4.935     0.0503    0.0549    14:46:45   No
2       5.008      5.008     0.0511    0.0556    14:47:20   No
Mean:   4.971      4.971     0.0507
SD :     0.0515     0.0515    0.0005
%RSD:      1.0      1.0     1.0306
QC value within specified limits.

```

Element: Hg Seq. No.: 148 AS Loc.: 8 Date: 02/18/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0009	0.0036	14:48:48	No
2	-0.103	-0.103	-0.0008	0.0038	14:49:23	No
Mean:	-0.111	-0.111	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	9.9	9.9	13.1689			

QC value within specified limits.

=====
Element: Hg Seq. No.: 149 AS Loc.: 12 Date: 02/18/2010
Sample ID: 1202039216|i||951523|MB
=====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0002	0.0044	14:51:27	No
2	-0.052	-0.052	-0.0002	0.0043	14:52:02	No
Mean:	-0.048	-0.048	-0.0002			
SD :	0.0058	0.0058	0.0001			
%RSD:	12.3	12.3	28.8669			

=====
Element: Hg Seq. No.: 150 AS Loc.: 13 Date: 02/18/2010
Sample ID: 1202039217|i|10||LCS
=====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.143	4.143	0.0423	0.0469	14:53:26	No
2	4.032	4.032	0.0412	0.0457	14:54:02	No
Mean:	4.088	4.088	0.0417			
SD :	0.0787	0.0787	0.0008			
%RSD:	1.9	1.9	1.9124			

=====
Element: Hg Seq. No.: 151 AS Loc.: 14 Date: 02/18/2010
Sample ID: 245998001|i|||
=====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.323	0.323	0.0036	0.0081	14:55:28	No
2	0.307	0.307	0.0034	0.0080	14:56:03	No
Mean:	0.315	0.315	0.0035			
SD :	0.0114	0.0114	0.0001			
%RSD:	3.6	3.6	3.3400			

=====
Element: Hg Seq. No.: 152 AS Loc.: 15 Date: 02/18/2010
Sample ID: 245998002|i|||
=====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.060	0.060	0.0009	0.0054	14:57:29	No
2	0.059	0.059	0.0009	0.0054	14:58:04	No
Mean:	0.059	0.059	0.0009			
SD :	0.0005	0.0005	0.0000			
%RSD:	0.9	0.9	0.6315			

=====
Element: Hg Seq. No.: 153 AS Loc.: 16 Date: 02/18/2010
Sample ID: 245998003|i|||
=====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.202	0.202	0.0023	0.0069	14:59:32	No
2	0.207	0.207	0.0024	0.0069	15:00:07	No
Mean:	0.205	0.205	0.0024			
SD :	0.0036	0.0036	0.0000			
%RSD:	1.8	1.8	1.5481			

=====
Element: Hg Seq. No.: 154 AS Loc.: 17 Date: 02/18/2010
Sample ID: 245998004|i|||
=====

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.138	0.138	0.0017	0.0062	15:01:31	No
2	0.127	0.127	0.0016	0.0061	15:02:05	No
Mean:	0.132	0.132	0.0016			

SD : 0.0079 0.0079 0.0001
 %RSD: 5.9 5.9 4.9302

=====
 Element: Hg Seq. No.: 155 AS Loc.: 18 Date: 02/18/2010
 Sample ID: 245998005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.171	0.171	0.0020	0.0066	15:03:24	No
2	0.153	0.153	0.0018	0.0064	15:03:59	No
Mean:	0.162	0.162	0.0019			
SD :	0.0130	0.0130	0.0001			
%RSD:	8.0	8.0	6.8596			

=====
 Element: Hg Seq. No.: 156 AS Loc.: 19 Date: 02/18/2010
 Sample ID: 245998006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.410	0.410	0.0044	0.0090	15:05:20	No
2	0.408	0.408	0.0044	0.0090	15:05:54	No
Mean:	0.409	0.409	0.0044			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.2	0.2	0.2106			

=====
 Element: Hg Seq. No.: 157 AS Loc.: 20 Date: 02/18/2010
 Sample ID: 245998007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.368	0.368	0.0040	0.0086	15:07:17	No
2	0.368	0.368	0.0040	0.0086	15:07:51	No
Mean:	0.368	0.368	0.0040			
SD :	0.0002	0.0002	0.0000			
%RSD:						

=====
 Element: Hg Seq. No.: 158 AS Loc.: 21 Date: 02/18/2010
 Sample ID: 245998008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.239	0.239	0.0027	0.0073	15:09:13	No
2	0.230	0.230	0.0026	0.0072	15:09:48	No
Mean:	0.234	0.234	0.0027			
SD :	0.0059	0.0059	0.0001			
%RSD:	2.5	2.5	2.2384			

=====
 Element: Hg Seq. No.: 159 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.059	5.059	0.0516	0.0561	15:11:12	No
2	5.093	5.093	0.0519	0.0565	15:11:47	No
Mean:	5.076	5.076	0.0518			
SD :	0.0240	0.0240	0.0002			
%RSD:	0.5	0.5	0.4698			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 160 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height              Stored
1      -0.120     -0.120    -0.0009   0.0036    15:13:15  No
2      -0.110     -0.110    -0.0008   0.0037    15:13:50  No
Mean:  -0.115     -0.115    -0.0009
SD :    0.0066     0.0066    0.0001
%RSD:   5.7       5.7       7.4766
QC value within specified limits.

```

```

=====
Element: Hg      Seq. No.: 161      AS Loc.: 22      Date: 02/18/2010
Sample ID: 245998009|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height              Stored
1      0.145      0.145     0.0018    0.0063    15:15:16  No
2      0.145      0.145     0.0017    0.0063    15:15:50  No
Mean:  0.145      0.145     0.0017
SD :    0.0005     0.0005    0.0000
%RSD:  0.4        0.4        0.3053

```

```

=====
Element: Hg      Seq. No.: 162      AS Loc.: 23      Date: 02/18/2010
Sample ID: 246012001|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height              Stored
1      0.212      0.212     0.0024    0.0070    15:17:14  No
2      0.203      0.203     0.0023    0.0069    15:17:49  No
Mean:  0.207      0.207     0.0024
SD :    0.0060     0.0060    0.0001
%RSD:  2.9        2.9        2.5477

```

```

=====
Element: Hg      Seq. No.: 163      AS Loc.: 24      Date: 02/18/2010
Sample ID: 1202039218|i|||DUP

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height              Stored
1      0.150      0.150     0.0018    0.0064    15:19:13  No
2      0.140      0.140     0.0017    0.0063    15:19:47  No
Mean:  0.145      0.145     0.0018
SD :    0.0070     0.0070    0.0001
%RSD:  4.8        4.8        4.0347

```

```

=====
Element: Hg      Seq. No.: 164      AS Loc.: 25      Date: 02/18/2010
Sample ID: 1202039219|i|||MS

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height              Stored
1      2.427      2.427     0.0249    0.0294    15:21:11  No
2      2.429      2.429     0.0249    0.0295    15:21:45  No
Mean:  2.428      2.428     0.0249
SD :    0.0018     0.0018    0.0000
%RSD:

```

```

=====
Element: Hg      Seq. No.: 165      AS Loc.: 26      Date: 02/18/2010
Sample ID: 1202039221|i|||MSD

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height              Stored
1      2.503      2.503     0.0257    0.0302    15:23:09  No
2      2.451      2.451     0.0251    0.0297    15:23:44  No
Mean:  2.477      2.477     0.0254

```

SD : 0.0365 0.0365 0.0004
 %RSD: 1.5 1.5 1.4594

=====
 Element: Hg Seq. No.: 166 AS Loc.: 27 Date: 02/18/2010
 Sample ID: 1202039220|i|5||SDILT

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0001	0.0045	15:25:09	No
2	-0.047	-0.047	-0.0002	0.0044	15:25:44	No
Mean:	-0.040	-0.040	-0.0001			
SD :	0.0088	0.0088	0.0001			
%RSD:	21.7	21.7	67.1438			

=====
 Element: Hg Seq. No.: 167 AS Loc.: 28 Date: 02/18/2010
 Sample ID: 246012002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0001	0.0045	15:27:10	No
2	-0.044	-0.044	-0.0002	0.0044	15:27:46	No
Mean:	-0.039	-0.039	-0.0001			
SD :	0.0075	0.0075	0.0001			
%RSD:	19.3	19.3	65.1493			

=====
 Element: Hg Seq. No.: 168 AS Loc.: 29 Date: 02/18/2010
 Sample ID: 246012003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.102	0.102	0.0013	0.0059	15:29:12	No
2	0.104	0.104	0.0013	0.0059	15:29:47	No
Mean:	0.103	0.103	0.0013			
SD :	0.0012	0.0012	0.0000			
%RSD:	1.1	1.1	0.9059			

=====
 Element: Hg Seq. No.: 169 AS Loc.: 30 Date: 02/18/2010
 Sample ID: 246012004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.313	0.313	0.0035	0.0080	15:31:14	No
2	0.307	0.307	0.0034	0.0080	15:31:48	No
Mean:	0.310	0.310	0.0034			
SD :	0.0039	0.0039	0.0000			
%RSD:	1.3	1.3	1.1643			

=====
 Element: Hg Seq. No.: 170 AS Loc.: 31 Date: 02/18/2010
 Sample ID: 246012005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.059	0.059	0.0009	0.0054	15:33:16	No
2	0.037	0.037	0.0007	0.0052	15:33:51	No
Mean:	0.048	0.048	0.0008			
SD :	0.0159	0.0159	0.0002			
%RSD:	33.1	33.1	21.1364			

=====
 Element: Hg Seq. No.: 171 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.141	5.141	0.0524	0.0570	15:35:18	No
2	5.094	5.094	0.0519	0.0565	15:35:53	No
Mean:	5.118	5.118	0.0522			
SD :	0.0332	0.0332	0.0003			
%RSD:	0.6	0.6	0.6445			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 172 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0009	0.0036	15:37:21	No
2	-0.124	-0.124	-0.0010	0.0036	15:37:56	No
Mean:	-0.122	-0.122	-0.0010			
SD :	0.0035	0.0035	0.0000			
%RSD:	2.9	2.9	3.6860			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 173 AS Loc.: 32 Date: 02/18/2010
 Sample ID: 246012006|i|

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.201	0.201	0.0023	0.0069	15:39:21	No
2	0.202	0.202	0.0023	0.0069	15:39:56	No
Mean:	0.202	0.202	0.0023			
SD :	0.0011	0.0011	0.0000			
%RSD:	0.5	0.5	0.4708			

=====
 Element: Hg Seq. No.: 174 AS Loc.: 33 Date: 02/18/2010
 Sample ID: 246012007|i|

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.127	0.127	0.0016	0.0061	15:41:16	No
2	0.137	0.137	0.0017	0.0062	15:41:51	No
Mean:	0.132	0.132	0.0016			
SD :	0.0070	0.0070	0.0001			
%RSD:	5.3	5.3	4.4081			

=====
 Element: Hg Seq. No.: 175 AS Loc.: 34 Date: 02/18/2010
 Sample ID: 246012008|i|

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.264	0.264	0.0030	0.0075	15:43:12	No
2	0.250	0.250	0.0028	0.0074	15:43:47	No
Mean:	0.257	0.257	0.0029			
SD :	0.0104	0.0104	0.0001			
%RSD:	4.0	4.0	3.6429			

=====
 Element: Hg Seq. No.: 176 AS Loc.: 35 Date: 02/18/2010
 Sample ID: 246012009|i|

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0000	0.0045	15:45:07	No
2	-0.031	-0.031	0.0000	0.0045	15:45:42	No
Mean:	-0.030	-0.030	0.0000			

Miscellaneous

Prep LogBook

Analyst: FGA
 Batch: 948773
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202032633		SW846 3050B	10-FEB-2010 13:30	0.503 g	50 mL	99.40358	51	g
LCS	1202032638		SW846 3050B	10-FEB-2010 13:30	0.51 g	50 mL	98.03922	.25	mL
SAMPLE	245998001		SW846 3050B	10-FEB-2010 13:30	0.514 g	50 mL	97.27626	.25	mL
DUP	1202032634	245998001	SW846 3050B	10-FEB-2010 13:30	0.514 g	50 mL	97.27626	.25	mL
SDILT	1202032635	245998001	SW846 3050B	10-FEB-2010 13:30	0.514 g	50 mL	97.27626	.25	mL
MS	1202032636	245998001	SW846 3050B	10-FEB-2010 13:30	0.512 g	50 mL	97.65625	.25	mL
MSD	1202032637	245998001	SW846 3050B	10-FEB-2010 13:30	0.519 g	50 mL	96.33911	.25	mL
SAMPLE	245998002		SW846 3050B	10-FEB-2010 13:30	0.5 g	50 mL	100		
SAMPLE	245998003		SW846 3050B	10-FEB-2010 13:30	0.51 g	50 mL	98.03922		
SAMPLE	245998004		SW846 3050B	10-FEB-2010 13:30	0.536 g	50 mL	93.28358		
SAMPLE	245998005		SW846 3050B	10-FEB-2010 13:30	0.502 g	50 mL	99.60159		
SAMPLE	245998006		SW846 3050B	10-FEB-2010 13:30	0.505 g	50 mL	99.0099		
SAMPLE	245998007		SW846 3050B	10-FEB-2010 13:30	0.502 g	50 mL	99.60159		
SAMPLE	245998008		SW846 3050B	10-FEB-2010 13:30	0.507 g	50 mL	98.61933		
SAMPLE	245998009		SW846 3050B	10-FEB-2010 13:30	0.512 g	50 mL	97.65625		
SAMPLE	246012001		SW846 3050B	10-FEB-2010 13:30	0.525 g	50 mL	95.2381		
SAMPLE	246012002		SW846 3050B	10-FEB-2010 13:30	0.509 g	50 mL	98.23183		
SAMPLE	246012003		SW846 3050B	10-FEB-2010 13:30	0.5 g	50 mL	100		
SAMPLE	246012004		SW846 3050B	10-FEB-2010 13:30	0.501 g	50 mL	99.8004		
SAMPLE	246012005		SW846 3050B	10-FEB-2010 13:30	0.529 g	50 mL	94.51796		
SAMPLE	246012006		SW846 3050B	10-FEB-2010 13:30	0.512 g	50 mL	97.65625		
SAMPLE	246012007		SW846 3050B	10-FEB-2010 13:30	0.524 g	50 mL	95.41985		
SAMPLE	246012008		SW846 3050B	10-FEB-2010 13:30	0.501 g	50 mL	99.8004		
SAMPLE	246012009		SW846 3050B	10-FEB-2010 13:30	0.505 g	50 mL	99.0099		
SAMPLE	246012010		SW846 3050B	10-FEB-2010 13:30	0.526 g	50 mL	95.05703		
SAMPLE	246012011		SW846 3050B	10-FEB-2010 13:30	0.528 g	50 mL	94.69697		

Reagent/Solvent Lot ID Amount Description

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

1265209	10 mL	HYDROCHLORIC ACID	Comments	Soft,brown,clumpy soil.
1264396	1.25 mL	Nitric Acid CONC.		

Prep LogBook

Analyst: _____ Verified by: _____

Batch: 948780

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202032646		SW846 3050B	10-FEB-2010 13:30	0.508 g	50 mL	98.4252	SOIL	g
LCS	1202032651		SW846 3050B	10-FEB-2010 13:30	0.52 g	50 mL	96.15385	SOIL	mL
SAMPLE	245998001		SW846 3050B	10-FEB-2010 13:30	0.514 g	50 mL	97.27626	SOIL	mL
DUP	1202032647	245998001	SW846 3050B	10-FEB-2010 13:30	0.52 g	50 mL	96.15385	SOIL	mL
SDILT	1202032648	245998001	SW846 3050B	10-FEB-2010 13:30	0.514 g	50 mL	97.27626	SOIL	mL
MS	1202032649	245998001	SW846 3050B	10-FEB-2010 13:30	0.51 g	50 mL	98.03922	SOIL	mL
MSD	1202032650	245998001	SW846 3050B	10-FEB-2010 13:30	0.513 g	50 mL	97.46589	SOIL	mL
SAMPLE	245998002		SW846 3050B	10-FEB-2010 13:30	0.5 g	50 mL	100	SOIL	mL
SAMPLE	245998003		SW846 3050B	10-FEB-2010 13:30	0.502 g	50 mL	99.60159	SOIL	mL
SAMPLE	245998004		SW846 3050B	10-FEB-2010 13:30	0.53 g	50 mL	94.33962	SOIL	mL
SAMPLE	245998005		SW846 3050B	10-FEB-2010 13:30	0.503 g	50 mL	99.40358	SOIL	mL
SAMPLE	245998006		SW846 3050B	10-FEB-2010 13:30	0.501 g	50 mL	99.8004	SOIL	mL
SAMPLE	245998007		SW846 3050B	10-FEB-2010 13:30	0.517 g	50 mL	96.7118	SOIL	mL
SAMPLE	245998008		SW846 3050B	10-FEB-2010 13:30	0.522 g	50 mL	95.78544	SOIL	mL
SAMPLE	245998009		SW846 3050B	10-FEB-2010 13:30	0.525 g	50 mL	95.2381	SOIL	mL
SAMPLE	246012001		SW846 3050B	10-FEB-2010 13:30	0.513 g	50 mL	97.46589	SOIL	mL
SAMPLE	246012002		SW846 3050B	10-FEB-2010 13:30	0.514 g	50 mL	97.27626	SOIL	mL
SAMPLE	246012003		SW846 3050B	10-FEB-2010 13:30	0.505 g	50 mL	99.0099	SOIL	mL
SAMPLE	246012004		SW846 3050B	10-FEB-2010 13:30	0.524 g	50 mL	95.41985	SOIL	mL
SAMPLE	246012005		SW846 3050B	10-FEB-2010 13:30	0.525 g	50 mL	95.2381	SOIL	mL
SAMPLE	246012006		SW846 3050B	10-FEB-2010 13:30	0.53 g	50 mL	94.33962	SOIL	mL
SAMPLE	246012007		SW846 3050B	10-FEB-2010 13:30	0.513 g	50 mL	97.46589	SOIL	mL
SAMPLE	246012008		SW846 3050B	10-FEB-2010 13:30	0.5 g	50 mL	100	SOIL	mL
SAMPLE	246012009		SW846 3050B	10-FEB-2010 13:30	0.52 g	50 mL	96.15385	SOIL	mL
SAMPLE	246012010		SW846 3050B	10-FEB-2010 13:30	0.521 g	50 mL	95.96929	SOIL	mL
SAMPLE	246012011		SW846 3050B	10-FEB-2010 13:30	0.526 g	50 mL	95.05703	SOIL	mL

Reagent/Solvent Lot ID _____ Amount _____ Description _____

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page# _____

Prep LogBook

1203655-02	1.5 mL	Hydrogen Peroxide 30%	Comments	Soft,brown,clumpy soil.
1264396	5 mL	Nitric Acid CONC.		

Prep LogBook

Analyst: TXB3
 Batch: 951522
 Lab SOP: GL-MA-E-010 REV# 23

Verified by:

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202039216		SW846 7471A Prep	17-FEB-2010 19:30	LCS	1202039217	U1031809A	.205	g
LCS	1202039217		SW846 7471A Prep	17-FEB-2010 19:30	MS	1202039219	WHG100217-14	.3	mL
SAMPLE	245998001		SW846 7471A Prep	17-FEB-2010 19:30	MSD	1202039221	WHG100217-14	.3	mL
SAMPLE	245998002		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998003		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998004		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998005		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998006		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998007		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998008		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	245998009		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012001		SW846 7471A Prep	17-FEB-2010 19:30					
DUP	1202039218	246012001	SW846 7471A Prep	17-FEB-2010 19:30					
MS	1202039219	246012001	SW846 7471A Prep	17-FEB-2010 19:30					
MSD	1202039221	246012001	SW846 7471A Prep	17-FEB-2010 19:30					
SDILT	1202039220	246012001	SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012002		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012003		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012004		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012005		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012006		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012007		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012008		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012009		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012010		SW846 7471A Prep	17-FEB-2010 19:30					
SAMPLE	246012011		SW846 7471A Prep	17-FEB-2010 19:30					

Reagent/Solvent Lot ID Amount Description
 1264796-A 1.125 mL Hydrochloric Acid Conc.
 1257474-I .375 mL NITRIC ACID
 1264984-C 7.5 mL 5% KMnO4 solution

Comments Sample 246012001 is a muddy rocky brown soil.
 Digestion Start Date: 17-FEB-10 19:30
 Digestion End Date: 17-FEB-10 20:00

GEL Laboratories LLC

Page#

Prep LogBook

125532-C		
WHG100217-07	2 mL	Hg reducing agent
WHG100217-08	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100217-11	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100217-09	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100217-10	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100217-12	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
		Mercury Working 2nd Source S 5.0/ICV

DATA EXCEPTION REPORT

Mo. Day Yr. 20-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 948776	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 245998(10-1517),246012(10-1523)

Application Issues:

Failed Recovery for MS/PS
Failed RPD for MS/MSD, or PS/PSD
Failed RPD for DUP
Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:
QC 1202032636MS
2. Failed RPD for DUP:
QC 1202032634DUP
3. Failed RPD for MS/MSD, or PS/PSD:
QC 1202032637MSD
4. Failed Recovery for MSD/PSD:
QC 1202032637MSD

DER Disposition:

1. The matrix spike recovery failed outside of the control limits for potassium and antimony 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 aluminum, cobalt, iron, lead, manganese, vanadium and zinc due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
4. The matrix spike duplicate recovery failed outside of the control limits for potassium and antimony 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 20-FEB-10

Data Validator/Group Leader:

Helen Camello 22-FEB-10

DATA EXCEPTION REPORT

Mo. Day Yr. 28-FEB-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: 948782	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245998(10-1517),246012(10-1523)			
Application Issues: Failed Recovery for MS/PS Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description: 1. Failed Recovery for MS/PS: QC 1202032649MS 2. Failed Recovery for MSD/PSD: QC 1202032650MSD		DER Disposition: The matrix spike and matrix spike duplicate failed outside the control limits for Se and Ni due to 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 28-FEB-10

Data Validator/Group Leader:

Samantha Jacobs 28-FEB-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Carnello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/-0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Carnello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 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

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100120-01 **Opened:** 20-JAN-10 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100120-06 **Opened:** 20-JAN-10 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI100210-48 **Opened:** 11-FEB-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **Received:** 10-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018807
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO₃
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100211-40 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO₃
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100211-41 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO₃
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100217-49.2 **Opened:** 19-FEB-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 17-FEB-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 20-FEB-10 **Lot Number :** 1018879
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: 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

Standard Logbook

Serial ID: UI100219-60 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI100219-61 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCaSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCaSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCaSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100217-01 **Opened:** 17-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 17-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 18-FEB-10 **Solvent :** 1mL HNO3 + Type1 H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Standard Logbook

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: IHG100217-02 **Opened:** 17-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 18-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: WHG100217-07 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100217-08 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100217-09 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100217-10 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100217-11 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100217-12 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100217-14 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 ug/L	.05 mL	250 mL	200 ug/L

Serial ID: <u>WI100219-42</u>	Opened: <u>19-FEB-10</u>	Balance Id : <u>216</u>
Name: <u>TRACE ICP 0.1 PPM STD.</u>	Received: <u>02-NOV-09</u>	Pipet Id : <u>3581809</u>
Type: <u>Working</u>	Expires: <u>20-FEB-10</u>	Solvent : <u>3%HCL and 1%HNO3 -1270010</u>

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.
WI100219-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100219-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100219-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100219-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100219-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI100219-43 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI100219-44 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1270010
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100219-45 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100219-46 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1270010
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: W1100219-47 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL & 1%HNO3-1270010
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100225-04AB **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100225-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100225-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100225-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100225-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100225-04B **Opened:** 25-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2% HNO_3 /1% HCl - 1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: <u>WMS100225-05B</u>	Opened: <u>25-FEB-10</u>	Balance Id : <u>40245216</u>
Name: <u>ICPMS ICV</u>	Received: <u>25-FEB-10</u>	Pipet Id : <u>1758088</u>
Type: <u>Working</u>	Expires: <u>26-FEB-10</u>	Solvent : <u>2%HNO3/1%HCl - 1272768</u>
Employee: <u>Rose Jenkins</u>		
Supplier: <u>GEL</u>		
Description: <u>ICPMS ICV</u>		
Comments: <u>None</u>		

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100225-06B
Name: ICPMS CRDL
Type: Working
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Opened: 25-FEB-10 **Balance Id :** 40245216
Received: 25-FEB-10 **Pipet Id :** 3820544
Expires: 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Verified: 23-FEB-10

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: WMS100225-07B **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-08B **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-FEB-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-70B **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100226-04AB **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 26-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100226-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100226-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100226-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100226-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100226-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100226-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100226-04B **Opened:** 26-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 26-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 27-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100226-05B **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 26-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100226-06B **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 26-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins **Verified:** 23-FEB-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: WMS100226-07B **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 26-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 27-FEB-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100226-08B **Opened:** 26-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 26-FEB-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 27-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
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
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: WMS100227-04AB **Opened:** 27-FEB-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 27-FEB-10 **Pipet Id :** 3541598
Type: Working **Expres:** 28-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100227-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100227-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100227-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100227-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100227-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100227-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100227-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100227-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100227-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100227-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100227-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100227-04B **Opened:** 27-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 27-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 28-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100227-05B **Opened:** 27-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 27-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 28-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Rose Jenkins
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: <u>WMS100227-06B</u>	Opened: <u>27-FEB-10</u>	Balance Id : <u>40245216</u>
Name: <u>ICPMS CRDL</u>	Received: <u>27-FEB-10</u>	Pipet Id : <u>3820544</u>
Type: <u>Working</u>	Expires: <u>28-FEB-10</u>	Solvent : <u>2%HNO3/1%HCl - 1272768</u>
Employee: <u>Rose Jenkins</u>	Verified: <u>23-FEB-10</u>	
Supplier: <u>GEL</u>		
Description: <u>ICPMS CRDL</u>		
Comments: <u>None</u>		

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: WMS100227-07B **Opened:** 27-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 27-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 28-FEB-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100227-08B **Opened:** 27-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 27-FEB-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 28-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
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
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: 100202 Opened: 02-FEB-10 Lot Number : 200930201
Name: I-HCL Received: 02-FEB-10
Type: Reagent/Solvent Expires: 02-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1100721TCLP Opened: 16-APR-09 Lot Number : H02026 L
Name: I-HNO3 Received: 02-APR-09
Type: Reagent/Solvent Expires: 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A Opened: 20-JUL-09 Lot Number : 41226920
Name: B-KMnO4(VWR)-MER Received: 20-JUL-09
Type: Reagent/Solvent Expires: 20-JUL-10
Employee: Tara Griffin Verified: 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1203655-02 Opened: 15-OCT-09 Lot Number : ZU74081198 mL
Name: B-H2O2 Received: 15-OCT-09
Type: Reagent/Solvent Expires: 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1228372-A Opened: 12-NOV-09 Lot Number : 49215936
Name: B-NH2OH.HCl-MER Received: 12-NOV-09
Type: Reagent/Solvent Expires: 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

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: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1264396 **Opened:** 03-FEB-10 **Lot Number :** H51025 L
Name: I-HNO3 **Received:** 02-FEB-10
Type: Reagent/Solvent **Expires:** 03-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1264796-A **Opened:** 04-FEB-10 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 04-FEB-10
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1264984-C **Opened:** 04-FEB-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 04-FEB-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1265209 **Opened:** 04-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 04-FEB-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Bryan Davis
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1270010 **Opened:** 15-FEB-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 05-FEB-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 21-FEB-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1272768 **Opened:** 22-FEB-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 22-FEB-10
Type: Reagent/Solvent **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1517-1**

Sample Analysis

Sample ID	Client ID
246000001	RE15-10-8124
1202032557	Method Blank (MB) ICP
1202032558	Laboratory Control Sample (LCS)
1202032561	246000001(RE15-10-8124L) Serial Dilution (SD)
1202032559	246000001(RE15-10-8124D) Sample Duplicate (DUP)
1202032560	246000001(RE15-10-8124S) Matrix Spike (MS)
1202032562	Method Blank (MB) ICP-MS
1202032563	Laboratory Control Sample (LCS)
1202032566	246000001(RE15-10-8124L) Serial Dilution (SD)
1202032564	246000001(RE15-10-8124D) Sample Duplicate (DUP)
1202032565	246000001(RE15-10-8124S) Matrix Spike (MS)
1202033203	Method Blank (MB) CVAA
1202033204	Laboratory Control Sample (LCS)
1202033207	246056001(RE15-10-8233L) Serial Dilution (SD)
1202033205	246056001(RE15-10-8233D) Sample Duplicate (DUP)
1202033206	246056001(RE15-10-8233S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch: 948737, 948740 and 949020

Prep Batch : 948730, 948739 and 949018

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 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement

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

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the 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: 246000001 (RE15-10-8124) and 246056001 (RE15-10-8233).

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: 797043. 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 Pearson Date: 3/1/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1517-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246000001

BASIS: As Received

DATE COLLECTED 28-JAN-10

CLIENT ID: RE15-10-8124

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/25/10 05:09	100224-2	948740
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/25/10 15:37	100225-3	948740
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/25/10 05:09	100224-2	948740
7440-70-2	Calcium	59.5	ug/L	J	50	200	200	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-47-3	Chromium	1.31	ug/L	J	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 19:27	021110B-1	948737
7439-89-6	Iron	34.7	ug/L	J	30	100	100	1	P	HSC	02/11/10 19:27	021110B-1	948737
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	02/25/10 15:37	100225-3	948740
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 19:27	021110B-1	948737
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	02/25/10 15:37	100225-3	948740
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:07	020510W1-6	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-09-7	Potassium	181	ug/L		50	150	150	1	P	HSC	02/11/10 19:27	021110B-1	948737
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-23-5	Sodium	200	ug/L	J	100	300	300	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-28-0	Thallium	1	ug/L	UN	0.3	1	1	1	MS	BAJ	02/28/10 14:46	100228-5	948740
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	02/25/10 16:29	100225-4	948740
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 19:27	021110B-1	948737
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 19:27	021110B-1	948737

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948737	948730	SW846 3005A	50	mL	50	mL	02/10/10	FGA
948740	948739	SW846 3005A	50	mL	50	mL	02/10/10	FGA
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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	4.96	ug/L	5	ug/L	99.1	90.0 - 110.0	AV	05-FEB-10 09:17	020510W1-6
	Aluminum	4950	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Arsenic	450	ug/L	500	ug/L	89.9	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Barium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Calcium	4880	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Chromium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Cobalt	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Copper	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Nickel	485	ug/L	500	ug/L	97	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Potassium	2410	ug/L	2500	ug/L	96.3	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Selenium	2440	ug/L	2500	ug/L	97.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Silver	253	ug/L	250	ug/L	101.2	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Sodium	2390	ug/L	2500	ug/L	95.6	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Zinc	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Antimony	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	25-FEB-10 01:03	100224-2
	Cadmium	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	25-FEB-10 01:03	100224-2
	Beryllium	51.3	ug/L	50	ug/L	102.7	90.0 - 110.0	MS	25-FEB-10 14:19	100225-3
	Lead	53.3	ug/L	50	ug/L	106.6	90.0 - 110.0	MS	25-FEB-10 14:19	100225-3
	Manganese	54.5	ug/L	50	ug/L	109.1	90.0 - 110.0	MS	25-FEB-10 14:19	100225-3
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-FEB-10 16:01	100225-4
	Thallium	53.2	ug/L	50	ug/L	106.4	90.0 - 110.0	MS	28-FEB-10 11:42	100228-5
CCV01										
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 - 120.0	AV	05-FEB-10 09:22	020510W1-6
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Arsenic	495	ug/L	500	ug/L	99	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Barium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Calcium	4830	ug/L	5000	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Copper	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Magnesium	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Nickel	485	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Potassium	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Selenium	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Vanadium	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Antimony	51.3	ug/L	50	ug/L	102.7	90.0 - 110.0	MS	25-FEB-10 01:33	100224-2
	Cadmium	50.8	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	25-FEB-10 01:33	100224-2
	Beryllium	53.6	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	25-FEB-10 14:32	100225-3
	Lead	54.1	ug/L	50	ug/L	108.2	90.0 - 110.0	MS	25-FEB-10 14:32	100225-3
	Manganese	54.4	ug/L	50	ug/L	108.9	90.0 - 110.0	MS	25-FEB-10 14:32	100225-3
	Uranium	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	25-FEB-10 16:10	100225-4
	Thallium	54	ug/L	50	ug/L	108	90.0 - 110.0	MS	28-FEB-10 11:57	100228-5
CCV02	Mercury	4.93	ug/L	5	ug/L	98.5	80.0 - 120.0	AV	05-FEB-10 09:45	020510W1-6
	Aluminum	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Arsenic	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Calcium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Chromium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Cobalt	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Copper	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Magnesium	5300	ug/L	5000	ug/L	106.1	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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>
	Nickel	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Potassium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Selenium	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Silver	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Sodium	10500	ug/L	10000	ug/L	105	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Vanadium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Zinc	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Antimony	54	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	25-FEB-10 01:52	100224-2
	Cadmium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	25-FEB-10 01:52	100224-2
	Beryllium	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	25-FEB-10 14:56	100225-3
	Lead	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	25-FEB-10 14:56	100225-3
	Manganese	55.1	ug/L	50	ug/L	110.2	90.0 – 110.0	MS	25-FEB-10 14:56	100225-3
	Uranium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	25-FEB-10 16:24	100225-4
	Thallium	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	28-FEB-10 12:20	100228-5
CCV03										
	Mercury	5.05	ug/L	5	ug/L	101	80.0 – 120.0	AV	05-FEB-10 10:08	020510W1-6
	Aluminum	4750	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Arsenic	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Barium	468	ug/L	500	ug/L	93.6	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Calcium	4780	ug/L	5000	ug/L	95.6	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Chromium	467	ug/L	500	ug/L	93.4	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Cobalt	470	ug/L	500	ug/L	94	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Copper	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Iron	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Magnesium	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Nickel	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Selenium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Silver	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Sodium	9790	ug/L	10000	ug/L	98	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Zinc	466	ug/L	500	ug/L	93.2	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Antimony	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	25-FEB-10 03:06	100224-2
	Cadmium	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	25-FEB-10 03:06	100224-2
	Beryllium	54.2	ug/L	50	ug/L	108.4	90.0 - 110.0	MS	25-FEB-10 15:23	100225-3
	Lead	54.4	ug/L	50	ug/L	108.8	90.0 - 110.0	MS	25-FEB-10 15:23	100225-3
	Manganese	54.4	ug/L	50	ug/L	108.8	90.0 - 110.0	MS	25-FEB-10 15:23	100225-3
	Uranium	50.3	ug/L	50	ug/L	100.6	90.0 - 110.0	MS	25-FEB-10 16:36	100225-4
	Thallium	53.7	ug/L	50	ug/L	107.3	90.0 - 110.0	MS	28-FEB-10 12:42	100228-5
CCV04										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 - 120.0	AV	05-FEB-10 10:32	020510W1-6
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Arsenic	462	ug/L	500	ug/L	92.4	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Barium	460	ug/L	500	ug/L	92.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Chromium	459	ug/L	500	ug/L	91.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Cobalt	462	ug/L	500	ug/L	92.3	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Copper	455	ug/L	500	ug/L	91.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Iron	4820	ug/L	5000	ug/L	96.5	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Magnesium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Nickel	461	ug/L	500	ug/L	92.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Potassium	4800	ug/L	5000	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Selenium	461	ug/L	500	ug/L	92.2	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Silver	465	ug/L	500	ug/L	93	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Vanadium	462	ug/L	500	ug/L	92.4	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Zinc	458	ug/L	500	ug/L	91.6	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Antimony	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-FEB-10 04:01	100224-2
	Cadmium	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	25-FEB-10 04:01	100224-2
	Beryllium	51.7	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	25-FEB-10 15:50	100225-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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	52.3	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	25-FEB-10 15:50	100225-3
	Manganese	53.6	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	25-FEB-10 15:50	100225-3
	Thallium	52.3	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	28-FEB-10 13:06	100228-5
CCV05	Aluminum	4730	ug/L	5000	ug/L	94.5	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Arsenic	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Calcium	4750	ug/L	5000	ug/L	95	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Chromium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Copper	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Iron	4780	ug/L	5000	ug/L	95.5	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Magnesium	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Nickel	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Potassium	4750	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Selenium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Silver	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Sodium	9460	ug/L	10000	ug/L	94.6	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Zinc	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Antimony	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	25-FEB-10 04:57	100224-2
	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	25-FEB-10 04:57	100224-2
	Thallium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	28-FEB-10 13:29	100228-5
CCV06	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 – 110.0	P	11-FEB-10 17:27	021110B-1
	Arsenic	466	ug/L	500	ug/L	93.3	90.0 – 110.0	P	11-FEB-10 17:27	021110B-1
	Barium	469	ug/L	500	ug/L	93.9	90.0 – 110.0	P	11-FEB-10 17:27	021110B-1
	Calcium	4770	ug/L	5000	ug/L	95.3	90.0 – 110.0	P	11-FEB-10 17:27	021110B-1
	Chromium	468	ug/L	500	ug/L	93.7	90.0 – 110.0	P	11-FEB-10 17:27	021110B-1
	Cobalt	472	ug/L	500	ug/L	94.4	90.0 – 110.0	P	11-FEB-10 17:27	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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>
	Copper	467	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Iron	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Magnesium	4870	ug/L	5000	ug/L	97.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Nickel	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Potassium	4740	ug/L	5000	ug/L	94.7	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Selenium	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Silver	466	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Sodium	9440	ug/L	10000	ug/L	94.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Vanadium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Zinc	469	ug/L	500	ug/L	93.9	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Antimony	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	25-FEB-10 05:34	100224-2
	Cadmium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	25-FEB-10 05:34	100224-2
	Thallium	53.9	ug/L	50	ug/L	107.8	90.0 - 110.0	MS	28-FEB-10 13:51	100228-5
CCV07	Aluminum	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Arsenic	479	ug/L	500	ug/L	95.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Barium	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Calcium	4810	ug/L	5000	ug/L	96.2	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Copper	480	ug/L	500	ug/L	96	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Iron	4840	ug/L	5000	ug/L	96.8	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Magnesium	4900	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Nickel	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Potassium	4790	ug/L	5000	ug/L	95.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Selenium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Vanadium	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Zinc	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,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>
CCV08	Thallium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	28-FEB-10 14:10	100228-5
	Aluminum	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Arsenic	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Barium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Nickel	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Potassium	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Selenium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Silver	495	ug/L	500	ug/L	99	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Sodium	10000	ug/L	10000	ug/L	100.4	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	11-FEB-10 18:32	021110B-1
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	28-FEB-10 14:39	100228-5
CCV09	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Arsenic	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Cobalt	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Nickel	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3.ICPMS5.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	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Selenium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Thallium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	28-FEB-10 14:58	100228-5
CCV10										
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Arsenic	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Barium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Calcium	4850	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Cobalt	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Copper	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Magnesium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Nickel	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Selenium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Silver	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Vanadium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1

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

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,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	.191	ug/L	.2	ug/L	95.5	70.0 - 130.0	AV	05-FEB-10 09:20	020510W1-6
	Antimony	3.37	ug/L	3	ug/L	112.3	70.0 - 130.0	MS	25-FEB-10 01:15	100224-2
	Cadmium	1.11	ug/L	1	ug/L	111.1	70.0 - 130.0	MS	25-FEB-10 01:15	100224-2
	Lead	2.55	ug/L	2	ug/L	127.6	70.0 - 130.0	MS	25-FEB-10 14:24	100225-3
	Beryllium	.557	ug/L	.5	ug/L	111.4	70.0 - 130.0	MS	25-FEB-10 14:24	100225-3
	Manganese	6.28	ug/L	5	ug/L	125.5	70.0 - 130.0	MS	25-FEB-10 14:24	100225-3
	Uranium	.244	ug/L	.2	ug/L	122	70.0 - 130.0	MS	25-FEB-10 16:05	100225-4
	Thallium	1.27	ug/L	1	ug/L	126.6	70.0 - 130.0	MS	28-FEB-10 11:48	100228-5
PQL01										
	Aluminum	201	ug/L	200	ug/L	100.5	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Iron	119	ug/L	100	ug/L	118.9	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Magnesium	304	ug/L	300	ug/L	101.5	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Nickel	4.56	ug/L	5	ug/L	91.2	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Potassium	185	ug/L	150	ug/L	123.1	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Silver	5.04	ug/L	5	ug/L	100.7	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Sodium	294	ug/L	300	ug/L	98	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Arsenic	28.6	ug/L	30	ug/L	95.5	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Barium	4.75	ug/L	5	ug/L	95	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Chromium	4.99	ug/L	5	ug/L	99.9	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Cobalt	4.65	ug/L	5	ug/L	93.1	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Copper	9.86	ug/L	10	ug/L	98.6	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Vanadium	5.04	ug/L	5	ug/L	100.9	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Zinc	9.38	ug/L	10	ug/L	93.8	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Calcium	200	ug/L	200	ug/L	100	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1
	Selenium	28.7	ug/L	30	ug/L	95.7	70.0 - 130.0	P	11-FEB-10 14:33	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:18	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 14:30	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 14:30	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 14:30	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 14:30	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 14:30	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 14:30	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 01:09	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 01:09	100224-2
	Beryllium	0.1	+/- .5	U	0.1	0.5	LIQ	MS	25-FEB-10 14:22	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 14:22	100225-3
	Manganesec	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 14:22	100225-3
	Uranium	0.05	+/- .2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:03	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 11:45	100228-5
CCB01										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:24	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 14:53	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 14:53	021110B-1
	Chromium	1.23	+/-5	J	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

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>
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Iron	39.3	+/-100	J	30.0	100	LIQ	P	11-FEB-10 14:53	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 14:53	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Potassium	77.71	+/-150	J	50.0	150	LIQ	P	11-FEB-10 14:53	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 14:53	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 01:40	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 01:40	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 14:34	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 14:34	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 14:34	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:12	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 12:01	100228-5
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:47	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 15:19	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 15:19	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 15:19	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 15:19	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Potassium	56.33	+/-150	J	50.0	150	LIQ	P	11-FEB-10 15:19	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 15:19	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 01:58	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 01:58	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 14:59	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 14:59	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 14:59	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:25	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 12:23	100228-5
CCB03	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 10:10	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 16:01	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 16:01	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 16:01	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 16:01	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 16:01	021110B-1
	Selenium	-5.29	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Sodium	186.28	+/-300	J	100	300	LIQ	P	11-FEB-10 16:01	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 03:12	100224-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

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>
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 03:12	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 15:26	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 15:26	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 15:26	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:37	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 12:45	100228-5
CCB04	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 10:34	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 16:41	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 16:41	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 16:41	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 16:41	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 16:41	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Sodium	121.62	+/-300	J	100	300	LIQ	P	11-FEB-10 16:41	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 04:07	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 04:07	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 15:52	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 15:52	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 15:52	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 13:09	100228-5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 17:02	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 17:02	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 17:02	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 17:02	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 17:02	021110B-1
	Selenium	-6.0	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 17:02	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 05:03	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 05:03	100224-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 13:32	100228-5
CCB06										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 17:31	021110B-1
	Arsenic	-8.04	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 17:31	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 17:31	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 17:31	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 17:31	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

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>
CCB07	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 17:31	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 05:40	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 05:40	100224-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 13:54	100228-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 18:07	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 18:07	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 18:07	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 18:07	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 18:07	021110B-1
CCB08	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 18:07	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Thallium	0.304	+/-1	J	0.3	1.0	LIQ	MS	28-FEB-10 14:13	100228-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 18:36	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 18:36	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 18:36	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 18:36	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 18:36	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 18:36	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 14:42	100228-5
CCB09	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 19:16	021110B-1
	Arsenic	-6.17	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 19:16	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 19:16	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 19:16	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 19:16	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 19:16	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Thallium	0.778	+/-1	J	0.3	1.0	LIQ	MS	28-FEB-10 15:01	100228-5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB10	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 19:45	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 19:45	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 19:45	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 19:45	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 19:45	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 19:45	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 19:45	021110B-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1517-1

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>
1202032557	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	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	3.3	ug/L	+/-10	U	P	3.3	10
1202032562	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202033203	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS

-4-

Interference Check Sample

SDG No: 10-1517-1

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	492000	ug/L	500000	ug/L	98.5	80.0 - 120.0	11-FEB-10 14:37	021110B-1
	Arsenic	-47.9	ug/L					11-FEB-10 14:37	021110B-1
	Barium	7.7	ug/L					11-FEB-10 14:37	021110B-1
	Calcium	469000	ug/L	500000	ug/L	93.9	80.0 - 120.0	11-FEB-10 14:37	021110B-1
	Chromium	-0.331	ug/L					11-FEB-10 14:37	021110B-1
	Cobalt	1.88	ug/L					11-FEB-10 14:37	021110B-1
	Copper	-2.75	ug/L					11-FEB-10 14:37	021110B-1
	Iron	180000	ug/L	200000	ug/L	90.2	80.0 - 120.0	11-FEB-10 14:37	021110B-1
	Magnesium	469000	ug/L	500000	ug/L	93.8	80.0 - 120.0	11-FEB-10 14:37	021110B-1
	Nickel	-5.64	ug/L					11-FEB-10 14:37	021110B-1
	Potassium	-12.0	ug/L					11-FEB-10 14:37	021110B-1
	Selenium	-29.8	ug/L					11-FEB-10 14:37	021110B-1
	Silver	-8.02	ug/L					11-FEB-10 14:37	021110B-1
	Sodium	25.0	ug/L					11-FEB-10 14:37	021110B-1
	Vanadium	0.707	ug/L					11-FEB-10 14:37	021110B-1
	Zinc	-9.27	ug/L					11-FEB-10 14:37	021110B-1
ICSAB01									
	Aluminum	493000	ug/L	500000	ug/L	98.5	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Arsenic	460	ug/L	500	ug/L	92	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Barium	479	ug/L	500	ug/L	95.8	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Calcium	467000	ug/L	500000	ug/L	93.5	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Chromium	467	ug/L	500	ug/L	93.3	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Cobalt	417	ug/L	500	ug/L	83.3	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Copper	516	ug/L	500	ug/L	103	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Iron	181000	ug/L	200000	ug/L	90.5	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Magnesium	472000	ug/L	500000	ug/L	94.3	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Nickel	412	ug/L	500	ug/L	82.4	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Potassium	4870	ug/L	5000	ug/L	97.4	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Selenium	2240	ug/L	2500	ug/L	89.5	80.0 - 120.0	11-FEB-10 14:40	021110B-1

METALS

-4-

Interference Check Sample

SDG No: 10-1517-1

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	244	ug/L	250	ug/L	97.7	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Sodium	4900	ug/L	5000	ug/L	98.1	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Vanadium	496	ug/L	500	ug/L	99.1	80.0 - 120.0	11-FEB-10 14:40	021110B-1
	Zinc	442	ug/L	500	ug/L	88.4	80.0 - 120.0	11-FEB-10 14:40	021110B-1

METALS

-4-

Interference Check Sample

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	<u>True Value</u>	Units	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Antimony	0.383	ug/L					25-FEB-10 01:21	100224-2
	Cadmium	0.506	ug/L					25-FEB-10 01:21	100224-2
ICSAB01	Antimony	21.2	ug/L	20	ug/L	106	80.0 ~ 120.0	25-FEB-10 01:27	100224-2
	Cadmium	19.9	ug/L	20.44	ug/L	97.4	80.0 ~ 120.0	25-FEB-10 01:27	100224-2

METALS

-4-

Interference Check Sample

SDG No: 10-1517-1

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	0.089	ug/L					25-FEB-10 14:27	100225-3
	Lead	0.239	ug/L					25-FEB-10 14:27	100225-3
	Manganese	6.37	ug/L					25-FEB-10 14:27	100225-3
ICSAB01	Beryllium	19.8	ug/L	20	ug/L	98.9	80.0 - 120.0	25-FEB-10 14:29	100225-3
	Lead	22.0	ug/L	20.19	ug/L	109	80.0 - 120.0	25-FEB-10 14:29	100225-3
	Manganese	28.5	ug/L	25.8	ug/L	110	80.0 - 120.0	25-FEB-10 14:29	100225-3

METALS

-4-

Interference Check Sample

SDG No: 10-1517-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	-0.001	ug/L					25-FEB-10 16:07	100225-4
ICSAB01	Uranium	23.4	ug/L	20	ug/L	117	80.0 - 120.0	25-FEB-10 16:08	100225-4

METALS
-4-
Interference Check Sample

SDG No: 10-1517-1

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	Thallium	0.013	ug/L					28-FEB-10 11:51	100228-5
ICSAB01	Thallium	22.7	ug/L	20	ug/L	114	80.0 - 120.0	28-FEB-10 11:54	100228-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1517-1 **Client ID** RE15-10-8124S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 246000001 **Spike ID:** 1202032560

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Aluminum	ug/L	75-125	4880		68	U	5000	97.2		P
Arsenic	ug/L	75-125	488		5	U	500	97.5		P
Barium	ug/L	75-125	489		1	U	500	97.7		P
Calcium	ug/L	75-125	4830		59.5	J	5000	95.3		P
Chromium	ug/L	75-125	487		1.31	J	500	97.2		P
Cobalt	ug/L	75-125	479		1	U	500	95.8		P
Copper	ug/L	75-125	490		3	U	500	97.9		P
Iron	ug/L	75-125	4890		34.7	J	5000	97.1		P
Magnesium	ug/L	75-125	4910		85	U	5000	97.7		P
Nickel	ug/L	75-125	489		1.5	U	500	97.9		P
Potassium	ug/L	75-125	5000		181		5000	96.3		P
Selenium	ug/L	75-125	470		5	U	500	94.1		P
Silver	ug/L	75-125	483		1	U	500	96.5		P
Sodium	ug/L	75-125	5010		200	J	5000	96.3		P
Vanadium	ug/L	75-125	493		1	U	500	98.5		P
Zinc	ug/L	75-125	475		3.3	U	500	94.6		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1517-1 Client ID RE15-10-8124S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246000001 Spike ID: 1202032565

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	196		1	U	200	98		MS
Beryllium	ug/L	75-125	47.7		0.1	U	50	95.3		MS
Cadmium	ug/L	75-125	10.3		0.11	U	10	102		MS
Lead	ug/L	75-125	42.2		0.5	U	40	105		MS
Manganese	ug/L	75-125	48.9		1	U	50	96.6		MS
Thallium	ug/L	75-125	75		0.3	U	100	74.9	N	MS
Uranium	ug/L	75-125	49.5		0.05	U	50	98.9		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1517-1 Client ID RE15-10-8233S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246056001 Spike ID: 1202033206

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	1.5		0.066	U	2	75		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8124D

Sample ID: 246000001

Duplicate ID: 1202032559

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L	+/-200	59.5 J		52.6 J		12.4		P
Chromium	ug/L		1.31 J		1 U		200		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L		34.7 J		30 U		200		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	181		193		6.09		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	200 J		180 J		10.5		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.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8124D

Sample ID: 246000001

Duplicate ID: 1202032564

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L		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
Uranium	ug/L		0.05 U		0.05 U				MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1517-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8233D

Sample ID: 246056001

Duplicate ID: 1202033205

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

-7-

Laboratory Control Sample Summary

SDG NO. 10-1517-1

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>
1202032558								
	Aluminum	ug/L	5000	4910		98.1	80-120	P
	Arsenic	ug/L	500	487		97.4	80-120	P
	Barium	ug/L	500	486		97.2	80-120	P
	Calcium	ug/L	5000	4880		97.6	80-120	P
	Chromium	ug/L	500	484		96.7	80-120	P
	Cobalt	ug/L	500	475		95.1	80-120	P
	Copper	ug/L	500	486		97.1	80-120	P
	Iron	ug/L	5000	4930		98.6	80-120	P
	Magnesium	ug/L	5000	4960		99.3	80-120	P
	Nickel	ug/L	500	487		97.4	80-120	P
	Potassium	ug/L	5000	4890		97.9	80-120	P
	Selenium	ug/L	500	481		96.3	80-120	P
	Silver	ug/L	500	481		96.2	80-120	P
	Sodium	ug/L	5000	4940		98.8	80-120	P
	Vanadium	ug/L	500	489		97.8	80-120	P
	Zinc	ug/L	500	474		94.8	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1517-1

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>
1202032563	Antimony	ug/L	50	52.3		105	80-120	MS
	Beryllium	ug/L	50	49.6		99.3	80-120	MS
	Cadmium	ug/L	50	48.6		97.1	80-120	MS
	Lead	ug/L	50	52.8		106	80-120	MS
	Manganese	ug/L	50	50.1		100	80-120	MS
	Thallium	ug/L	50	52.3		105	80-120	MS
	Uranium	ug/L	50	50.6		101	80-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1517-1

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>
1202033204	Mercury	ug/L	2	2.01		100	80-120	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1517-1 **Client ID** RE15-10-8124L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 246000001 **Serial Dilution ID:** 1202032561

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	59.5	J	250	U	100			P
Chromium	1.31	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	34.7	J	150	U	100			P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	181		267	J	47.5			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	200	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. 10-1517-1 Client ID RE15-10-8124L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246000001 Serial Dilution ID: 1202032566

Analyte	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	8.35					MS
Uranium	.05	U	.25	U				MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1517-1 Client ID RE15-10-8233L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246056001 Serial Dilution ID: 1202033207

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

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1517-1

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	948730						
1202032557	MB for batch 948730	MB	W	10-FEB-10	50mL	50mL	
1202032558	LCS for batch 948730	LCS	W	10-FEB-10	50mL	50mL	
1202032560	RE15-10-8124S	MS	W	10-FEB-10	50mL	50mL	
1202032559	RE15-10-8124D	DUP	W	10-FEB-10	50mL	50mL	
246000001	RE15-10-8124	SAMPLE	W	10-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1517-1

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 948739							
1202032562	MB for batch 948739	MB	W	10-FEB-10	50mL	50mL	
1202032563	LCS for batch 948739	LCS	W	10-FEB-10	50mL	50mL	
1202032565	RE15-10-8124S	MS	W	10-FEB-10	50mL	50mL	
1202032564	RE15-10-8124D	DUP	W	10-FEB-10	50mL	50mL	
246000001	RE15-10-8124	SAMPLE	W	10-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1517-1

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	949018						
1202033203	MB for batch 949018	MB	W	04-FEB-10	20mL	20mL	
1202033204	LCS for batch 949018	LCS	W	04-FEB-10	20mL	20mL	
1202033206	RE15-10-8233S	MS	W	04-FEB-10	20mL	20mL	
1202033205	RE15-10-8233D	DUP	W	04-FEB-10	20mL	20mL	
246000001	RE15-10-8124	SAMPLE	W	04-FEB-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

Client Sdg: 10-1517-1

Method: MS

Data File: 100224-2

End Date: 25-FEB-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	00:45		X				X																		
S10	1	00:51		X				X																		
S100	1	00:57		X				X																		
ICV01	1	01:03		X				X																		
ICB01	1	01:09		X				X																		
CRDL01	1	01:15		X				X																		
ICSA01	1	01:21		X				X																		
ICSAB01	1	01:27		X				X																		
CCV01	1	01:33		X				X																		
CCB01	1	01:40		X				X																		
LR01	1	01:46		X				X																		
CCV02	1	01:52		X				X																		
CCB02	1	01:58		X				X																		
ZZZZZZ	1	02:04																								
ZZZZZZ	1	02:10																								
ZZZZZZ	1	02:16																								
ZZZZZZ	1	02:23																								
ZZZZZZ	1	02:29																								
ZZZZZZ	1	02:35																								
ZZZZZZ	1	02:41																								
ZZZZZZ	1	02:47																								
ZZZZZZ	1	02:54																								
ZZZZZZ	1	03:00																								
CCV03	1	03:06		X				X																		
CCB03	1	03:12		X				X																		
ZZZZZZ	1	03:18																								
ZZZZZZ	1	03:24																								
ZZZZZZ	1	03:31																								
ZZZZZZ	1	03:37																								
ZZZZZZ	1	03:43																								
ZZZZZZ	1	03:49																								
ZZZZZZ	5	03:55																								
CCV04	1	04:01		X				X																		
CCB04	1	04:07		X				X																		
1202032562	1	04:14		X				X																		
1202032563	1	04:20		X				X																		
ZZZZZZ	1	04:26																								
ZZZZZZ	1	04:32																								
ZZZZZZ	1	04:38																								
ZZZZZZ	1	04:45																								

Samp No.	D/F	Run Time
ZZZZZZ	1	04:51
CCV05	1	04:57
CCB05	1	05:03
246000001	1	05:09
1202032564	1	05:15
1202032565	1	05:22
1202032566	5	05:28
CCV06	1	05:34
CCB06	1	05:40

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1517-1

Method MS

Data File: 100225-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Ti	U	V	Zn
S0.0	1	14:12					X							X	X											
S10	1	14:14					X							X	X											
S100	1	14:17					X							X	X											
ICV01	1	14:19					X							X	X											
ICB01	1	14:22					X							X	X											
CRDL01	1	14:24					X							X	X											
ICSA01	1	14:27					X							X	X											
ICSAB01	1	14:29					X							X	X											
CCV01	1	14:32					X							X	X											
CCB01	1	14:34					X							X	X											
ZZZZZZ	1	14:37																								
ZZZZZZ	1	14:40																								
ZZZZZZ	1	14:42																								
ZZZZZZ	1	14:46																								
ZZZZZZ	1	14:49																								
ZZZZZZ	1	14:51																								
ZZZZZZ	5	14:54																								
CCV02	1	14:56					X							X	X											
CCB02	1	14:59					X							X	X											
ZZZZZZ	1	15:02																								
ZZZZZZ	1	15:04																								
ZZZZZZ	1	15:07																								
ZZZZZZ	1	15:10																								
1202032562	1	15:13					X							X	X											
1202032563	1	15:15					X							X	X											
ZZZZZZ	1	15:18																								
ZZZZZZ	1	15:21																								
CCV03	1	15:23					X							X	X											
CCB03	1	15:26					X							X	X											
ZZZZZZ	1	15:28																								
ZZZZZZ	1	15:31																								
ZZZZZZ	1	15:34																								
246000001	1	15:37					X							X	X											
1202032564	1	15:39					X							X	X											
1202032565	1	15:42					X							X	X											
1202032566	5	15:44					X							X	X											
ZZZZZZ	5	15:47																								
CCV04	1	15:50					X							X	X											
CCB04	1	15:52					X							X	X											

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1517-1

Method MS

Data File: 100225-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	15:57																						X		
S10	1	15:58																						X		
S100	1	16:00																						X		
ICV01	1	16:01																						X		
ICB01	1	16:03																						X		
CRDL01	1	16:05																						X		
ICSA01	1	16:07																						X		
ICSAB01	1	16:08																						X		
CCV01	1	16:10																						X		
CCB01	1	16:12																						X		
1202032562	1	16:13																						X		
1202032563	1	16:15																						X		
ZZZZZZ	1	16:17																								
ZZZZZZ	1	16:18																								
ZZZZZZ	1	16:20																								
ZZZZZZ	1	16:22																								
CCV02	1	16:24																						X		
CCB02	1	16:25																						X		
ZZZZZZ	1	16:27																								
246000001	1	16:29																						X		
1202032564	1	16:30																						X		
1202032565	1	16:32																						X		
1202032566	5	16:34																						X		
CCV03	1	16:36																						X		
CCB03	1	16:37																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 28-FEB-10

End Date: 28-FEB-10

Client Sdg: 10-1517-1

Method MS

Data File: 100228-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	11:32																					X			
S10	1	11:35																					X			
S100	1	11:38																					X			
ICV01	1	11:42																					X			
ICB01	1	11:45																					X			
CRDL01	1	11:48																					X			
ICSA01	1	11:51																					X			
ICSAB01	1	11:54																					X			
CCV01	1	11:57																					X			
CCB01	1	12:01																					X			
ZZZZZZ	1	12:04																								
ZZZZZZ	1	12:07																								
ZZZZZZ	1	12:10																								
ZZZZZZ	1	12:13																								
ZZZZZZ	1	12:16																								
CCV02	1	12:20																					X			
CCB02	1	12:23																					X			
ZZZZZZ	1	12:26																								
ZZZZZZ	1	12:29																								
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:36																								
ZZZZZZ	5	12:39																								
CCV03	1	12:42																					X			
CCB03	1	12:45																					X			
ZZZZZZ	1	12:50																								
ZZZZZZ	1	12:53																								
ZZZZZZ	1	12:57																								
ZZZZZZ	1	13:00																								
ZZZZZZ	1	13:03																								
CCV04	1	13:06																					X			
CCB04	1	13:09																					X			
ZZZZZZ	1	13:13																								
ZZZZZZ	1	13:16																								
ZZZZZZ	1	13:19																								
ZZZZZZ	5	13:22																								
ZZZZZZ	1	13:25																								
CCV05	1	13:29																					X			
CCB05	1	13:32																					X			
ZZZZZZ	1	13:35																								
ZZZZZZ	1	13:38																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	13:41
ZZZZZZ	1	13:45
ZZZZZZ	1	13:48
CCV06	1	13:51
CCB06	1	13:54
ZZZZZZ	1	13:57
ZZZZZZ	1	14:01
ZZZZZZ	1	14:04
ZZZZZZ	5	14:07
CCV07	1	14:10
CCB07	1	14:13
I202032562	1	14:17
I202032563	1	14:20
ZZZZZZ	1	14:23
ZZZZZZ	1	14:26
ZZZZZZ	1	14:30
ZZZZZZ	1	14:33
ZZZZZZ	1	14:36
CCV08	1	14:39
CCB08	1	14:42
246000001	1	14:46
I202032564	1	14:49
I202032565	1	14:52
I202032566	5	14:55
CCV09	1	14:58
CCB09	1	15:01

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 05-FEB-10

End Date: 05-FEB-10

Client Sdg: 10-1517-1

Method: AV

Data File: 020510W1-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:05															X									
S0.2	1	09:07															X									
S0.5	1	09:09															X									
S2.0	1	09:11															X									
S5.0	1	09:13															X									
S10.0	1	09:15															X									
ICV01	1	09:17															X									
ICB01	1	09:18															X									
CRDL01	1	09:20															X									
CCV01	1	09:22															X									
CCB01	1	09:24															X									
ZZZZZZ	1	09:26																								
ZZZZZZ	1	09:28																								
ZZZZZZ	1	09:30																								
ZZZZZZ	1	09:32																								
ZZZZZZ	1	09:34																								
ZZZZZZ	1	09:36																								
ZZZZZZ	1	09:38																								
ZZZZZZ	1	09:40																								
ZZZZZZ	5	09:42																								
1202033203	1	09:43															X									
CCV02	1	09:45															X									
CCB02	1	09:47															X									
1202033204	1	09:49															X									
ZZZZZZ	1	09:51																								
ZZZZZZ	1	09:53																								
ZZZZZZ	1	09:55																								
ZZZZZZ	1	09:57																								
ZZZZZZ	1	09:59																								
ZZZZZZ	1	10:01																								
ZZZZZZ	1	10:03																								
ZZZZZZ	1	10:05																								
246000001	1	10:07															X									
CCV03	1	10:08															X									
CCB03	1	10:10															X									
ZZZZZZ	1	10:12																								
ZZZZZZ	1	10:14																								
1202033205	1	10:16															X									
1202033206	1	10:18															X									
1202033207	5	10:20															X									

Samp No.	D/F	Run Time
ZZZZZZ	1	10:22
ZZZZZZ	1	10:24
ZZZZZZ	1	10:26
ZZZZZZ	1	10:28
ZZZZZZ	1	10:30
CCV04	1	10:32
CCB04	1	10:34

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 11-FEB-10

End Date: 11-FEB-10

Client Sdg: 10-1517-1

Method P

Data File: 021110B-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	Ti	U	V	Zn
S0.0	1	14:10	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	14:14			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	14:17	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	14:20	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	14:24	X						X				X		X							X				
ICV01	1	14:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	14:30	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	14:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	14:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	14:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	14:43	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	14:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	14:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	15:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR04	1	15:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	15:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	15:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:23																								
ZZZZZZ	1	15:26																								
ZZZZZZ	1	15:30																								
ZZZZZZ	1	15:34																								
ZZZZZZ	1	15:38																								
ZZZZZZ	5	15:42																								
ZZZZZZ	1	15:45																								
ZZZZZZ	1	15:49																								
ZZZZZZ	1	15:53																								
CCV03	1	15:57	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	16:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	16:04																								
ZZZZZZ	1	16:08																								
ZZZZZZ	1	16:12																								
ZZZZZZ	1	16:16																								
ZZZZZZ	1	16:20																								
ZZZZZZ	1	16:24																								
ZZZZZZ	1	16:28																								
ZZZZZZ	1	16:31																								
ZZZZZZ	1	16:34																								
CCV04	1	16:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	16:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
1202032558	1	19:23	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
246000001	1	19:27	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202032559	1	19:30	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202032560	1	19:34	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202032561	5	19:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV10	1	19:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB10	1	19:45	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1517-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1517-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

		<u>Wavelength</u> (nm)	<u>MDL</u> ug/L	<u>RDL</u> ug/L
MERCURY	<u>Analyte</u>			
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1517-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1517-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1517-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1517-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Iron	Lead	Magnesium	Manganese	Molybdenum
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	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: **10-1517-1**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Selenium	Silicon	Silver
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	-0.99900	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: 10-1517-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1517-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1517-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
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. 10-1517-1

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
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

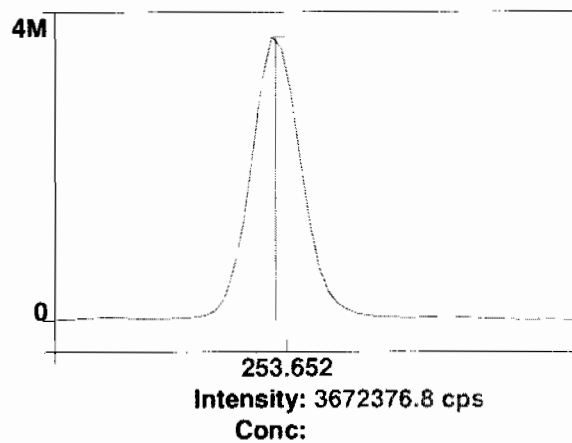
Raw Data

Method: Hg_ReAlign
Result: 022710B

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

=====

Analysis Begun

Start Time: 2/11/2010 14:10:46

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optimal\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/11/2010 14:10:48

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	54739.4	54739.4	100 %	14:11:23
1	Al 396.153Radial†	-13.9	-13.8	[0.00] µg/L	14:11:23
1	Ca 317.933Radial†	181.9	181.3	[0.00] µg/L	14:11:43
1	Fe 238.204 Radial†	15.3	15.3	[0.00] µg/L	14:11:43
1	K 766.490 Radial†	133.4	133.0	[0.00] µg/L	14:11:23
1	Mg 279.077 IEC†	7.8	7.8	[0.00] µg/L	14:11:43
1	Na 589.592 Radial†	544.1	542.5	[0.00] µg/L	14:11:23
1	Sr 421.552†	47.1	46.9	[0.00] µg/L	14:11:23
1	Sc 361.383	1911885.3	1911885.3	100.11 %	14:12:45
1	Y 371.029	1310700.1	1310700.1	100.06 %	14:12:45
1	Ag 328.068†	-547.3	-546.7	[0.00] µg/L	14:12:50
1	As 188.979†	3.5	3.5	[0.00] µg/L	14:13:11
1	B 249.677†	353.5	353.1	[0.00] µg/L	14:13:11
1	Ba 233.527†	-32.2	-32.2	[0.00] µg/L	14:13:11
1	Be 313.107†	-3446.9	-3443.2	[0.00] µg/L	14:12:50
1	Cd 226.502†	-153.7	-153.5	[0.00] µg/L	14:13:11
1	Co 228.616†	-1.3	-1.3	[0.00] µg/L	14:13:11
1	Cr 267.716†	-55.4	-55.3	[0.00] µg/L	14:12:50
1	Cu 324.752†	2504.0	2501.3	[0.00] µg/L	14:12:50
1	Mn 257.610†	-239.6	-239.4	[0.00] µg/L	14:13:11
1	Mo 202.031†	-2.8	-2.8	[0.00] µg/L	14:13:11
1	Ni 231.604†	307.9	307.6	[0.00] µg/L	14:13:11
1	P 214.914†	26.2	26.2	[0.00] µg/L	14:13:11
1	Pb 220.353†	91.7	91.6	[0.00] µg/L	14:13:11
1	S 181.975 Axial†	15.4	15.3	[0.00] µg/L	14:13:11
1	Sb 206.836†	28.4	28.4	[0.00] µg/L	14:13:11
1	Se 196.026†	16.7	16.7	[0.00] µg/L	14:13:11
1	SiO2†	1235.3	1234.0	[0.00] µg/L	14:12:50
1	Si 251.611†	309.0	308.7	[0.00] µg/L	14:13:11
1	Sn 189.927†	-0.7	-0.7	[0.00] µg/L	14:13:11
1	Ti 334.940†	89.4	89.3	[0.00] µg/L	14:12:50
1	Tl 190.801†	-23.5	-23.5	[0.00] µg/L	14:13:11
1	U 409.014†	-77.0	-76.9	[0.00] µg/L	14:12:50
1	V 292.402†	-41.9	-41.9	[0.00] µg/L	14:12:50
1	Zn 213.857†	474.5	474.0	[0.00] µg/L	14:13:11
2	Sc RADIAL	54665.4	54665.4	100 %	14:11:49
2	Al 396.153Radial†	-1.2	-1.2	[0.00] µg/L	14:11:49
2	Ca 317.933Radial†	175.4	175.1	[0.00] µg/L	14:12:09
2	Fe 238.204 Radial†	14.9	14.8	[0.00] µg/L	14:12:09
2	K 766.490 Radial†	144.1	143.8	[0.00] µg/L	14:11:49
2	Mg 279.077 IEC†	11.1	11.1	[0.00] µg/L	14:12:09
2	Na 589.592 Radial†	552.5	551.5	[0.00] µg/L	14:11:49
2	Sr 421.552†	33.2	33.1	[0.00] µg/L	14:11:49
2	Sc 361.383	1909838.0	1909838.0	100.000 %	14:13:17
2	Y 371.029	1310179.5	1310179.5	100.02 %	14:13:17
2	Ag 328.068†	-580.2	-580.2	[0.00] µg/L	14:13:23
2	As 188.979†	-0.5	-0.5	[0.00] µg/L	14:13:43

2	B 249.677†	311.8	311.8	[0.00]	µg/L	14:13:43
2	Ba 233.527†	-19.4	-19.4	[0.00]	µg/L	14:13:43
2	Be 313.107†	-3440.2	-3440.2	[0.00]	µg/L	14:13:23
2	Cd 226.502†	-136.8	-136.8	[0.00]	µg/L	14:13:43
2	Co 228.616†	-8.2	-8.2	[0.00]	µg/L	14:13:43
2	Cr 267.716†	-44.6	-44.6	[0.00]	µg/L	14:13:23
2	Cu 324.752†	2529.2	2529.2	[0.00]	µg/L	14:13:23
2	Mn 257.610†	-247.4	-247.4	[0.00]	µg/L	14:13:43
2	Mo 202.031†	-8.7	-8.7	[0.00]	µg/L	14:13:43
2	Ni 231.604†	295.5	295.5	[0.00]	µg/L	14:13:43
2	P 214.914†	27.9	27.9	[0.00]	µg/L	14:13:43
2	Pb 220.353†	98.3	98.3	[0.00]	µg/L	14:13:43
2	S 181.975 Axial†	16.8	16.8	[0.00]	µg/L	14:13:43
2	Sb 206.836†	27.6	27.6	[0.00]	µg/L	14:13:43
2	Se 196.026†	12.1	12.1	[0.00]	µg/L	14:13:43
2	SiO2†	1235.5	1235.5	[0.00]	µg/L	14:13:23
2	Si 251.611†	316.0	316.0	[0.00]	µg/L	14:13:43
2	Sn 189.927†	-2.2	-2.2	[0.00]	µg/L	14:13:43
2	Ti 334.940†	132.2	132.2	[0.00]	µg/L	14:13:23
2	Tl 190.801†	-27.5	-27.5	[0.00]	µg/L	14:13:43
2	U 409.014†	-52.6	-52.6	[0.00]	µg/L	14:13:23
2	V 292.402†	-46.9	-46.9	[0.00]	µg/L	14:13:23
2	Zn 213.857†	476.6	476.6	[0.00]	µg/L	14:13:43
3	Sc RADIAL	54318.4	54318.4	99.5	%	14:12:15
3	Al 396.153Radial†	-15.3	-15.3	[0.00]	µg/L	14:12:15
3	Ca 317.933Radial†	180.2	181.0	[0.00]	µg/L	14:12:35
3	Fe 238.204 Radial†	13.3	13.4	[0.00]	µg/L	14:12:35
3	K 766.490 Radial†	107.9	108.4	[0.00]	µg/L	14:12:15
3	Mg 279.077 IEC†	14.9	15.0	[0.00]	µg/L	14:12:35
3	Na 589.592 Radial†	529.1	531.6	[0.00]	µg/L	14:12:15
3	Sr 421.552†	38.4	38.6	[0.00]	µg/L	14:12:15
3	Sc 361.383	1907796.9	1907796.9	99.893	%	14:13:49
3	Y 371.029	1308876.2	1308876.2	99.920	%	14:13:49
3	Ag 328.068†	-566.0	-566.6	[0.00]	µg/L	14:13:55
3	As 188.979†	0.4	0.4	[0.00]	µg/L	14:14:15
3	B 249.677†	329.2	329.5	[0.00]	µg/L	14:14:15
3	Ba 233.527†	-26.4	-26.4	[0.00]	µg/L	14:14:15
3	Be 313.107†	-3434.3	-3437.9	[0.00]	µg/L	14:13:55
3	Cd 226.502†	-135.9	-136.0	[0.00]	µg/L	14:14:15
3	Co 228.616†	-17.0	-17.0	[0.00]	µg/L	14:14:15
3	Cr 267.716†	-57.1	-57.2	[0.00]	µg/L	14:13:55
3	Cu 324.752†	2425.2	2427.8	[0.00]	µg/L	14:13:55
3	Mn 257.610†	-245.3	-245.6	[0.00]	µg/L	14:14:15
3	Mo 202.031†	-11.1	-11.1	[0.00]	µg/L	14:14:15
3	Ni 231.604†	303.1	303.5	[0.00]	µg/L	14:14:15
3	P 214.914†	28.8	28.8	[0.00]	µg/L	14:14:15
3	Pb 220.353†	101.6	101.7	[0.00]	µg/L	14:14:15
3	S 181.975 Axial†	12.3	12.3	[0.00]	µg/L	14:14:15
3	Sb 206.836†	24.9	25.0	[0.00]	µg/L	14:14:15
3	Se 196.026†	18.7	18.7	[0.00]	µg/L	14:14:15
3	SiO2†	1279.2	1280.6	[0.00]	µg/L	14:13:55
3	Si 251.611†	313.6	313.9	[0.00]	µg/L	14:14:15
3	Sn 189.927†	0.3	0.3	[0.00]	µg/L	14:14:15
3	Ti 334.940†	126.8	126.9	[0.00]	µg/L	14:13:55
3	Tl 190.801†	-21.9	-21.9	[0.00]	µg/L	14:14:15
3	U 409.014†	-31.2	-31.3	[0.00]	µg/L	14:13:55
3	V 292.402†	-43.8	-43.9	[0.00]	µg/L	14:13:55
3	Zn 213.857†	475.5	476.0	[0.00]	µg/L	14:14:15

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1909840.1	2044.21	0.11%	100.00 %
Sc RADIAL	54574.4	224.80	0.41%	100 %
Y 371.029	1309918.6	939.52	0.07%	100.00 %
Ag 328.068†	-564.5	16.85	2.98%	[0.00] µg/L
Al 396.153Radial†	-10.1	7.73	76.30%	[0.00] µg/L
As 188.979†	1.1	2.09	182.38%	[0.00] µg/L
B 249.677†	331.5	20.73	6.25%	[0.00] µg/L
Ba 233.527†	-26.0	6.39	24.57%	[0.00] µg/L

Be 313.107†	-3440.4	2.66	0.08%	[0.00]	µg/L
Ca 317.933 Radial†	179.2	3.51	1.96%	[0.00]	µg/L
Cd 226.502†	-142.1	9.89	6.96%	[0.00]	µg/L
Co 228.616†	-8.8	7.85	88.83%	[0.00]	µg/L
Cr 267.716†	-52.4	6.82	13.02%	[0.00]	µg/L
Cu 324.752†	2486.1	52.42	2.11%	[0.00]	µg/L
Fe 238.204 Radial†	14.5	1.00	6.90%	[0.00]	µg/L
K 766.490 Radial†	128.4	18.15	14.13%	[0.00]	µg/L
Mg 279.077 IEC†	11.3	3.62	32.14%	[0.00]	µg/L
Mn 257.610†	-244.1	4.19	1.72%	[0.00]	µg/L
Mo 202.031†	-7.5	4.31	57.15%	[0.00]	µg/L
Na 589.592 Radial†	541.9	9.97	1.84%	[0.00]	µg/L
Ni 231.604†	302.2	6.13	2.03%	[0.00]	µg/L
P 214.914†	27.6	1.32	4.77%	[0.00]	µg/L
Pb 220.353†	97.2	5.13	5.27%	[0.00]	µg/L
S 181.975 Axial†	14.8	2.33	15.71%	[0.00]	µg/L
Sb 206.836†	27.0	1.78	6.62%	[0.00]	µg/L
Se 196.026†	15.8	3.37	21.27%	[0.00]	µg/L
SiO2†	1250.0	26.45	2.12%	[0.00]	µg/L
Si 251.611†	312.9	3.77	1.21%	[0.00]	µg/L
Sn 189.927†	-0.9	1.29	148.06%	[0.00]	µg/L
Sr 421.552†	39.6	6.94	17.54%	[0.00]	µg/L
Ti 334.940†	116.1	23.40	20.15%	[0.00]	µg/L
Tl 190.801†	-24.3	2.88	11.85%	[0.00]	µg/L
U 409.014†	-53.6	22.84	42.60%	[0.00]	µg/L
V 292.402†	-44.2	2.52	5.69%	[0.00]	µg/L
Zn 213.857†	475.5	1.38	0.29%	[0.00]	µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/11/2010 14:14:25

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	55015.9	55015.9	101 %	14:15:00
1	K 766.490 Radial†	1529.6	1388.9	[1000] µg/L	14:15:00
1	Sr 421.552†	9551.7	9435.5	[100] µg/L	14:15:00
1	Sc 361.383	1906987.6	1906987.6	99.851 %	14:15:21
1	Y 371.029	1308080.3	1308080.3	99.860 %	14:15:21
1	Ag 328.068†	12337.2	12920.2	[100] µg/L	14:15:27
1	As 188.979†	60.2	59.1	[100] µg/L	14:15:48
1	B 249.677†	2597.7	2270.1	[100] µg/L	14:15:27
1	Ba 233.527†	3962.5	3994.4	[100] µg/L	14:15:27
1	Be 313.107†	151975.4	155643.2	[100] µg/L	14:15:21
1	Cd 226.502†	3678.8	3826.5	[100] µg/L	14:15:27
1	Co 228.616†	2095.6	2107.6	[100] µg/L	14:15:48
1	Cr 267.716†	4700.6	4760.0	[100] µg/L	14:15:27
1	Cu 324.752†	17516.6	15056.7	[100] µg/L	14:15:27
1	Mn 257.610†	30035.0	30324.0	[100] µg/L	14:15:27
1	Mo 202.031†	993.1	1002.1	[100] µg/L	14:15:48
1	Ni 231.604†	2238.0	1939.1	[100] µg/L	14:15:27
1	P 214.914†	275.5	248.3	[500] µg/L	14:15:48
1	Pb 220.353†	495.9	399.5	[100] µg/L	14:15:48
1	S 181.975 Axial†	61.0	46.2	[200] µg/L	14:15:48
1	Sb 206.836†	127.3	100.5	[100] µg/L	14:15:48
1	Se 196.026†	83.6	67.8	[100] µg/L	14:15:48
1	SiO2†	6362.3	5121.8	[1069.5] µg/L	14:15:27
1	Si 251.611†	6526.8	6223.6	[500] µg/L	14:15:27
1	Sn 189.927†	236.7	237.9	[100] µg/L	14:15:48
1	Ti 334.940†	41818.8	41765.2	[100] µg/L	14:15:27
1	Tl 190.801†	52.7	77.0	[100] µg/L	14:15:48
1	U 409.014†	1125.7	1181.0	[100] µg/L	14:15:27
1	V 292.402†	9619.3	9677.9	[100] µg/L	14:15:27
1	Zn 213.857†	4700.1	4231.6	[100] µg/L	14:15:27
2	Sc RADIAL	55171.2	55171.2	101 %	14:15:05
2	K 766.490 Radial†	1577.1	1431.6	[1000] µg/L	14:15:05
2	Sr 421.552†	9725.8	9581.1	[100] µg/L	14:15:05
2	Sc 361.383	1919566.1	1919566.1	100.51 %	14:15:54
2	Y 371.029	1316225.3	1316225.3	100.48 %	14:15:54
2	Ag 328.068†	12296.8	12799.1	[100] µg/L	14:16:00
2	As 188.979†	55.3	53.9	[100] µg/L	14:16:20
2	B 249.677†	2620.3	2275.6	[100] µg/L	14:16:00
2	Ba 233.527†	3925.8	3931.9	[100] µg/L	14:16:00
2	Be 313.107†	153476.8	156139.6	[100] µg/L	14:15:54
2	Cd 226.502†	3613.9	3737.7	[100] µg/L	14:16:00
2	Co 228.616†	2078.6	2076.9	[100] µg/L	14:16:20
2	Cr 267.716†	4668.3	4697.0	[100] µg/L	14:16:00
2	Cu 324.752†	17487.1	14912.4	[100] µg/L	14:16:00
2	Mn 257.610†	29867.9	29960.6	[100] µg/L	14:16:00
2	Mo 202.031†	997.0	999.5	[100] µg/L	14:16:20
2	Ni 231.604†	2232.7	1919.2	[100] µg/L	14:16:00
2	P 214.914†	277.4	248.4	[500] µg/L	14:16:20
2	Pb 220.353†	494.0	394.3	[100] µg/L	14:16:20
2	S 181.975 Axial†	66.3	51.1	[200] µg/L	14:16:20
2	Sb 206.836†	134.2	106.6	[100] µg/L	14:16:20
2	Se 196.026†	81.0	64.7	[100] µg/L	14:16:20
2	SiO2†	6316.5	5034.4	[1069.5] µg/L	14:16:00
2	Si 251.611†	6524.6	6178.6	[500] µg/L	14:16:00
2	Sn 189.927†	229.9	229.6	[100] µg/L	14:16:20
2	Ti 334.940†	41713.2	41385.8	[100] µg/L	14:16:00
2	Tl 190.801†	46.9	70.9	[100] µg/L	14:16:20
2	U 409.014†	1094.4	1142.5	[100] µg/L	14:16:00
2	V 292.402†	9634.9	9630.3	[100] µg/L	14:16:00

2	Zn 213.857†	4683.2	4183.9	[100] µg/L	14:16:00
3	Sc RADIAL	54696.3	54696.3	100 %	14:15:11
3	K 766.490 Radial†	1613.5	1481.5	[1000] µg/L	14:15:11
3	Sr 421.552†	9663.0	9601.9	[100] µg/L	14:15:11
3	Sc 361.383	1914175.0	1914175.0	100.23 %	14:16:26
3	Y 371.029	1314459.8	1314459.8	100.35 %	14:16:26
3	Ag 328.068†	12311.6	12848.2	[100] µg/L	14:16:32
3	As 188.979†	52.2	51.0	[100] µg/L	14:16:53
3	B 249.677†	2607.8	2270.5	[100] µg/L	14:16:32
3	Ba 233.527†	3927.0	3944.1	[100] µg/L	14:16:32
3	Be 313.107†	152121.7	155217.6	[100] µg/L	14:16:26
3	Cd 226.502†	3649.8	3783.7	[100] µg/L	14:16:32
3	Co 228.616†	2092.3	2096.4	[100] µg/L	14:16:53
3	Cr 267.716†	4695.0	4736.7	[100] µg/L	14:16:32
3	Cu 324.752†	17403.9	14878.4	[100] µg/L	14:16:32
3	Mn 257.610†	29812.0	29988.6	[100] µg/L	14:16:32
3	Mo 202.031†	994.2	999.5	[100] µg/L	14:16:53
3	Ni 231.604†	2238.0	1930.8	[100] µg/L	14:16:32
3	P 214.914†	276.9	248.7	[500] µg/L	14:16:53
3	Pb 220.353†	496.4	398.1	[100] µg/L	14:16:53
3	S 181.975 Axial†	63.6	48.7	[200] µg/L	14:16:53
3	Sb 206.836†	131.7	104.5	[100] µg/L	14:16:53
3	Se 196.026†	85.1	69.1	[100] µg/L	14:16:53
3	SiO2†	6274.4	5010.2	[1069.5] µg/L	14:16:32
3	Si 251.611†	6506.8	6179.2	[500] µg/L	14:16:32
3	Sn 189.927†	233.2	233.5	[100] µg/L	14:16:53
3	Ti 334.940†	41628.8	41418.4	[100] µg/L	14:16:32
3	Tl 190.801†	52.0	76.1	[100] µg/L	14:16:53
3	U 409.014†	1167.9	1218.9	[100] µg/L	14:16:32
3	V 292.402†	9645.5	9667.9	[100] µg/L	14:16:32
3	Zn 213.857†	4697.5	4211.3	[100] µg/L	14:16:32

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	1913576.2	6310.61	0.33%	100.20 %	
Sc RADIAL	54961.1	242.12	0.44%	101 %	
Y 371.029	1312921.8	4284.80	0.33%	100.23 %	
Ag 328.068†	12855.8	60.90	0.47%	[100] µg/L	
As 188.979†	54.7	4.13	7.55%	[100] µg/L	
B 249.677†	2272.1	3.07	0.13%	[100] µg/L	
Ba 233.527†	3956.8	33.13	0.84%	[100] µg/L	
Be 313.107†	155666.8	461.42	0.30%	[100] µg/L	
Cd 226.502†	3782.6	44.38	1.17%	[100] µg/L	
Co 228.616†	2093.6	15.54	0.74%	[100] µg/L	
Cr 267.716†	4731.2	31.87	0.67%	[100] µg/L	
Cu 324.752†	14949.2	94.66	0.63%	[100] µg/L	
K 766.490 Radial†	1434.0	46.37	3.23%	[1000] µg/L	
Mn 257.610†	30091.1	202.22	0.67%	[100] µg/L	
Mo 202.031†	1000.4	1.54	0.15%	[100] µg/L	
Ni 231.604†	1929.7	10.00	0.52%	[100] µg/L	
P 214.914†	248.5	0.19	0.08%	[500] µg/L	
Pb 220.353†	397.3	2.68	0.67%	[100] µg/L	
S 181.975 Axial†	48.7	2.45	5.03%	[200] µg/L	
Sb 206.836†	103.8	3.08	2.97%	[100] µg/L	
Se 196.026†	67.2	2.24	3.33%	[100] µg/L	
SiO2†	5055.5	58.67	1.16%	[1069.5] µg/L	
Si 251.611†	6193.8	25.84	0.42%	[500] µg/L	
Sn 189.927†	233.7	4.16	1.78%	[100] µg/L	
Sr 421.552†	9539.5	90.63	0.95%	[100] µg/L	
Ti 334.940†	41523.1	210.28	0.51%	[100] µg/L	
Tl 190.801†	74.7	3.29	4.41%	[100] µg/L	
U 409.014†	1180.8	38.20	3.23%	[100] µg/L	
V 292.402†	9658.7	25.07	0.26%	[100] µg/L	
Zn 213.857†	4209.0	23.92	0.57%	[100] µg/L	

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

Autosampler Location: 3
 Date Collected: 2/11/2010 14:17:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	56431.2	56431.2	103 %	14:17:36
1	Al 396.153Radial†	6754.1	6542.0	[5000] µg/L	14:17:36
1	Ca 317.933Radial†	5471.1	5111.9	[5000] µg/L	14:17:56
1	K 766.490 Radial†	7121.7	6759.0	[5000] µg/L	14:17:36
1	Mg 279.077 IEC†	566.8	536.8	[5000] µg/L	14:17:56
1	Sr 421.552†	48100.9	46478.6	[500] µg/L	14:17:36
1	Sc 361.383	1949267.7	1949267.7	102.06 %	14:18:59
1	Y 371.029	1332062.2	1332062.2	101.69 %	14:18:59
1	Ag 328.068†	62715.3	62011.3	[500] µg/L	14:19:05
1	As 188.979†	268.2	261.6	[500] µg/L	14:19:26
1	B 249.677†	11715.5	11147.1	[500] µg/L	14:19:05
1	Ba 233.527†	19296.1	18931.8	[500] µg/L	14:19:05
1	Be 313.107†	765143.4	753107.4	[500] µg/L	14:18:59
1	Cd 226.502†	18181.3	17955.7	[500] µg/L	14:19:05
1	Co 228.616†	10302.5	10103.0	[500] µg/L	14:19:05
1	Cr 267.716†	23080.8	22666.4	[500] µg/L	14:19:05
1	Cu 324.752†	74689.8	70693.0	[500] µg/L	14:19:05
1	Mn 257.610†	147455.4	144716.9	[500] µg/L	14:18:59
1	Mo 202.031†	4948.3	4855.8	[500] µg/L	14:19:26
1	Ni 231.604†	9587.6	9091.5	[500] µg/L	14:19:05
1	P 214.914†	1227.3	1174.8	[2500] µg/L	14:19:26
1	Pb 220.353†	2024.6	1886.4	[500] µg/L	14:19:26
1	S 181.975 Axial†	257.2	237.2	[1000] µg/L	14:19:26
1	Sb 206.836†	565.6	527.2	[500] µg/L	14:19:26
1	Se 196.026†	349.8	326.9	[500] µg/L	14:19:26
1	SiO2†	26268.6	24487.3	[5347.5] µg/L	14:19:05
1	Si 251.611†	30925.0	29986.6	[2500] µg/L	14:19:05
1	Sn 189.927†	1150.8	1128.4	[500] µg/L	14:19:26
1	Ti 334.940†	210237.3	205868.8	[500] µg/L	14:18:59
1	Tl 190.801†	342.7	360.1	[500] µg/L	14:19:26
1	U 409.014†	5574.8	5515.7	[500] µg/L	14:19:05
1	V 292.402†	47320.5	46407.6	[500] µg/L	14:19:05
1	Zn 213.857†	20885.0	19987.0	[500] µg/L	14:19:05
2	Sc RADIAL	56400.3	56400.3	103 %	14:18:02
2	Al 396.153Radial†	6776.8	6567.5	[5000] µg/L	14:18:02
2	Ca 317.933Radial†	5446.0	5090.5	[5000] µg/L	14:18:22
2	K 766.490 Radial†	7209.5	6847.7	[5000] µg/L	14:18:02
2	Mg 279.077 IEC†	558.9	529.5	[5000] µg/L	14:18:22
2	Sr 421.552†	48009.1	46415.3	[500] µg/L	14:18:02
2	Sc 361.383	1969776.8	1969776.8	103.14 %	14:19:33
2	Y 371.029	1347212.9	1347212.9	102.85 %	14:19:33
2	Ag 328.068†	63263.2	61902.7	[500] µg/L	14:19:38
2	As 188.979†	264.1	254.9	[500] µg/L	14:19:59
2	B 249.677†	11833.7	11142.2	[500] µg/L	14:19:38
2	Ba 233.527†	19517.7	18949.8	[500] µg/L	14:19:38
2	Be 313.107†	769998.9	750009.7	[500] µg/L	14:19:33
2	Cd 226.502†	18459.9	18040.3	[500] µg/L	14:19:38
2	Co 228.616†	10435.6	10126.9	[500] µg/L	14:19:38
2	Cr 267.716†	23319.3	22662.1	[500] µg/L	14:19:38
2	Cu 324.752†	75284.2	70507.3	[500] µg/L	14:19:38
2	Mn 257.610†	148076.6	143815.0	[500] µg/L	14:19:33
2	Mo 202.031†	4926.4	4784.1	[500] µg/L	14:19:59
2	Ni 231.604†	9732.8	9134.4	[500] µg/L	14:19:38
2	P 214.914†	1225.6	1160.7	[2500] µg/L	14:19:59
2	Pb 220.353†	2028.4	1869.5	[500] µg/L	14:19:59
2	S 181.975 Axial†	257.8	235.1	[1000] µg/L	14:19:59
2	Sb 206.836†	552.2	508.4	[500] µg/L	14:19:59
2	Se 196.026†	361.1	334.3	[500] µg/L	14:19:59
2	SiO2†	26477.9	24422.2	[5347.5] µg/L	14:19:38

2	Si 251.611†	31253.2	29989.4	[2500]	µg/L	14:19:38
2	Sn 189.927†	1150.3	1116.1	[500]	µg/L	14:19:59
2	Ti 334.940†	211105.1	204565.4	[500]	µg/L	14:19:33
2	Tl 190.801†	338.9	352.9	[500]	µg/L	14:19:59
2	U 409.014†	5592.5	5475.9	[500]	µg/L	14:19:38
2	V 292.402†	47778.9	46369.3	[500]	µg/L	14:19:38
2	Zn 213.857†	21066.0	19949.5	[500]	µg/L	14:19:38
3	Sc RADIAL	56116.0	56116.0	103	%	14:18:27
3	Al 396.153Radial†	6776.6	6600.6	[5000]	µg/L	14:18:27
3	Ca 317.933Radial†	5474.8	5145.3	[5000]	µg/L	14:18:48
3	K 766.490 Radial†	7167.4	6842.1	[5000]	µg/L	14:18:27
3	Mg 279.077 IEC†	570.0	543.0	[5000]	µg/L	14:18:48
3	Sr 421.552†	47985.8	46628.0	[500]	µg/L	14:18:27
3	Sc 361.383	1956384.8	1956384.8	102.44	%	14:20:06
3	Y 371.029	1336938.7	1336938.7	102.06	%	14:20:06
3	Ag 328.068†	58992.1	58153.2	[500]	µg/L	14:20:12
3	As 188.979†	227.0	220.5	[500]	µg/L	14:20:32
3	B 249.677†	10983.9	10391.2	[500]	µg/L	14:20:12
3	Ba 233.527†	17692.5	17297.6	[500]	µg/L	14:20:12
3	Be 313.107†	719301.4	705628.8	[500]	µg/L	14:20:06
3	Cd 226.502†	16595.4	16342.7	[500]	µg/L	14:20:12
3	Co 228.616†	9342.2	9128.8	[500]	µg/L	14:20:12
3	Cr 267.716†	20357.4	19925.5	[500]	µg/L	14:20:12
3	Cu 324.752†	68152.8	64045.2	[500]	µg/L	14:20:12
3	Mn 257.610†	138782.6	135724.9	[500]	µg/L	14:20:06
3	Mo 202.031†	4112.2	4021.9	[500]	µg/L	14:20:32
3	Ni 231.604†	8700.9	8191.7	[500]	µg/L	14:20:12
3	P 214.914†	1052.8	1000.2	[2500]	µg/L	14:20:32
3	Pb 220.353†	1780.7	1641.2	[500]	µg/L	14:20:32
3	S 181.975 Axial†	220.4	200.3	[1000]	µg/L	14:20:32
3	Sb 206.836†	483.7	445.3	[500]	µg/L	14:20:32
3	Se 196.026†	314.2	290.9	[500]	µg/L	14:20:32
3	SiO2†	24349.5	22520.2	[5347.5]	µg/L	14:20:12
3	Si 251.611†	28634.1	27640.0	[2500]	µg/L	14:20:12
3	Sn 189.927†	946.2	924.5	[500]	µg/L	14:20:32
3	Ti 334.940†	196408.6	191619.7	[500]	µg/L	14:20:06
3	Tl 190.801†	311.8	328.7	[500]	µg/L	14:20:32
3	U 409.014†	4970.2	4905.6	[500]	µg/L	14:20:12
3	V 292.402†	42533.9	41566.2	[500]	µg/L	14:20:12
3	Zn 213.857†	18957.2	18030.7	[500]	µg/L	14:20:12

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1958476.4	10413.33	0.53%	102.55	%
Sc RADIAL	56315.8	173.75	0.31%	103	%
Y 371.029	1338737.9	7733.97	0.58%	102.20	%
Ag 328.068†	60689.0	2196.81	3.62%	[500]	µg/L
Al 396.153Radial†	6570.0	29.39	0.45%	[5000]	µg/L
As 188.979†	245.7	22.07	8.99%	[500]	µg/L
B 249.677†	10893.5	435.04	3.99%	[500]	µg/L
Ba 233.527†	18393.1	948.76	5.16%	[500]	µg/L
Be 313.107†	736248.6	26562.75	3.61%	[500]	µg/L
Ca 317.933Radial†	5115.9	27.60	0.54%	[5000]	µg/L
Cd 226.502†	17446.2	956.62	5.48%	[500]	µg/L
Co 228.616†	9786.2	569.47	5.82%	[500]	µg/L
Cr 267.716†	21751.3	1581.21	7.27%	[500]	µg/L
Cu 324.752†	68415.2	3785.63	5.53%	[500]	µg/L
K 766.490 Radial†	6816.2	49.68	0.73%	[5000]	µg/L
Mg 279.077 IEC†	536.5	6.79	1.26%	[5000]	µg/L
Mn 257.610†	141419.0	4951.74	3.50%	[500]	µg/L
Mo 202.031†	4553.9	462.10	10.15%	[500]	µg/L
Ni 231.604†	8805.9	532.32	6.04%	[500]	µg/L
P 214.914†	1111.9	97.02	8.73%	[2500]	µg/L
Pb 220.353†	1799.0	136.97	7.61%	[500]	µg/L
S 181.975 Axial†	224.2	20.73	9.24%	[1000]	µg/L
Sb 206.836†	493.6	42.92	8.69%	[500]	µg/L
Se 196.026†	317.4	23.20	7.31%	[500]	µg/L
SiO2†	23809.9	1117.40	4.69%	[5347.5]	µg/L
Si 251.611†	29205.3	1355.64	4.64%	[2500]	µg/L

Sn 189.927†	1056.3	114.33	10.82%	[500]	µg/L
Sr 421.552†	46507.3	109.22	0.23%	[500]	µg/L
Ti 334.940†	200684.6	7877.46	3.93%	[500]	µg/L
Tl 190.801†	347.2	16.45	4.74%	[500]	µg/L
U 409.014†	5299.1	341.35	6.44%	[500]	µg/L
V 292.402†	44781.0	2784.22	6.22%	[500]	µg/L
Zn 213.857†	19322.4	1118.82	5.79%	[500]	µg/L

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

Autosampler Location: 4
 Date Collected: 2/11/2010 14:20:41
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	54624.1	54624.1	100	%	14:21:14
1	Al 396.153Radial†	13945.5	13943.0	[10000]	µg/L	14:21:14
1	Ca 317.933Radial†	11091.0	10901.8	[10000]	µg/L	14:21:34
1	Fe 238.204 Radial†	1237.7	1222.1	[10000]	µg/L	14:21:34
1	K 766.490 Radial†	14553.2	14411.5	[10000]	µg/L	14:21:14
1	Mg 279.077 IEC†	1145.5	1133.2	[10000]	µg/L	14:21:34
1	Na 589.592 Radial†	32001.3	31430.3	[10000]	µg/L	14:21:14
1	Sr 421.552†	98763.5	98634.1	[1000]	µg/L	14:21:14
1	Sc 361.383	1918837.7	1918837.7	100.47	%	14:22:38
1	Y 371.029	1309873.4	1309873.4	99.997	%	14:22:38
1	Ag 328.068†	129789.4	129745.3	[1000]	µg/L	14:22:44
1	As 188.979†	545.1	541.4	[1000]	µg/L	14:23:05
1	B 249.677†	24100.3	23655.8	[1000]	µg/L	14:22:44
1	Ba 233.527†	40021.0	39859.3	[1000]	µg/L	14:22:44
1	Be 313.107†	1583359.7	1579375.6	[1000]	µg/L	14:22:38
1	Cd 226.502†	37676.7	37642.1	[1000]	µg/L	14:22:44
1	Co 228.616†	21224.5	21133.9	[1000]	µg/L	14:22:44
1	Cr 267.716†	47864.2	47692.2	[1000]	µg/L	14:22:44
1	Cu 324.752†	152208.7	149008.9	[1000]	µg/L	14:22:44
1	Mn 257.610†	300264.6	299100.8	[1000]	µg/L	14:22:44
1	Mo 202.031†	10059.0	10019.4	[1000]	µg/L	14:23:05
1	Ni 231.604†	19417.1	19023.9	[1000]	µg/L	14:22:44
1	P 214.914†	2522.7	2483.2	[5000]	µg/L	14:23:05
1	Pb 220.353†	4095.0	3978.6	[1000]	µg/L	14:23:05
1	S 181.975 Axial†	497.7	480.5	[2000]	µg/L	14:23:05
1	Sb 206.836†	1108.7	1076.5	[1000]	µg/L	14:23:05
1	Se 196.026†	705.0	685.9	[1000]	µg/L	14:23:05
1	SiO2†	52879.3	51381.3	[10695]	µg/L	14:22:44
1	Si 251.611†	63553.1	62942.2	[5000]	µg/L	14:22:44
1	Sn 189.927†	2343.4	2333.3	[1000]	µg/L	14:23:05
1	Ti 334.940†	431168.6	429030.7	[1000]	µg/L	14:22:38
1	Tl 190.801†	726.4	747.3	[1000]	µg/L	14:23:05
1	U 409.014†	11460.5	11460.4	[1000]	µg/L	14:22:44
1	V 292.402†	98389.1	97972.0	[1000]	µg/L	14:22:44
1	Zn 213.857†	42248.3	41574.6	[1000]	µg/L	14:22:44
2	Sc RADIAL	55757.6	55757.6	102	%	14:21:40
2	Al 396.153Radial†	13857.6	13573.7	[10000]	µg/L	14:21:40
2	Ca 317.933Radial†	11113.5	10698.5	[10000]	µg/L	14:22:00
2	Fe 238.204 Radial†	1242.3	1201.4	[10000]	µg/L	14:22:00
2	K 766.490 Radial†	14434.4	13999.7	[10000]	µg/L	14:21:40
2	Mg 279.077 IEC†	1155.1	1119.3	[10000]	µg/L	14:22:00
2	Na 589.592 Radial†	31736.9	30521.6	[10000]	µg/L	14:21:40
2	Sr 421.552†	98177.9	96055.0	[1000]	µg/L	14:21:40
2	Sc 361.383	1912891.8	1912891.8	100.16	%	14:23:11
2	Y 371.029	1304958.7	1304958.7	99.621	%	14:23:11
2	Ag 328.068†	130617.7	130973.8	[1000]	µg/L	14:23:17
2	As 188.979†	550.1	548.1	[1000]	µg/L	14:23:38
2	B 249.677†	24305.4	23935.1	[1000]	µg/L	14:23:17
2	Ba 233.527†	40326.4	40288.1	[1000]	µg/L	14:23:17
2	Be 313.107†	1586929.2	1587837.9	[1000]	µg/L	14:23:11
2	Cd 226.502†	37959.2	38040.8	[1000]	µg/L	14:23:17
2	Co 228.616†	21379.4	21354.1	[1000]	µg/L	14:23:17
2	Cr 267.716†	48340.5	48315.7	[1000]	µg/L	14:23:17
2	Cu 324.752†	153521.9	150790.9	[1000]	µg/L	14:23:17
2	Mn 257.610†	303225.9	302986.3	[1000]	µg/L	14:23:17
2	Mo 202.031†	10012.5	10004.1	[1000]	µg/L	14:23:38
2	Ni 231.604†	19568.5	19235.1	[1000]	µg/L	14:23:17
2	P 214.914†	2513.0	2481.4	[5000]	µg/L	14:23:38
2	Pb 220.353†	4075.3	3971.6	[1000]	µg/L	14:23:38

2	S 181.975 Axial†	494.3	478.7	[2000]	µg/L	14:23:38
2	Sb 206.836†	1106.5	1077.8	[1000]	µg/L	14:23:38
2	Se 196.026†	715.1	698.1	[1000]	µg/L	14:23:38
2	SiO2†	53340.3	52005.2	[10695]	µg/L	14:23:17
2	Si 251.611†	64000.9	63585.9	[5000]	µg/L	14:23:17
2	Sn 189.927†	2345.0	2342.2	[1000]	µg/L	14:23:38
2	Ti 334.940†	432325.2	431519.3	[1000]	µg/L	14:23:11
2	Tl 190.801†	726.1	749.2	[1000]	µg/L	14:23:38
2	U 409.014†	11741.1	11776.0	[1000]	µg/L	14:23:17
2	V 292.402†	99181.6	99067.5	[1000]	µg/L	14:23:17
2	Zn 213.857†	42614.4	42070.9	[1000]	µg/L	14:23:17
3	Sc RADIAL	54875.2	54875.2	101	%	14:22:06
3	Al 396.153Radial†	13886.4	13820.4	[10000]	µg/L	14:22:06
3	Ca 317.933Radial†	11079.2	10839.4	[10000]	µg/L	14:22:26
3	Fe 238.204 Radial†	1232.3	1211.0	[10000]	µg/L	14:22:26
3	K 766.490 Radial†	14321.1	14114.2	[10000]	µg/L	14:22:06
3	Mg 279.077 IEC†	1147.7	1130.1	[10000]	µg/L	14:22:26
3	Na 589.592 Radial†	31806.0	31089.8	[10000]	µg/L	14:22:06
3	Sr 421.552†	97911.9	97335.8	[1000]	µg/L	14:22:06
3	Sc 361.383	1943388.7	1943388.7	101.76	%	14:23:44
3	Y 371.029	1326037.1	1326037.1	101.23	%	14:23:44
3	Ag 328.068†	122308.3	120761.4	[1000]	µg/L	14:23:50
3	As 188.979†	468.8	459.6	[1000]	µg/L	14:24:11
3	B 249.677†	22603.8	21882.1	[1000]	µg/L	14:23:50
3	Ba 233.527†	36855.9	36245.6	[1000]	µg/L	14:23:50
3	Be 313.107†	1492194.6	1469875.4	[1000]	µg/L	14:23:44
3	Cd 226.502†	34480.3	34027.2	[1000]	µg/L	14:23:50
3	Co 228.616†	19338.4	19013.4	[1000]	µg/L	14:23:50
3	Cr 267.716†	42475.6	41794.7	[1000]	µg/L	14:23:50
3	Cu 324.752†	139121.1	134233.4	[1000]	µg/L	14:23:50
3	Mn 257.610†	272803.2	268337.9	[1000]	µg/L	14:23:50
3	Mo 202.031†	8402.4	8264.9	[1000]	µg/L	14:24:11
3	Ni 231.604†	17696.7	17089.1	[1000]	µg/L	14:23:50
3	P 214.914†	2160.3	2095.4	[5000]	µg/L	14:24:11
3	Pb 220.353†	3557.4	3398.8	[1000]	µg/L	14:24:11
3	S 181.975 Axial†	437.7	415.3	[2000]	µg/L	14:24:11
3	Sb 206.836†	957.8	914.3	[1000]	µg/L	14:24:11
3	Se 196.026†	625.8	599.2	[1000]	µg/L	14:24:11
3	SiO2†	49204.0	47104.6	[10695]	µg/L	14:23:50
3	Si 251.611†	59050.8	57718.6	[5000]	µg/L	14:23:50
3	Sn 189.927†	1920.9	1888.6	[1000]	µg/L	14:24:11
3	Ti 334.940†	404515.4	397416.1	[1000]	µg/L	14:23:44
3	Tl 190.801†	655.3	668.3	[1000]	µg/L	14:24:11
3	U 409.014†	10336.6	10211.8	[1000]	µg/L	14:23:50
3	V 292.402†	89071.2	87577.8	[1000]	µg/L	14:23:50
3	Zn 213.857†	38626.6	37484.3	[1000]	µg/L	14:23:50

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1925039.4	16166.66	0.84%	100.80 %
Sc RADIAL	55085.6	595.31	1.08%	101 %
Y 371.029	1313623.1	11028.13	0.84%	100.28 %
Ag 328.068†	127160.2	5575.45	4.38%	[1000] µg/L
Al 396.153Radial†	13779.0	188.09	1.37%	[10000] µg/L
As 188.979†	516.3	49.27	9.54%	[1000] µg/L
B 249.677†	23157.7	1113.46	4.81%	[1000] µg/L
Ba 233.527†	38797.7	2220.52	5.72%	[1000] µg/L
Be 313.107†	1545696.3	65799.01	4.26%	[1000] µg/L
Ca 317.933Radial†	10813.2	104.13	0.96%	[10000] µg/L
Cd 226.502†	36570.0	2211.18	6.05%	[1000] µg/L
Co 228.616†	20500.4	1292.54	6.30%	[1000] µg/L
Cr 267.716†	45934.2	3598.42	7.83%	[1000] µg/L
Cu 324.752†	144677.7	9088.85	6.28%	[1000] µg/L
Fe 238.204 Radial†	1211.5	10.32	0.85%	[10000] µg/L
K 766.490 Radial†	14175.1	212.58	1.50%	[10000] µg/L
Mg 279.077 IEC†	1127.5	7.31	0.65%	[10000] µg/L
Mn 257.610†	290141.7	18982.26	6.54%	[1000] µg/L
Mo 202.031†	9429.5	1008.55	10.70%	[1000] µg/L
Na 589.592 Radial†	31013.9	459.06	1.48%	[10000] µg/L

Ni 231.604†	18449.4	1182.78	6.41%	[1000] µg/L
P 214.914†	2353.3	223.38	9.49%	[5000] µg/L
Pb 220.353†	3783.0	332.79	8.80%	[1000] µg/L
S 181.975 Axial†	458.2	37.14	8.10%	[2000] µg/L
Sb 206.836†	1022.9	94.00	9.19%	[1000] µg/L
Se 196.026†	661.1	53.94	8.16%	[1000] µg/L
SiO2†	50163.7	2667.59	5.32%	[10695] µg/L
Si 251.611†	61415.6	3217.81	5.24%	[5000] µg/L
Sn 189.927†	2188.0	259.31	11.85%	[1000] µg/L
Sr 421.552†	97341.6	1289.53	1.32%	[1000] µg/L
Ti 334.940†	419322.0	19011.87	4.53%	[1000] µg/L
Tl 190.801†	721.6	46.19	6.40%	[1000] µg/L
U 409.014†	11149.4	827.15	7.42%	[1000] µg/L
V 292.402†	94872.5	6341.05	6.68%	[1000] µg/L
Zn 213.857†	40376.6	2517.08	6.23%	[1000] µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/11/2010 14:24:20

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	55734.1	55734.1	102 %	14:24:53
1	Al 396.153Radial†	68477.1	67062.5	[50000] µg/L	14:24:53
1	Ca 317.933Radial†	54301.8	52992.8	[50000] µg/L	14:24:53
1	Fe 238.204 Radial†	2420.6	2355.7	[20000] µg/L	14:25:13
1	Mg 279.077 IEC†	5505.9	5380.1	[50000] µg/L	14:25:13
1	Na 589.592 Radial†	62235.4	60398.5	[20000] µg/L	14:24:53
1	Sc 361.383	1922257.7	1922257.7	100.65 %	14:26:17
1	Y 371.029	1306511.6	1306511.6	99.740 %	14:26:17
2	Sc RADIAL	55997.4	55997.4	103 %	14:25:19
2	Al 396.153Radial†	68696.2	66960.7	[50000] µg/L	14:25:19
2	Ca 317.933Radial†	54670.5	53102.1	[50000] µg/L	14:25:19
2	Fe 238.204 Radial†	2419.7	2343.7	[20000] µg/L	14:25:39
2	Mg 279.077 IEC†	5512.9	5361.5	[50000] µg/L	14:25:39
2	Na 589.592 Radial†	62504.6	60374.4	[20000] µg/L	14:25:19
2	Sc 361.383	1943938.9	1943938.9	101.79 %	14:26:25
2	Y 371.029	1321297.0	1321297.0	100.87 %	14:26:25
3	Sc RADIAL	56208.4	56208.4	103 %	14:25:45
3	Al 396.153Radial†	69051.1	67053.9	[50000] µg/L	14:25:45
3	Ca 317.933Radial†	54933.8	53157.7	[50000] µg/L	14:25:45
3	Fe 238.204 Radial†	2417.0	2332.2	[20000] µg/L	14:26:05
3	Mg 279.077 IEC†	5516.6	5344.9	[50000] µg/L	14:26:05
3	Na 589.592 Radial†	62899.5	60529.1	[20000] µg/L	14:25:45
3	Sc 361.383	1959647.9	1959647.9	102.61 %	14:26:33
3	Y 371.029	1332766.9	1332766.9	101.74 %	14:26:33

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1941948.2	18774.43	0.97%	101.68 %
Sc RADIAL	55979.9	237.64	0.42%	103 %
Y 371.029	1320191.8	13162.49	1.00%	100.78 %
Al 396.153Radial†	67025.7	56.44	0.08%	[50000] µg/L
Ca 317.933Radial†	53084.2	83.91	0.16%	[50000] µg/L
Fe 238.204 Radial†	2343.9	11.76	0.50%	[20000] µg/L
Mg 279.077 IEC†	5362.2	17.57	0.33%	[50000] µg/L
Na 589.592 Radial†	60434.0	83.23	0.14%	[20000] µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	126.0	0.00000	0.999831	
Al 396.153Radial	3	Lin Thru 0	0.0	1.342	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	0.5116	0.00000	0.999791	
B 249.677	3	Lin Thru 0	0.0	22.88	0.00000	0.999715	
Ba 233.527	3	Lin Thru 0	0.0	38.40	0.00000	0.999779	
Be 313.107	3	Lin Thru 0	0.0	1531	0.00000	0.999818	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.062	0.00000	0.999987	
Cd 226.502	3	Lin Thru 0	0.0	36.25	0.00000	0.999822	
Co 228.616	3	Lin Thru 0	0.0	20.32	0.00000	0.999831	
Cr 267.716	3	Lin Thru 0	0.0	45.46	0.00000	0.999766	
Cu 324.752	3	Lin Thru 0	0.0	143.2	0.00000	0.999754	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1180	0.00000	0.999910	
K 766.490 Radial	3	Lin Thru 0	0.0	1.407	0.00000	0.999880	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1075	0.00000	0.999952	
Mn 257.610	3	Lin Thru 0	0.0	288.8	0.00000	0.999942	
Mo 202.031	3	Lin Thru 0	0.0	9.370	0.00000	0.999888	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.038	0.00000	0.999945	

Ni 231.604	3	Lin Thru 0	0.0	18.29	0.00000	0.999821
P 214.914	3	Lin Thru 0	0.0	0.4657	0.00000	0.999737
Pb 220.353	3	Lin Thru 0	0.0	3.748	0.00000	0.999792
S 181.975 Axial	3	Lin Thru 0	0.0	0.2282	0.00000	0.999946
Sb 206.836	3	Lin Thru 0	0.0	1.016	0.00000	0.999901
Se 196.026	3	Lin Thru 0	0.0	0.6559	0.00000	0.999870
SiO2	3	Lin Thru 0	0.0	4.643	0.00000	0.999791
Si 251.611	3	Lin Thru 0	0.0	12.16	0.00000	0.999805
Sn 189.927	3	Lin Thru 0	0.0	2.174	0.00000	0.999882
Sr 421.552	3	Lin Thru 0	0.0	96.47	0.00000	0.999840
Ti 334.940	3	Lin Thru 0	0.0	415.7	0.00000	0.999852
Tl 190.801	3	Lin Thru 0	0.0	0.7164	0.00000	0.999879
U 409.014	3	Lin Thru 0	0.0	11.05	0.00000	0.999783
V 292.402	3	Lin Thru 0	0.0	93.83	0.00000	0.999742
Zn 213.857	3	Lin Thru 0	0.0	40.05	0.00000	0.999841

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/11/2010 14:26:41

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	56175.2	56175.2	103 %		14:27:15
1	Al 396.153Radial†	6827.4	6643.0	4939.9 µg/L	4939.9 ppb	14:27:35
1	Ca 317.933Radial†	5504.7	5168.7	4866.7 µg/L	4866.7 ppb	14:27:35
1	Fe 238.204 Radial†	619.4	587.3	4988.2 µg/L	4988.2 ppb	14:27:35
1	K 766.490 Radial†	3573.7	3343.4	2376.5 µg/L	2376.5 ppb	14:27:15
1	Mg 279.077 IEC†	579.7	551.9	5140.1 µg/L	5140.1 ppb	14:27:35
1	Na 589.592 Radial†	7985.2	7215.8	2375.5 µg/L	2375.5 ppb	14:27:15
1	Sr 421.552†	49736.5	48279.6	500.47 µg/L	500.47 ppb	14:27:15
1	Sc 361.383	1963746.6	1963746.6	102.82 %		14:28:38
1	Y 371.029	1343456.9	1343456.9	102.56 %		14:28:38
1	Ag 328.068†	32402.4	32077.4	258.20 µg/L	258.20 ppb	14:28:44
1	As 188.979†	252.0	244.0	475.79 µg/L	475.79 ppb	14:29:05
1	B 249.677†	12299.6	11630.5	506.47 µg/L	506.47 ppb	14:28:44
1	Ba 233.527†	19805.3	19287.7	503.14 µg/L	503.14 ppb	14:28:44
1	Be 313.107†	400944.5	393378.7	256.71 µg/L	256.71 ppb	14:28:38
1	Cd 226.502†	18448.5	18084.2	498.85 µg/L	498.85 ppb	14:28:44
1	Co 228.616†	10564.7	10283.6	505.57 µg/L	505.57 ppb	14:28:44
1	Cr 267.716†	22885.3	22309.5	491.04 µg/L	491.04 ppb	14:28:44
1	Cu 324.752†	76882.1	72285.6	505.62 µg/L	505.62 ppb	14:28:44
1	Mn 257.610†	151694.6	147774.6	512.18 µg/L	512.18 ppb	14:28:38
1	Mo 202.031†	5332.7	5193.9	554.49 µg/L	554.49 ppb	14:29:05
1	Ni 231.604†	9713.9	9145.0	499.47 µg/L	499.47 ppb	14:28:44
1	P 214.914†	1269.4	1206.9	2543.7 µg/L	2543.7 ppb	14:29:05
1	Pb 220.353†	2051.9	1898.4	506.85 µg/L	506.85 ppb	14:29:05
1	S 181.975 Axial†	610.0	578.4	2534.1 µg/L	2534.1 ppb	14:29:05
1	Sb 206.836†	565.9	523.4	518.27 µg/L	518.27 ppb	14:29:05
1	Se 196.026†	1740.7	1677.1	2564.5 µg/L	2564.5 ppb	14:29:05
1	SiO2†	50702.0	48060.2	10350 µg/L	10350 ppb	14:28:44
1	Si 251.611†	60656.9	58679.0	4823.7 µg/L	4823.7 ppb	14:28:44
1	Sn 189.927†	1247.6	1214.2	558.50 µg/L	558.50 ppb	14:29:05
1	Ti 334.940†	209346.8	203483.9	489.14 µg/L	489.14 ppb	14:28:38
1	Tl 190.801†	364.1	378.4	534.06 µg/L	534.06 ppb	14:29:05
1	U 409.014†	5596.2	5496.2	496.62 µg/L	496.62 ppb	14:28:44
1	V 292.402†	48924.8	47626.0	514.07 µg/L	514.07 ppb	14:28:44
1	Zn 213.857†	21567.2	20499.6	508.35 µg/L	508.35 ppb	14:28:44
2	Sc RADIAL	56033.1	56033.1	103 %		14:27:40
2	Al 396.153Radial†	6802.0	6635.1	4934.1 µg/L	4934.1 ppb	14:28:01
2	Ca 317.933Radial†	5475.3	5153.6	4852.4 µg/L	4852.4 ppb	14:28:01
2	Fe 238.204 Radial†	614.3	583.8	4958.8 µg/L	4958.8 ppb	14:28:01
2	K 766.490 Radial†	3641.5	3418.3	2429.7 µg/L	2429.7 ppb	14:27:40
2	Mg 279.077 IEC†	579.8	553.4	5154.4 µg/L	5154.4 ppb	14:28:01
2	Na 589.592 Radial†	8029.7	7278.8	2396.2 µg/L	2396.2 ppb	14:27:40
2	Sr 421.552†	50111.3	48767.2	505.53 µg/L	505.53 ppb	14:27:40
2	Sc 361.383	1959108.8	1959108.8	102.58 %		14:29:12
2	Y 371.029	1337906.1	1337906.1	102.14 %		14:29:12
2	Ag 328.068†	32371.7	32122.1	258.56 µg/L	258.56 ppb	14:29:17
2	As 188.979†	250.3	242.8	473.56 µg/L	473.56 ppb	14:29:38
2	B 249.677†	12349.9	11707.8	509.86 µg/L	509.86 ppb	14:29:17
2	Ba 233.527†	19859.1	19385.7	505.69 µg/L	505.69 ppb	14:29:17
2	Be 313.107†	397767.3	391204.5	255.29 µg/L	255.29 ppb	14:29:12
2	Cd 226.502†	18445.9	18124.1	499.96 µg/L	499.96 ppb	14:29:17
2	Co 228.616†	10616.9	10358.7	509.26 µg/L	509.26 ppb	14:29:17
2	Cr 267.716†	22880.0	22357.0	492.09 µg/L	492.09 ppb	14:29:17
2	Cu 324.752†	76966.8	72545.1	507.43 µg/L	507.43 ppb	14:29:17
2	Mn 257.610†	150503.7	146962.9	509.37 µg/L	509.37 ppb	14:29:12
2	Mo 202.031†	5249.3	5124.9	547.12 µg/L	547.12 ppb	14:29:38
2	Ni 231.604†	9710.9	9164.5	500.53 µg/L	500.53 ppb	14:29:17
2	P 214.914†	1234.6	1175.9	2476.8 µg/L	2476.8 ppb	14:29:38
2	Pb 220.353†	2014.2	1866.4	498.27 µg/L	498.27 ppb	14:29:38

2	S 181.975 Axial†	603.9	573.9	2514.5 µg/L	2514.5 ppb	14:29:38
2	Sb 206.836†	552.1	511.3	506.22 µg/L	506.22 ppb	14:29:38
2	Se 196.026†	1718.6	1659.6	2537.7 µg/L	2537.7 ppb	14:29:38
2	SiO2†	50804.5	48276.9	10397 µg/L	10397 ppb	14:29:17
2	Si 251.611†	60707.2	58867.6	4839.2 µg/L	4839.2 ppb	14:29:17
2	Sn 189.927†	1227.9	1197.9	551.01 µg/L	551.01 ppb	14:29:38
2	Ti 334.940†	208068.6	202719.9	487.30 µg/L	487.30 ppb	14:29:12
2	Tl 190.801†	356.4	371.7	524.72 µg/L	524.72 ppb	14:29:38
2	U 409.014†	5657.2	5568.6	503.18 µg/L	503.18 ppb	14:29:17
2	V 292.402†	48911.7	47725.9	515.09 µg/L	515.09 ppb	14:29:17
2	Zn 213.857†	21491.7	20475.7	507.74 µg/L	507.74 ppb	14:29:17
3	Sc RADIAL	55710.7	55710.7	102 %		14:28:06
3	Al 396.153Radial†	6837.6	6708.3	4990.5 µg/L	4990.5 ppb	14:28:27
3	Ca 317.933Radial†	5503.3	5211.9	4907.4 µg/L	4907.4 ppb	14:28:27
3	Fe 238.204 Radial†	619.1	592.0	5027.4 µg/L	5027.4 ppb	14:28:27
3	K 766.490 Radial†	3604.3	3402.4	2418.4 µg/L	2418.4 ppb	14:28:06
3	Mg 279.077 IEC†	577.0	553.9	5157.4 µg/L	5157.4 ppb	14:28:27
3	Na 589.592 Radial†	7999.1	7294.1	2401.2 µg/L	2401.2 ppb	14:28:06
3	Sr 421.552†	49756.2	48701.8	504.85 µg/L	504.85 ppb	14:28:06
3	Sc 361.383	1966591.1	1966591.1	102.97 %		14:29:45
3	Y 371.029	1344829.1	1344829.1	102.67 %		14:29:45
3	Ag 328.068†	30447.1	30133.0	242.44 µg/L	242.44 ppb	14:29:51
3	As 188.979†	212.1	204.8	399.46 µg/L	399.46 ppb	14:30:11
3	B 249.677†	11543.9	10879.3	473.52 µg/L	473.52 ppb	14:29:51
3	Ba 233.527†	18235.3	17735.1	462.62 µg/L	462.62 ppb	14:29:51
3	Be 313.107†	376544.4	369118.7	240.88 µg/L	240.88 ppb	14:29:45
3	Cd 226.502†	16808.4	16465.5	454.14 µg/L	454.14 ppb	14:29:51
3	Co 228.616†	9616.6	9347.9	459.50 µg/L	459.50 ppb	14:29:51
3	Cr 267.716†	20282.2	19749.2	434.69 µg/L	434.69 ppb	14:29:51
3	Cu 324.752†	70054.3	65546.6	458.56 µg/L	458.56 ppb	14:29:51
3	Mn 257.610†	142833.7	138956.0	481.65 µg/L	481.65 ppb	14:29:45
3	Mo 202.031†	4404.7	4285.1	457.51 µg/L	457.51 ppb	14:30:11
3	Ni 231.604†	8886.0	8327.4	454.82 µg/L	454.82 ppb	14:29:51
3	P 214.914†	1057.7	999.5	2101.9 µg/L	2101.9 ppb	14:30:11
3	Pb 220.353†	1779.9	1631.4	435.46 µg/L	435.46 ppb	14:30:11
3	S 181.975 Axial†	527.5	497.5	2179.7 µg/L	2179.7 ppb	14:30:11
3	Sb 206.836†	492.5	451.4	446.41 µg/L	446.41 ppb	14:30:11
3	Se 196.026†	1501.7	1442.5	2207.0 µg/L	2207.0 ppb	14:30:11
3	SiO2†	47105.5	44496.1	9582.5 µg/L	9582.5 ppb	14:29:51
3	Si 251.611†	56262.5	54326.1	4465.9 µg/L	4465.9 ppb	14:29:51
3	Sn 189.927†	1018.6	990.0	455.40 µg/L	455.40 ppb	14:30:11
3	Ti 334.940†	196112.8	190337.3	457.51 µg/L	457.51 ppb	14:29:45
3	Tl 190.801†	328.3	343.2	484.58 µg/L	484.58 ppb	14:30:11
3	U 409.014†	4922.5	4834.1	436.66 µg/L	436.66 ppb	14:29:51
3	V 292.402†	44109.1	42880.5	462.56 µg/L	462.56 ppb	14:29:51
3	Zn 213.857†	19646.9	18604.4	461.29 µg/L	461.29 ppb	14:29:51

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1963148.8	102.79 %	0.198			0.19%
Sc RADIAL	55973.0	103 %	0.4			0.43%
Y 371.029	1342064.0	102.45 %	0.280			0.27%
Ag 328.068†	31444.2	253.06 µg/L	9.205	253.06 ppb	9.205	3.64%
QC value within limits for Ag 328.068 Recovery = 101.23%						
Al 396.153Radial†	6662.1	4954.8 µg/L	31.04	4954.8 ppb	31.04	0.63%
QC value within limits for Al 396.153Radial Recovery = 99.10%						
As 188.979†	230.5	449.61 µg/L	43.438	449.61 ppb	43.438	9.66%
QC value less than the lower limit for As 188.979 Recovery = 89.92%						
B 249.677†	11405.9	496.62 µg/L	20.071	496.62 ppb	20.071	4.04%
QC value within limits for B 249.677 Recovery = 99.32%						
Ba 233.527†	18802.8	490.48 µg/L	24.164	490.48 ppb	24.164	4.93%
QC value within limits for Ba 233.527 Recovery = 98.10%						
Be 313.107†	384567.3	250.96 µg/L	8.759	250.96 ppb	8.759	3.49%
QC value within limits for Be 313.107 Recovery = 100.38%						
Ca 317.933Radial†	5178.1	4875.5 µg/L	28.51	4875.5 ppb	28.51	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.51%						
Cd 226.502†	17558.0	484.32 µg/L	26.137	484.32 ppb	26.137	5.40%
QC value within limits for Cd 226.502 Recovery = 96.86%						
Co 228.616†	9996.7	491.44 µg/L	27.727	491.44 ppb	27.727	5.64%

Cr	267.716†	21471.9	472.61 µg/L	32.838	472.61 ppb	32.838	6.95%
Cu	324.752†	70125.8	490.54 µg/L	27.712	490.54 ppb	27.712	5.65%
Fe	238.204 Radial†	587.7	4991.5 µg/L	34.44	4991.5 ppb	34.44	0.69%
K	766.490 Radial†	3388.1	2408.2 µg/L	28.04	2408.2 ppb	28.04	1.16%
Mg	279.077 IEC†	553.1	5150.6 µg/L	9.21	5150.6 ppb	9.21	0.18%
Mn	257.610†	144564.5	501.06 µg/L	16.874	501.06 ppb	16.874	3.37%
Mo	202.031†	4868.0	519.70 µg/L	53.991	519.70 ppb	53.991	10.39%
Na	589.592 Radial†	7262.9	2391.0 µg/L	13.66	2391.0 ppb	13.66	0.57%
Ni	231.604†	8879.0	484.94 µg/L	26.089	484.94 ppb	26.089	5.38%
P	214.914†	1127.4	2374.2 µg/L	238.13	2374.2 ppb	238.13	10.03%
Pb	220.353†	1798.7	480.19 µg/L	38.976	480.19 ppb	38.976	8.12%
S	181.975 Axial†	549.9	2409.5 µg/L	199.20	2409.5 ppb	199.20	8.27%
Sb	206.836†	495.4	490.30 µg/L	38.486	490.30 ppb	38.486	7.85%
Se	196.026†	1593.1	2436.4 µg/L	199.13	2436.4 ppb	199.13	8.17%
SiO2†		46944.4	10110 µg/L	457.2	10110 ppb	457.2	4.52%
Si	251.611†	57290.9	4709.6 µg/L	211.21	4709.6 ppb	211.21	4.48%
Sn	189.927†	1134.1	521.64 µg/L	57.487	521.64 ppb	57.487	11.02%
Sr	421.552†	48582.8	503.62 µg/L	2.743	503.62 ppb	2.743	0.54%
Ti	334.940†	198847.0	477.98 µg/L	17.751	477.98 ppb	17.751	3.71%
Tl	190.801†	364.4	514.45 µg/L	26.290	514.45 ppb	26.290	5.11%
U	409.014†	5299.6	478.82 µg/L	36.655	478.82 ppb	36.655	7.66%
V	292.402†	46077.4	497.24 µg/L	30.036	497.24 ppb	30.036	6.04%
Zn	213.857†	19859.9	492.46 µg/L	26.995	492.46 ppb	26.995	5.48%

QC value within limits for Co 228.616 Recovery = 98.29%
 QC value within limits for Cr 267.716 Recovery = 94.52%
 QC value within limits for Cu 324.752 Recovery = 98.11%
 QC value within limits for Fe 238.204 Radial Recovery = 99.83%
 QC value within limits for K 766.490 Radial Recovery = 96.33%
 QC value within limits for Mg 279.077 IEC Recovery = 103.01%
 QC value within limits for Mn 257.610 Recovery = 100.21%
 QC value within limits for Mo 202.031 Recovery = 103.94%
 QC value within limits for Na 589.592 Radial Recovery = 95.64%
 QC value within limits for Ni 231.604 Recovery = 96.99%
 QC value within limits for P 214.914 Recovery = 94.97%
 QC value within limits for Pb 220.353 Recovery = 96.04%
 QC value within limits for S 181.975 Axial Recovery = 96.38%
 QC value within limits for Sb 206.836 Recovery = 98.06%
 QC value within limits for Se 196.026 Recovery = 97.46%
 QC value within limits for SiO2 Recovery = 94.53%
 QC value within limits for Si 251.611 Recovery = 94.19%
 QC value within limits for Sn 189.927 Recovery = 104.33%
 QC value within limits for Sr 421.552 Recovery = 100.72%
 QC value within limits for Ti 334.940 Recovery = 95.60%
 QC value within limits for Tl 190.801 Recovery = 102.89%
 QC value within limits for U 409.014 Recovery = 95.76%
 QC value within limits for V 292.402 Recovery = 99.45%
 QC value within limits for Zn 213.857 Recovery = 98.49%

QC Failed. Continue with analysis.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/11/2010 14:30:21

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	55908.8	55908.8	102 %		14:30:53
1	Al 396.153Radial†	-5.0	5.2	3.8899 µg/L	3.8899 ppb	14:30:53
1	Ca 317.933Radial†	192.7	9.0	8.4299 µg/L	8.4299 ppb	14:31:14
1	Fe 238.204 Radial†	14.3	-0.6	-4.9645 µg/L	-4.9645 ppb	14:31:14
1	K 766.490 Radial†	107.9	-23.1	-16.426 µg/L	-16.426 ppb	14:30:53
1	Mg 279.077 IEC†	15.7	4.0	37.295 µg/L	37.295 ppb	14:31:14
1	Na 589.592 Radial†	574.2	18.7	6.1420 µg/L	6.1420 ppb	14:30:53
1	Sr 421.552†	57.3	16.3	0.1694 µg/L	0.1694 ppb	14:30:53
1	Sc 361.383	1944300.1	1944300.1	101.80 %		14:32:16
1	Y 371.029	1332393.9	1332393.9	101.72 %		14:32:16
1	Ag 328.068†	-508.2	65.3	0.5177 µg/L	0.5177 ppb	14:32:21
1	As 188.979†	2.4	1.2	2.3247 µg/L	2.3247 ppb	14:32:42
1	B 249.677†	341.3	3.8	0.1701 µg/L	0.1701 ppb	14:32:42
1	Ba 233.527†	-14.2	12.0	0.3135 µg/L	0.3135 ppb	14:32:42
1	Be 313.107†	-3420.4	80.6	0.0526 µg/L	0.0526 ppb	14:32:21
1	Cd 226.502†	-141.7	2.9	0.0816 µg/L	0.0816 ppb	14:32:42
1	Co 228.616†	-8.8	0.2	0.0094 µg/L	0.0094 ppb	14:32:42
1	Cr 267.716†	-52.4	0.9	0.0196 µg/L	0.0196 ppb	14:32:21
1	Cu 324.752†	2516.4	-14.3	-0.1006 µg/L	-0.1006 ppb	14:32:21
1	Mn 257.610†	-222.7	25.3	0.0856 µg/L	0.0856 ppb	14:32:42
1	Mo 202.031†	-0.2	7.3	0.7799 µg/L	0.7799 ppb	14:32:42
1	Ni 231.604†	301.0	-6.6	-0.3591 µg/L	-0.3591 ppb	14:32:42
1	P 214.914†	32.4	4.2	8.9740 µg/L	8.9740 ppb	14:32:42
1	Pb 220.353†	88.6	-10.1	-2.7035 µg/L	-2.7035 ppb	14:32:42
1	S 181.975 Axial†	16.5	1.4	6.0966 µg/L	6.0966 ppb	14:32:42
1	Sb 206.836†	22.8	-4.6	-4.5144 µg/L	-4.5144 ppb	14:32:42
1	Se 196.026†	21.7	5.5	8.3158 µg/L	8.3158 ppb	14:32:42
1	SiO2†	1261.7	-10.7	-2.2937 µg/L	-2.2937 ppb	14:32:21
1	Si 251.611†	339.4	20.5	1.6875 µg/L	1.6875 ppb	14:32:42
1	Sn 189.927†	1.1	2.0	0.9031 µg/L	0.9031 ppb	14:32:42
1	Ti 334.940†	148.3	29.6	0.0683 µg/L	0.0683 ppb	14:32:21
1	Tl 190.801†	-21.8	2.8	3.9713 µg/L	3.9713 ppb	14:32:42
1	U 409.014†	-33.0	21.2	1.9223 µg/L	1.9223 ppb	14:32:21
1	V 292.402†	-53.1	-7.9	-0.0767 µg/L	-0.0767 ppb	14:32:21
1	Zn 213.857†	482.8	-1.3	-0.0325 µg/L	-0.0325 ppb	14:32:42
2	Sc RADIAL	55881.3	55881.3	102 %		14:31:19
2	Al 396.153Radial†	-15.6	-5.1	-3.7901 µg/L	-3.7901 ppb	14:31:19
2	Ca 317.933Radial†	181.6	-1.8	-1.6610 µg/L	-1.6610 ppb	14:31:40
2	Fe 238.204 Radial†	14.4	-0.5	-4.0234 µg/L	-4.0234 ppb	14:31:40
2	K 766.490 Radial†	165.7	33.4	23.714 µg/L	23.714 ppb	14:31:19
2	Mg 279.077 IEC†	9.4	-2.1	-19.910 µg/L	-19.910 ppb	14:31:40
2	Na 589.592 Radial†	521.5	-32.6	-10.727 µg/L	-10.727 ppb	14:31:19
2	Sr 421.552†	60.7	19.7	0.2040 µg/L	0.2040 ppb	14:31:19
2	Sc 361.383	1964760.3	1964760.3	102.88 %		14:32:48
2	Y 371.029	1347613.8	1347613.8	102.88 %		14:32:48
2	Ag 328.068†	-518.5	60.5	0.4799 µg/L	0.4799 ppb	14:32:53
2	As 188.979†	-1.3	-2.4	-4.7694 µg/L	-4.7694 ppb	14:33:14
2	B 249.677†	344.7	3.6	0.1600 µg/L	0.1600 ppb	14:33:14
2	Ba 233.527†	-16.3	10.1	0.2637 µg/L	0.2637 ppb	14:33:14
2	Be 313.107†	-3298.7	234.0	0.1527 µg/L	0.1527 ppb	14:32:53
2	Cd 226.502†	-133.3	12.6	0.3477 µg/L	0.3477 ppb	14:33:14
2	Co 228.616†	-4.9	4.1	0.2028 µg/L	0.2028 ppb	14:33:14
2	Cr 267.716†	-12.9	39.8	0.8752 µg/L	0.8752 ppb	14:32:53
2	Cu 324.752†	2529.4	-27.4	-0.1918 µg/L	-0.1918 ppb	14:32:53
2	Mn 257.610†	-202.1	47.7	0.1654 µg/L	0.1654 ppb	14:33:14
2	Mo 202.031†	1.2	8.7	0.9303 µg/L	0.9303 ppb	14:33:14
2	Ni 231.604†	305.7	-5.0	-0.2753 µg/L	-0.2753 ppb	14:33:14
2	P 214.914†	24.2	-4.1	-8.8167 µg/L	-8.8167 ppb	14:33:14
2	Pb 220.353†	97.8	-2.1	-0.5597 µg/L	-0.5597 ppb	14:33:14

2	S 181.975 Axial†	15.1	-0.1	-0.5770 µg/L	-0.5770 ppb	14:33:14
2	Sb 206.836†	27.2	-0.5	-0.4890 µg/L	-0.4890 ppb	14:33:14
2	Se 196.026†	14.7	-1.6	-2.3575 µg/L	-2.3575 ppb	14:33:14
2	SiO2†	1242.8	-41.9	-9.0338 µg/L	-9.0338 ppb	14:32:53
2	Si 251.611†	360.2	37.3	3.0664 µg/L	3.0664 ppb	14:33:14
2	Sn 189.927†	0.7	1.6	0.7280 µg/L	0.7280 ppb	14:33:14
2	Ti 334.940†	261.8	138.4	0.3344 µg/L	0.3344 ppb	14:32:53
2	Tl 190.801†	-26.1	-1.1	-1.5598 µg/L	-1.5598 ppb	14:33:14
2	U 409.014†	-15.1	39.0	3.5273 µg/L	3.5273 ppb	14:32:53
2	V 292.402†	-42.6	2.8	0.0426 µg/L	0.0426 ppb	14:32:53
2	Zn 213.857†	491.7	2.4	0.0627 µg/L	0.0627 ppb	14:33:14
3	Sc RADIAL	56329.8	56329.8	103 %		14:31:45
3	Al 396.153Radial†	2.8	12.8	9.5317 µg/L	9.5317 ppb	14:31:45
3	Ca 317.933Radial†	174.0	-10.6	-9.9765 µg/L	-9.9765 ppb	14:32:05
3	Fe 238.204 Radial†	15.1	0.1	1.1942 µg/L	1.1942 ppb	14:32:05
3	K 766.490 Radial†	116.0	-16.0	-11.375 µg/L	-11.375 ppb	14:31:45
3	Mg 279.077 IEC†	9.4	-2.1	-19.858 µg/L	-19.858 ppb	14:32:05
3	Na 589.592 Radial†	536.5	-22.1	-7.2800 µg/L	-7.2800 ppb	14:31:45
3	Sr 421.552†	17.2	-22.9	-0.2369 µg/L	-0.2369 ppb	14:31:45
3	Sc 361.383	1963041.8	1963041.8	102.79 %		14:33:20
3	Y 371.029	1346546.9	1346546.9	102.80 %		14:33:20
3	Ag 328.068†	-542.7	36.6	0.2929 µg/L	0.2929 ppb	14:33:26
3	As 188.979†	1.8	0.6	1.1689 µg/L	1.1689 ppb	14:33:46
3	B 249.677†	343.0	2.2	0.0978 µg/L	0.0978 ppb	14:33:46
3	Ba 233.527†	-18.5	8.0	0.2082 µg/L	0.2082 ppb	14:33:46
3	Be 313.107†	-3230.6	297.4	0.1942 µg/L	0.1942 ppb	14:33:26
3	Cd 226.502†	-130.1	15.5	0.4281 µg/L	0.4281 ppb	14:33:46
3	Co 228.616†	-21.8	-12.4	-0.6104 µg/L	-0.6104 ppb	14:33:46
3	Cr 267.716†	-41.2	12.3	0.2708 µg/L	0.2708 ppb	14:33:26
3	Cu 324.752†	2546.0	-9.1	-0.0637 µg/L	-0.0637 ppb	14:33:26
3	Mn 257.610†	-170.0	78.8	0.2737 µg/L	0.2737 ppb	14:33:46
3	Mo 202.031†	0.3	7.9	0.8413 µg/L	0.8413 ppb	14:33:46
3	Ni 231.604†	307.9	-2.6	-0.1428 µg/L	-0.1428 ppb	14:33:46
3	P 214.914†	31.7	3.2	7.0023 µg/L	7.0023 ppb	14:33:46
3	Pb 220.353†	97.7	-2.1	-0.5651 µg/L	-0.5651 ppb	14:33:46
3	S 181.975 Axial†	14.0	-1.2	-5.1565 µg/L	-5.1565 ppb	14:33:46
3	Sb 206.836†	18.5	-9.0	-8.8540 µg/L	-8.8540 ppb	14:33:46
3	Se 196.026†	7.7	-8.4	-12.762 µg/L	-12.762 ppb	14:33:46
3	SiO2†	1231.2	-52.2	-11.239 µg/L	-11.239 ppb	14:33:26
3	Si 251.611†	338.7	16.6	1.3655 µg/L	1.3655 ppb	14:33:46
3	Sn 189.927†	2.7	3.5	1.5931 µg/L	1.5931 ppb	14:33:46
3	Ti 334.940†	206.7	84.9	0.2057 µg/L	0.2057 ppb	14:33:26
3	Tl 190.801†	-23.5	1.4	1.9821 µg/L	1.9821 ppb	14:33:46
3	U 409.014†	-82.4	-26.6	-2.4037 µg/L	-2.4037 ppb	14:33:26
3	V 292.402†	-5.0	39.3	0.4238 µg/L	0.4238 ppb	14:33:26
3	Zn 213.857†	490.6	1.7	0.0448 µg/L	0.0448 ppb	14:33:46

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1957367.4	102.49 %	0.594			0.58%
Sc RADIAL	56040.0	103 %	0.5			0.45%
Y 371.029	1342184.9	102.46 %	0.649			0.63%
Ag 328.068†	54.1	0.4302 µg/L	0.12036	0.4302 ppb	0.12036	27.98%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.3	3.2105 µg/L	6.68686	3.2105 ppb	6.68686	208.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.4253 µg/L	3.80624	-0.4253 ppb	3.80624	895.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	3.2	0.1426 µg/L	0.03915	0.1426 ppb	0.03915	27.45%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.0	0.2618 µg/L	0.05266	0.2618 ppb	0.05266	20.11%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	204.0	0.1331 µg/L	0.07275	0.1331 ppb	0.07275	54.64%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.1	-1.0692 µg/L	9.21745	-1.0692 ppb	9.21745	862.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.4	0.2858 µg/L	0.18136	0.2858 ppb	0.18136	63.46%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.7	-0.1327 µg/L	0.42483	-0.1327 ppb	0.42483	320.06%

Cr	267.716†	17.7	0.3886 µg/L	0.43975	0.3886 ppb	0.43975	113.17%
	QC value within limits	for Cr	267.716	Recovery =	Not calculated		
Cu	324.752†	-16.9	-0.1187 µg/L	0.06593	-0.1187 ppb	0.06593	55.55%
	QC value within limits	for Cu	324.752	Recovery =	Not calculated		
Fe	238.204 Radial†	-0.3	-2.5979 µg/L	3.31761	-2.5979 ppb	3.31761	127.70%
	QC value within limits	for Fe	238.204 Radial	Recovery =	Not calculated		
K	766.490 Radial†	-1.9	-1.3625 µg/L	21.86298	-1.3625 ppb	21.86298	>999.9%
	QC value within limits	for K	766.490 Radial	Recovery =	Not calculated		
Mg	279.077 IEC†	-0.1	-0.8244 µg/L	33.01203	-0.8244 ppb	33.01203	>999.9%
	QC value within limits	for Mg	279.077 IEC	Recovery =	Not calculated		
Mn	257.610†	50.6	0.1749 µg/L	0.09441	0.1749 ppb	0.09441	53.98%
	QC value within limits	for Mn	257.610	Recovery =	Not calculated		
Mo	202.031†	8.0	0.8505 µg/L	0.07561	0.8505 ppb	0.07561	8.89%
	QC value within limits	for Mo	202.031	Recovery =	Not calculated		
Na	589.592 Radial†	-12.0	-3.9548 µg/L	8.91231	-3.9548 ppb	8.91231	225.35%
	QC value within limits	for Na	589.592 Radial	Recovery =	Not calculated		
Ni	231.604†	-4.7	-0.2590 µg/L	0.10906	-0.2590 ppb	0.10906	42.10%
	QC value within limits	for Ni	231.604	Recovery =	Not calculated		
P	214.914†	1.1	2.3865 µg/L	9.75229	2.3865 ppb	9.75229	408.64%
	QC value within limits	for P	214.914	Recovery =	Not calculated		
Pb	220.353†	-4.8	-1.2761 µg/L	1.23617	-1.2761 ppb	1.23617	96.87%
	QC value within limits	for Pb	220.353	Recovery =	Not calculated		
S	181.975 Axial†	0.0	0.1210 µg/L	5.65896	0.1210 ppb	5.65896	>999.9%
	QC value within limits	for S	181.975 Axial	Recovery =	Not calculated		
Sb	206.836†	-4.7	-4.6191 µg/L	4.18349	-4.6191 ppb	4.18349	90.57%
	QC value within limits	for Sb	206.836	Recovery =	Not calculated		
Se	196.026†	-1.5	-2.2678 µg/L	10.53912	-2.2678 ppb	10.53912	464.73%
	QC value within limits	for Se	196.026	Recovery =	Not calculated		
SiO2†		-34.9	-7.5220 µg/L	4.66014	-7.5220 ppb	4.66014	61.95%
	QC value within limits	for SiO2		Recovery =	Not calculated		
Si	251.611†	24.8	2.0398 µg/L	0.90350	2.0398 ppb	0.90350	44.29%
	QC value within limits	for Si	251.611	Recovery =	Not calculated		
Sn	189.927†	2.3	1.0747 µg/L	0.45737	1.0747 ppb	0.45737	42.56%
	QC value within limits	for Sn	189.927	Recovery =	Not calculated		
Sr	421.552†	4.4	0.0455 µg/L	0.24518	0.0455 ppb	0.24518	539.15%
	QC value within limits	for Sr	421.552	Recovery =	Not calculated		
Ti	334.940†	84.3	0.2028 µg/L	0.13307	0.2028 ppb	0.13307	65.62%
	QC value within limits	for Ti	334.940	Recovery =	Not calculated		
Tl	190.801†	1.0	1.4645 µg/L	2.80164	1.4645 ppb	2.80164	191.30%
	QC value within limits	for Tl	190.801	Recovery =	Not calculated		
U	409.014†	11.2	1.0153 µg/L	3.06778	1.0153 ppb	3.06778	302.16%
	QC value within limits	for U	409.014	Recovery =	Not calculated		
V	292.402†	11.4	0.1299 µg/L	0.26143	0.1299 ppb	0.26143	201.23%
	QC value within limits	for V	292.402	Recovery =	Not calculated		
Zn	213.857†	0.9	0.0250 µg/L	0.05061	0.0250 ppb	0.05061	202.72%
	QC value within limits	for Zn	213.857	Recovery =	Not calculated		

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/11/2010 14:33:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54747.4	54747.4	100 %		14:34:28
1	Al 396.153Radial†	273.1	282.4	210.27 µg/L	210.27 ppb	14:34:28
1	Ca 317.933Radial†	397.1	216.7	204.01 µg/L	204.01 ppb	14:34:49
1	Fe 238.204 Radial†	30.8	16.2	137.25 µg/L	137.25 ppb	14:34:49
1	K 766.490 Radial†	363.7	234.1	166.40 µg/L	166.40 ppb	14:34:28
1	Mg 279.077 IEC†	45.5	34.1	317.43 µg/L	317.43 ppb	14:34:49
1	Na 589.592 Radial†	1424.0	877.6	288.92 µg/L	288.92 ppb	14:34:28
1	Sr 421.552†	486.3	445.2	4.6152 µg/L	4.6152 ppb	14:34:28
1	Sc 361.383	1940350.4	1940350.4	101.60 %		14:35:51
1	Y 371.029	1331501.6	1331501.6	101.65 %		14:35:51
1	Ag 328.068†	65.6	629.1	5.0332 µg/L	5.0332 ppb	14:35:56
1	As 188.979†	15.0	13.6	26.557 µg/L	26.557 ppb	14:36:17
1	B 249.677†	1481.9	1127.1	49.194 µg/L	49.194 ppb	14:35:56
1	Ba 233.527†	167.0	190.4	4.9664 µg/L	4.9664 ppb	14:36:17
1	Be 313.107†	4123.9	7499.6	4.8957 µg/L	4.8957 ppb	14:35:56
1	Cd 226.502†	43.2	184.7	5.0837 µg/L	5.0837 ppb	14:36:17
1	Co 228.616†	90.6	98.0	4.8213 µg/L	4.8213 ppb	14:36:17
1	Cr 267.716†	181.4	230.9	5.0824 µg/L	5.0824 ppb	14:36:17
1	Cu 324.752†	4005.0	1456.0	10.189 µg/L	10.189 ppb	14:35:56
1	Mn 257.610†	2747.7	2948.6	10.216 µg/L	10.216 ppb	14:35:56
1	Mo 202.031†	89.7	95.8	10.232 µg/L	10.232 ppb	14:36:17
1	Ni 231.604†	390.7	82.4	4.5019 µg/L	4.5019 ppb	14:36:17
1	P 214.914†	110.5	81.1	173.12 µg/L	173.12 ppb	14:36:17
1	Pb 220.353†	141.4	42.0	11.169 µg/L	11.169 ppb	14:36:17
1	S 181.975 Axial†	37.1	21.7	95.029 µg/L	95.029 ppb	14:36:17
1	Sb 206.836†	32.7	5.2	5.2344 µg/L	5.2344 ppb	14:36:17
1	Se 196.026†	25.6	9.4	14.367 µg/L	14.367 ppb	14:36:17
1	SiO2†	2267.0	981.4	211.34 µg/L	211.34 ppb	14:35:56
1	Si 251.611†	1501.7	1165.2	95.786 µg/L	95.786 ppb	14:36:17
1	Sn 189.927†	16.7	17.3	7.9752 µg/L	7.9752 ppb	14:36:17
1	Ti 334.940†	2212.8	2061.9	4.9379 µg/L	4.9379 ppb	14:35:56
1	Tl 190.801†	-5.1	19.2	27.011 µg/L	27.011 ppb	14:36:17
1	U 409.014†	558.4	603.3	54.587 µg/L	54.587 ppb	14:35:56
1	V 292.402†	425.6	463.2	5.0996 µg/L	5.0996 ppb	14:35:56
1	Zn 213.857†	892.7	403.1	10.006 µg/L	10.006 ppb	14:36:17
2	Sc RADIAL	54832.7	54832.7	100 %		14:34:54
2	Al 396.153Radial†	256.5	265.4	197.60 µg/L	197.60 ppb	14:34:54
2	Ca 317.933Radial†	389.1	208.2	196.00 µg/L	196.00 ppb	14:35:15
2	Fe 238.204 Radial†	27.3	12.7	107.86 µg/L	107.86 ppb	14:35:15
2	K 766.490 Radial†	367.8	237.7	168.93 µg/L	168.93 ppb	14:34:54
2	Mg 279.077 IEC†	46.2	34.7	322.64 µg/L	322.64 ppb	14:35:15
2	Na 589.592 Radial†	1434.3	885.7	291.57 µg/L	291.57 ppb	14:34:54
2	Sr 421.552†	510.9	468.9	4.8611 µg/L	4.8611 ppb	14:34:54
2	Sc 361.383	1945380.3	1945380.3	101.86 %		14:36:23
2	Y 371.029	1334631.9	1334631.9	101.89 %		14:36:23
2	Ag 328.068†	83.1	646.1	5.1667 µg/L	5.1667 ppb	14:36:29
2	As 188.979†	13.7	12.3	23.962 µg/L	23.962 ppb	14:36:49
2	B 249.677†	1439.6	1081.8	47.230 µg/L	47.230 ppb	14:36:29
2	Ba 233.527†	163.8	186.8	4.8734 µg/L	4.8734 ppb	14:36:49
2	Be 313.107†	4161.3	7525.8	4.9129 µg/L	4.9129 ppb	14:36:29
2	Cd 226.502†	40.3	181.7	5.0056 µg/L	5.0056 ppb	14:36:49
2	Co 228.616†	95.9	103.0	5.0691 µg/L	5.0691 ppb	14:36:49
2	Cr 267.716†	184.6	233.6	5.1411 µg/L	5.1411 ppb	14:36:49
2	Cu 324.752†	3976.5	1417.8	9.9186 µg/L	9.9186 ppb	14:36:29
2	Mn 257.610†	2754.8	2948.6	10.212 µg/L	10.212 ppb	14:36:29
2	Mo 202.031†	93.7	99.6	10.631 µg/L	10.631 ppb	14:36:49
2	Ni 231.604†	392.3	82.9	4.5279 µg/L	4.5279 ppb	14:36:49
2	P 214.914†	107.2	77.6	165.67 µg/L	165.67 ppb	14:36:49
2	Pb 220.353†	143.7	43.9	11.669 µg/L	11.669 ppb	14:36:49

2	S 181.975 Axial†	37.9	22.4	98.282 µg/L	98.282 ppb	14:36:49
2	Sb 206.836†	37.0	9.4	9.3125 µg/L	9.3125 ppb	14:36:49
2	Se 196.026†	40.5	23.9	36.431 µg/L	36.431 ppb	14:36:49
2	SiO2†	2237.3	946.4	203.81 µg/L	203.81 ppb	14:36:29
2	Si 251.611†	1509.6	1169.2	96.111 µg/L	96.111 ppb	14:36:49
2	Sn 189.927†	28.9	29.3	13.482 µg/L	13.482 ppb	14:36:49
2	Ti 334.940†	2191.1	2034.9	4.8725 µg/L	4.8725 ppb	14:36:29
2	Tl 190.801†	-12.7	11.8	16.671 µg/L	16.671 ppb	14:36:49
2	U 409.014†	565.8	609.0	55.113 µg/L	55.113 ppb	14:36:29
2	V 292.402†	429.8	466.2	5.1319 µg/L	5.1319 ppb	14:36:29
2	Zn 213.857†	888.5	396.7	9.8472 µg/L	9.8472 ppb	14:36:49
3	Sc RADIAL	54719.3	54719.3	100 %		14:35:20
3	Al 396.153Radial†	252.3	261.8	194.95 µg/L	194.95 ppb	14:35:20
3	Ca 317.933Radial†	392.4	212.2	199.82 µg/L	199.82 ppb	14:35:41
3	Fe 238.204 Radial†	27.7	13.1	111.51 µg/L	111.51 ppb	14:35:41
3	K 766.490 Radial†	437.0	307.5	218.53 µg/L	218.53 ppb	14:35:20
3	Mg 279.077 IEC†	40.7	29.3	272.95 µg/L	272.95 ppb	14:35:41
3	Na 589.592 Radial†	1460.8	915.0	301.22 µg/L	301.22 ppb	14:35:20
3	Sr 421.552†	523.6	482.7	5.0036 µg/L	5.0036 ppb	14:35:20
3	Sc 361.383	1939953.9	1939953.9	101.58 %		14:36:55
3	Y 371.029	1330294.0	1330294.0	101.56 %		14:36:55
3	Ag 328.068†	50.3	614.0	4.9107 µg/L	4.9107 ppb	14:37:01
3	As 188.979†	19.6	18.1	35.385 µg/L	35.385 ppb	14:37:21
3	B 249.677†	1372.3	1019.5	44.505 µg/L	44.505 ppb	14:37:01
3	Ba 233.527†	145.4	169.2	4.4133 µg/L	4.4133 ppb	14:37:21
3	Be 313.107†	3478.0	6864.4	4.4811 µg/L	4.4811 ppb	14:37:01
3	Cd 226.502†	11.9	153.8	4.2359 µg/L	4.2359 ppb	14:37:21
3	Co 228.616†	75.0	82.7	4.0666 µg/L	4.0666 ppb	14:37:21
3	Cr 267.716†	166.3	216.1	4.7559 µg/L	4.7559 ppb	14:37:21
3	Cu 324.752†	3902.1	1355.5	9.4837 µg/L	9.4837 ppb	14:37:01
3	Mn 257.610†	2548.1	2752.7	9.5360 µg/L	9.5360 ppb	14:37:01
3	Mo 202.031†	79.0	85.3	9.1080 µg/L	9.1080 ppb	14:37:21
3	Ni 231.604†	393.4	85.1	4.6522 µg/L	4.6522 ppb	14:37:21
3	P 214.914†	100.3	71.1	151.77 µg/L	151.77 ppb	14:37:21
3	Pb 220.353†	126.2	27.0	7.1738 µg/L	7.1738 ppb	14:37:21
3	S 181.975 Axial†	34.7	19.3	84.720 µg/L	84.720 ppb	14:37:21
3	Sb 206.836†	29.4	2.0	2.0741 µg/L	2.0741 ppb	14:37:21
3	Se 196.026†	39.6	23.1	35.285 µg/L	35.285 ppb	14:37:21
3	SiO2†	2171.3	887.6	191.15 µg/L	191.15 ppb	14:37:01
3	Si 251.611†	1361.3	1027.3	84.447 µg/L	84.447 ppb	14:37:21
3	Sn 189.927†	21.9	22.4	10.338 µg/L	10.338 ppb	14:37:21
3	Ti 334.940†	2058.9	1910.8	4.5779 µg/L	4.5779 ppb	14:37:01
3	Tl 190.801†	-4.2	20.2	28.271 µg/L	28.271 ppb	14:37:21
3	U 409.014†	515.1	560.7	50.740 µg/L	50.740 ppb	14:37:01
3	V 292.402†	407.9	445.8	4.8980 µg/L	4.8980 ppb	14:37:01
3	Zn 213.857†	822.6	334.3	8.2901 µg/L	8.2901 ppb	14:37:21

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941894.9	101.68 %	0.158			0.16%
Sc RADIAL	54766.5	100 %	0.1			0.11%
Y 371.029	1332142.5	101.70 %	0.171			0.17%
Ag 328.068†	629.8	5.0369 µg/L	0.12806	5.0369 ppb	0.12806	2.54%
QC value within limits for Ag 328.068 Recovery = 100.74%						
Al 396.153Radial†	269.9	200.94 µg/L	8.187	200.94 ppb	8.187	4.07%
QC value within limits for Al 396.153Radial Recovery = 100.47%						
As 188.979†	14.7	28.634 µg/L	5.9881	28.634 ppb	5.9881	20.91%
QC value within limits for As 188.979 Recovery = 95.45%						
B 249.677†	1076.2	46.976 µg/L	2.3545	46.976 ppb	2.3545	5.01%
QC value within limits for B 249.677 Recovery = 93.95%						
Ba 233.527†	182.1	4.7510 µg/L	0.29615	4.7510 ppb	0.29615	6.23%
QC value within limits for Ba 233.527 Recovery = 95.02%						
Be 313.107†	7296.6	4.7633 µg/L	0.24448	4.7633 ppb	0.24448	5.13%
QC value within limits for Be 313.107 Recovery = 95.27%						
Ca 317.933Radial†	212.4	199.94 µg/L	4.009	199.94 ppb	4.009	2.00%
QC value within limits for Ca 317.933Radial Recovery = 99.97%						
Cd 226.502†	173.4	4.7751 µg/L	0.46856	4.7751 ppb	0.46856	9.81%
QC value within limits for Cd 226.502 Recovery = 95.50%						
Co 228.616†	94.6	4.6523 µg/L	0.52218	4.6523 ppb	0.52218	11.22%

Cr	267.716†	226.9	4.9931 µg/L	0.20751	4.9931 ppb	0.20751	4.16%
Cu	324.752†	1409.7	9.8638 µg/L	0.35593	9.8638 ppb	0.35593	3.61%
Fe	238.204 Radial†	14.0	118.87 µg/L	16.021	118.87 ppb	16.021	13.48%
K	766.490 Radial†	259.7	184.62 µg/L	29.396	184.62 ppb	29.396	15.92%
Mg	279.077 IEC†	32.7	304.34 µg/L	27.307	304.34 ppb	27.307	8.97%
Mn	257.610†	2883.3	9.9880 µg/L	0.39151	9.9880 ppb	0.39151	3.92%
Mo	202.031†	93.6	9.9904 µg/L	0.78979	9.9904 ppb	0.78979	7.91%
Na	589.592 Radial†	892.8	293.90 µg/L	6.477	293.90 ppb	6.477	2.20%
Ni	231.604†	83.5	4.5606 µg/L	0.08032	4.5606 ppb	0.08032	1.76%
P	214.914†	76.6	163.52 µg/L	10.837	163.52 ppb	10.837	6.63%
Pb	220.353†	37.6	10.004 µg/L	2.4639	10.004 ppb	2.4639	24.63%
S	181.975 Axial†	21.2	92.677 µg/L	7.0801	92.677 ppb	7.0801	7.64%
Sb	206.836†	5.5	5.5403 µg/L	3.62890	5.5403 ppb	3.62890	65.50%
Se	196.026†	18.8	28.694 µg/L	12.4212	28.694 ppb	12.4212	43.29%
SiO2†		938.5	202.10 µg/L	10.205	202.10 ppb	10.205	5.05%
Si	251.611†	1120.6	92.115 µg/L	6.6423	92.115 ppb	6.6423	7.21%
Sn	189.927†	23.0	10.598 µg/L	2.7624	10.598 ppb	2.7624	26.06%
Sr	421.552†	465.6	4.8266 µg/L	0.19650	4.8266 ppb	0.19650	4.07%
Ti	334.940†	2002.5	4.7961 µg/L	0.19174	4.7961 ppb	0.19174	4.00%
Tl	190.801†	17.1	23.984 µg/L	6.3650	23.984 ppb	6.3650	26.54%
U	409.014†	591.0	53.480 µg/L	2.3877	53.480 ppb	2.3877	4.46%
V	292.402†	458.4	5.0431 µg/L	0.12672	5.0431 ppb	0.12672	2.51%
Zn	213.857†	378.0	9.3810 µg/L	0.94809	9.3810 ppb	0.94809	10.11%

QC value within limits for Co 228.616 Recovery = 93.05%

QC value within limits for Cr 267.716 Recovery = 99.86%

QC value within limits for Cu 324.752 Recovery = 98.64%

QC value within limits for Fe 238.204 Radial Recovery = 118.87%

QC value within limits for K 766.490 Radial Recovery = 123.08%

QC value within limits for Mg 279.077 IEC Recovery = 101.45%

QC value within limits for Mn 257.610 Recovery = 99.88%

QC value within limits for Mo 202.031 Recovery = 99.90%

QC value within limits for Na 589.592 Radial Recovery = 97.97%

QC value within limits for Ni 231.604 Recovery = 91.21%

QC value within limits for P 214.914 Recovery = 109.01%

QC value within limits for Pb 220.353 Recovery = 100.04%

QC value within limits for S 181.975 Axial Recovery = 92.68%

QC value less than the lower limit for Sb 206.836 Recovery = 55.40%

QC value within limits for Se 196.026 Recovery = 95.65%

QC value within limits for SiO2 Recovery = 94.88%

QC value within limits for Si 251.611 Recovery = 92.11%

QC value within limits for Sn 189.927 Recovery = 105.98%

QC value within limits for Sr 421.552 Recovery = 96.53%

QC value within limits for Ti 334.940 Recovery = 95.92%

QC value within limits for Tl 190.801 Recovery = 119.92%

QC value within limits for U 409.014 Recovery = 106.96%

QC value within limits for V 292.402 Recovery = 100.86%

QC value within limits for Zn 213.857 Recovery = 93.81%

QC Failed. Continue with analysis.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/11/2010 14:37:31

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	54929.8	54929.8	101 %		14:38:12
1	Al 396.153Radial†	662864.4	658585.8	490860 µg/L	490860 ppb	14:38:07
1	Ca 317.933Radial†	501017.0	497596.3	468520 µg/L	468520 ppb	14:38:07
1	Fe 238.204 Radial†	21302.2	21149.9	179260 µg/L	179260 ppb	14:38:12
1	K 766.490 Radial†	133.6	4.3	3.0615 µg/L	3.0615 ppb	14:38:12
1	Mg 279.077 IEC†	50419.1	50081.6	465880 µg/L	465880 ppb	14:38:12
1	Na 589.592 Radial†	588.4	42.7	14.053 µg/L	14.053 ppb	14:38:12
1	Sr 421.552†	369.2	327.3	3.3927 µg/L	3.3927 ppb	14:38:12
1	Sc 361.383	1857257.4	1857257.4	97.247 %		14:38:45
1	Y 371.029	1267408.3	1267408.3	96.755 %		14:38:45
1	Ag 328.068†	-2882.1	-2399.2	-7.8752 µg/L	-7.8752 ppb	14:38:51
1	As 188.979†	-10.9	-12.4	-38.129 µg/L	-38.129 ppb	14:39:11
1	B 249.677†	826.3	518.2	-70.891 µg/L	-70.891 ppb	14:38:51
1	Ba 233.527†	265.1	298.7	7.7406 µg/L	7.7406 ppb	14:39:11
1	Be 313.107†	-4111.4	-787.4	-0.5240 µg/L	-0.5240 ppb	14:38:51
1	Cd 226.502†	352.3	504.4	-6.3482 µg/L	-6.3482 ppb	14:39:11
1	Co 228.616†	33.3	43.1	2.0584 µg/L	2.0584 ppb	14:39:11
1	Cr 267.716†	-59.0	-8.3	-0.1945 µg/L	-0.1945 ppb	14:39:11
1	Cu 324.752†	-1400.3	-3926.0	-2.5072 µg/L	-2.5072 ppb	14:38:51
1	Mn 257.610†	37.6	282.8	6.1777 µg/L	6.1777 ppb	14:38:51
1	Mo 202.031†	-107.0	-102.5	-4.1257 µg/L	-4.1257 ppb	14:39:11
1	Ni 231.604†	157.1	-140.7	-5.3633 µg/L	-5.3633 ppb	14:39:11
1	P 214.914†	101.4	76.6	162.80 µg/L	162.80 ppb	14:39:11
1	Pb 220.353†	54.2	-41.5	9.1341 µg/L	9.1341 ppb	14:39:11
1	S 181.975 Axial†	32.3	18.4	80.756 µg/L	80.756 ppb	14:39:11
1	Sb 206.836†	58.1	32.8	-8.6501 µg/L	-8.6501 ppb	14:39:11
1	Se 196.026†	34.1	19.3	-25.969 µg/L	-25.969 ppb	14:39:11
1	SiO2†	1033.7	-187.0	-40.276 µg/L	-40.276 ppb	14:39:11
1	Si 251.611†	428.1	127.4	10.470 µg/L	10.470 ppb	14:39:11
1	Sn 189.927†	-61.0	-61.9	5.0665 µg/L	5.0665 ppb	14:39:11
1	Ti 334.940†	10534.2	10716.3	-3.5463 µg/L	-3.5463 ppb	14:38:51
1	Tl 190.801†	-30.9	-7.5	8.6675 µg/L	8.6675 ppb	14:39:11
1	U 409.014†	-29.2	23.6	-51.357 µg/L	-51.357 ppb	14:38:51
1	V 292.402†	-1857.1	-1865.5	1.1351 µg/L	1.1351 ppb	14:38:51
1	Zn 213.857†	1452.2	1017.8	-9.4487 µg/L	-9.4487 ppb	14:39:11
2	Sc RADIAL	55009.9	55009.9	101 %		14:38:23
2	Al 396.153Radial†	661057.1	655833.6	488810 µg/L	488810 ppb	14:38:18
2	Ca 317.933Radial†	498837.3	494708.8	465800 µg/L	465800 ppb	14:38:18
2	Fe 238.204 Radial†	21470.3	21285.8	180410 µg/L	180410 ppb	14:38:23
2	K 766.490 Radial†	106.0	-23.2	-16.506 µg/L	-16.506 ppb	14:38:23
2	Mg 279.077 IEC†	50738.3	50325.3	468150 µg/L	468150 ppb	14:38:23
2	Na 589.592 Radial†	648.0	101.0	33.250 µg/L	33.250 ppb	14:38:23
2	Sr 421.552†	361.1	318.7	3.3032 µg/L	3.3032 ppb	14:38:23
2	Sc 361.383	1846098.6	1846098.6	96.662 %		14:39:17
2	Y 371.029	1260367.6	1260367.6	96.217 %		14:39:17
2	Ag 328.068†	-2932.2	-2468.9	-8.3594 µg/L	-8.3594 ppb	14:39:23
2	As 188.979†	-14.6	-16.3	-45.537 µg/L	-45.537 ppb	14:39:43
2	B 249.677†	858.5	556.6	-69.813 µg/L	-69.813 ppb	14:39:23
2	Ba 233.527†	262.3	297.4	7.7059 µg/L	7.7059 ppb	14:39:43
2	Be 313.107†	-4105.1	-806.4	-0.5367 µg/L	-0.5367 ppb	14:39:23
2	Cd 226.502†	337.6	491.4	-6.8376 µg/L	-6.8376 ppb	14:39:43
2	Co 228.616†	17.7	27.1	1.2707 µg/L	1.2707 ppb	14:39:43
2	Cr 267.716†	-53.0	-2.4	-0.0661 µg/L	-0.0661 ppb	14:39:43
2	Cu 324.752†	-1461.5	-3998.0	-2.8500 µg/L	-2.8500 ppb	14:39:23
2	Mn 257.610†	43.7	289.4	6.2629 µg/L	6.2629 ppb	14:39:23
2	Mo 202.031†	-104.0	-100.0	-3.8203 µg/L	-3.8203 ppb	14:39:43
2	Ni 231.604†	142.4	-154.9	-6.1246 µg/L	-6.1246 ppb	14:39:43
2	P 214.914†	112.7	89.0	187.84 µg/L	187.84 ppb	14:39:43
2	Pb 220.353†	58.0	-37.2	10.116 µg/L	10.116 ppb	14:39:43

2	S 181.975 Axial†	36.2	22.6	98.941 µg/L	98.941 ppb	14:39:43
2	Sb 206.836†	53.9	28.8	-12.353 µg/L	-12.353 ppb	14:39:43
2	Se 196.026†	26.7	11.8	-35.549 µg/L	-35.549 ppb	14:39:43
2	SiO2†	1052.3	-161.4	-34.761 µg/L	-34.761 ppb	14:39:43
2	Si 251.611†	458.0	160.9	13.230 µg/L	13.230 ppb	14:39:43
2	Sn 189.927†	-63.6	-65.0	3.8069 µg/L	3.8069 ppb	14:39:43
2	Ti 334.940†	10748.6	11003.6	-3.0781 µg/L	-3.0781 ppb	14:39:23
2	Tl 190.801†	-35.3	-12.3	2.2973 µg/L	2.2973 ppb	14:39:43
2	U 409.014†	-80.2	-29.4	-56.150 µg/L	-56.150 ppb	14:39:23
2	V 292.402†	-1894.8	-1916.0	0.7299 µg/L	0.7299 ppb	14:39:23
2	Zn 213.857†	1462.8	1037.8	-9.1272 µg/L	-9.1272 ppb	14:39:43
3	Sc RADIAL	54631.5	54631.5	100 %		14:38:35
3	Al 396.153Radial†	667869.4	667182.1	497270 µg/L	497270 ppb	14:38:29
3	Ca 317.933Radial†	503599.4	502894.4	473510 µg/L	473510 ppb	14:38:29
3	Fe 238.204 Radial†	21467.0	21430.1	181630 µg/L	181630 ppb	14:38:35
3	K 766.490 Radial†	96.7	-31.8	-22.617 µg/L	-22.617 ppb	14:38:35
3	Mg 279.077 IEC†	50895.3	50830.8	472850 µg/L	472850 ppb	14:38:35
3	Na 589.592 Radial†	627.0	84.4	27.800 µg/L	27.800 ppb	14:38:35
3	Sr 421.552†	372.9	333.0	3.4514 µg/L	3.4514 ppb	14:38:35
3	Sc 361.383	1825493.4	1825493.4	95.584 %		14:39:49
3	Y 371.029	1244094.0	1244094.0	94.975 %		14:39:49
3	Ag 328.068†	-2843.3	-2410.2	-7.8207 µg/L	-7.8207 ppb	14:39:55
3	As 188.979†	-21.3	-23.4	-59.893 µg/L	-59.893 ppb	14:40:16
3	B 249.677†	774.3	478.6	-73.863 µg/L	-73.863 ppb	14:39:55
3	Ba 233.527†	257.2	295.1	7.6465 µg/L	7.6465 ppb	14:40:16
3	Be 313.107†	-4046.5	-793.0	-0.5281 µg/L	-0.5281 ppb	14:39:55
3	Cd 226.502†	377.7	537.3	-5.7094 µg/L	-5.7094 ppb	14:40:16
3	Co 228.616†	37.6	48.2	2.3043 µg/L	2.3043 ppb	14:40:16
3	Cr 267.716†	-81.4	-32.7	-0.7334 µg/L	-0.7334 ppb	14:40:16
3	Cu 324.752†	-1475.8	-4030.1	-2.9042 µg/L	-2.9042 ppb	14:39:55
3	Mn 257.610†	50.9	297.4	6.2652 µg/L	6.2652 ppb	14:39:55
3	Mo 202.031†	-108.7	-106.2	-4.4310 µg/L	-4.4310 ppb	14:40:16
3	Ni 231.604†	152.6	-142.5	-5.4329 µg/L	-5.4329 ppb	14:40:16
3	P 214.914†	105.4	82.6	175.78 µg/L	175.78 ppb	14:40:16
3	Pb 220.353†	72.0	-21.8	14.642 µg/L	14.642 ppb	14:40:16
3	S 181.975 Axial†	29.0	15.5	67.783 µg/L	67.783 ppb	14:40:16
3	Sb 206.836†	45.6	20.7	-20.949 µg/L	-20.949 ppb	14:40:16
3	Se 196.026†	33.1	18.8	-27.759 µg/L	-27.759 ppb	14:40:16
3	SiO2†	1033.4	-168.9	-36.378 µg/L	-36.378 ppb	14:40:16
3	Si 251.611†	441.5	149.0	12.252 µg/L	12.252 ppb	14:40:16
3	Sn 189.927†	-53.7	-55.3	8.6518 µg/L	8.6518 ppb	14:40:16
3	Ti 334.940†	10848.2	11233.3	-2.7738 µg/L	-2.7738 ppb	14:39:55
3	Tl 190.801†	-26.7	-3.6	14.470 µg/L	14.470 ppb	14:40:16
3	U 409.014†	-83.2	-33.5	-57.162 µg/L	-57.162 ppb	14:39:55
3	V 292.402†	-1928.3	-1973.2	0.2572 µg/L	0.2572 ppb	14:39:55
3	Zn 213.857†	1454.4	1046.1	-9.2482 µg/L	-9.2482 ppb	14:40:16

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1842949.8	96.498 %	0.8438			0.87%
Sc RADIAL	54857.1	101 %	0.4			0.36%
Y 371.029	1257290.0	95.982 %	0.9129			0.95%
Ag 328.068†	-2426.1	-8.0184 µg/L	0.29656	-8.0184 ppb	0.29656	3.70%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	660533.8	492320 µg/L	4412.2	492320 ppb	4412.2	0.90%
QC value within limits for Al 396.153Radial Recovery = 98.46%						
As 188.979†	-17.4	-47.853 µg/L	11.0657	-47.853 ppb	11.0657	23.12%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	517.8	-71.522 µg/L	2.0977	-71.522 ppb	2.0977	2.93%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	297.0	7.6977 µg/L	0.04758	7.6977 ppb	0.04758	0.62%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-795.6	-0.5296 µg/L	0.00649	-0.5296 ppb	0.00649	1.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	498399.8	469270 µg/L	3908.9	469270 ppb	3908.9	0.83%
QC value within limits for Ca 317.933Radial Recovery = 93.85%						
Cd 226.502†	511.0	-6.2984 µg/L	0.56575	-6.2984 ppb	0.56575	8.98%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	39.5	1.8778 µg/L	0.53996	1.8778 ppb	0.53996	28.75%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-14.5	-0.3313 µg/L	0.35406	-0.3313 ppb	0.35406 106.86%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-3984.7	-2.7538 µg/L	0.21524	-2.7538 ppb	0.21524 7.82%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	21288.6	180430 µg/L	1187.5	180430 ppb	1187.5 0.66%
QC value within limits for Fe 238.204 Radial Recovery = 90.22%					
K 766.490 Radial†	-16.9	-12.020 µg/L	13.4139	-12.020 ppb	13.4139 111.59%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	50412.6	468960 µg/L	3555.4	468960 ppb	3555.4 0.76%
QC value within limits for Mg 279.077 IEC Recovery = 93.79%					
Mn 257.610†	289.9	6.2353 µg/L	0.04986	6.2353 ppb	0.04986 0.80%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	-102.9	-4.1257 µg/L	0.30534	-4.1257 ppb	0.30534 7.40%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	76.0	25.034 µg/L	9.8929	25.034 ppb	9.8929 39.52%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-146.0	-5.6403 µg/L	0.42090	-5.6403 ppb	0.42090 7.46%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	82.7	175.47 µg/L	12.518	175.47 ppb	12.518 7.13%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-33.5	11.297 µg/L	2.9376	11.297 ppb	2.9376 26.00%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	18.8	82.493 µg/L	15.6511	82.493 ppb	15.6511 18.97%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	27.4	-13.984 µg/L	6.3094	-13.984 ppb	6.3094 45.12%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	16.6	-29.759 µg/L	5.0935	-29.759 ppb	5.0935 17.12%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	-172.5	-37.139 µg/L	2.8350	-37.139 ppb	2.8350 7.63%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	145.8	11.984 µg/L	1.3994	11.984 ppb	1.3994 11.68%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-60.7	5.8417 µg/L	2.51374	5.8417 ppb	2.51374 43.03%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	326.3	3.3825 µg/L	0.07464	3.3825 ppb	0.07464 2.21%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	10984.4	-3.1328 µg/L	0.38914	-3.1328 ppb	0.38914 12.42%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-7.8	8.4783 µg/L	6.08871	8.4783 ppb	6.08871 71.81%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-13.1	-54.890 µg/L	3.1009	-54.890 ppb	3.1009 5.65%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-1918.2	0.7074 µg/L	0.43934	0.7074 ppb	0.43934 62.11%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	1033.9	-9.2747 µg/L	0.16235	-9.2747 ppb	0.16235 1.75%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 104
 Date Collected: 2/11/2010 14:40:25
 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	54743.7	54743.7	100 %		14:41:04
1	Al 396.153Radial†	662601.8	660562.7	492330 µg/L	492330 ppb	14:40:59
1	Ca 317.933Radial†	498259.5	496539.4	467520 µg/L	467520 ppb	14:40:59
1	Fe 238.204 Radial†	21341.6	21261.1	180210 µg/L	180210 ppb	14:41:04
1	K 766.490 Radial†	6958.5	6808.5	4839.5 µg/L	4839.5 ppb	14:41:04
1	Mg 279.077 IEC†	50755.9	50587.7	470600 µg/L	470600 ppb	14:41:04
1	Na 589.592 Radial†	15455.3	14865.6	4893.8 µg/L	4893.8 ppb	14:41:04
1	Sr 421.552†	46875.8	46691.2	484.01 µg/L	484.01 ppb	14:41:04
1	Sc 361.383	1846856.3	1846856.3	96.702 %		14:41:38
1	Y 371.029	1258300.6	1258300.6	96.059 %		14:41:38
1	Ag 328.068†	27332.2	28828.8	243.20 µg/L	243.20 ppb	14:41:44
1	As 188.979†	237.2	244.2	462.48 µg/L	462.48 ppb	14:42:04
1	B 249.677†	11716.6	11784.7	421.73 µg/L	421.73 ppb	14:41:44
1	Ba 233.527†	17712.8	18342.8	478.47 µg/L	478.47 ppb	14:41:44
1	Be 313.107†	339671.1	354695.4	231.45 µg/L	231.45 ppb	14:41:38
1	Cd 226.502†	15868.9	16552.3	436.70 µg/L	436.70 ppb	14:41:44
1	Co 228.616†	8171.6	8459.1	415.69 µg/L	415.69 ppb	14:42:04
1	Cr 267.716†	20395.5	21143.4	465.37 µg/L	465.37 ppb	14:41:44
1	Cu 324.752†	70107.6	70012.4	514.10 µg/L	514.10 ppb	14:41:44
1	Mn 257.610†	126842.6	131412.5	460.20 µg/L	460.20 ppb	14:41:44
1	Mo 202.031†	4309.3	4463.8	483.23 µg/L	483.23 ppb	14:42:04
1	Ni 231.604†	7535.7	7490.5	411.39 µg/L	411.39 ppb	14:42:04
1	P 214.914†	1206.8	1220.3	2570.8 µg/L	2570.8 ppb	14:42:04
1	Pb 220.353†	1703.5	1664.4	464.39 µg/L	464.39 ppb	14:42:04
1	S 181.975 Axial†	587.6	592.8	2597.2 µg/L	2597.2 ppb	14:42:04
1	Sb 206.836†	550.1	541.9	495.21 µg/L	495.21 ppb	14:42:04
1	Se 196.026†	1471.2	1505.6	2238.6 µg/L	2238.6 ppb	14:42:04
1	SiO2†	47866.2	48248.6	10391 µg/L	10391 ppb	14:41:44
1	Si 251.611†	57854.9	59515.0	4892.4 µg/L	4892.4 ppb	14:41:44
1	Sn 189.927†	962.7	996.5	492.28 µg/L	492.28 ppb	14:42:04
1	Ti 334.940†	201101.7	207843.8	470.24 µg/L	470.24 ppb	14:41:44
1	Tl 190.801†	278.9	312.7	461.24 µg/L	461.24 ppb	14:42:04
1	U 409.014†	5055.9	5282.0	424.65 µg/L	424.65 ppb	14:41:44
1	V 292.402†	42477.1	43969.9	495.05 µg/L	495.05 ppb	14:41:44
1	Zn 213.857†	19021.9	19195.0	441.47 µg/L	441.47 ppb	14:41:44
2	Sc RADIAL	55060.7	55060.7	101 %		14:41:16
2	Al 396.153Radial†	664887.8	659025.8	491180 µg/L	491180 ppb	14:41:10
2	Ca 317.933Radial†	499367.7	494778.3	465860 µg/L	465860 ppb	14:41:10
2	Fe 238.204 Radial†	21754.5	21547.8	182640 µg/L	182640 ppb	14:41:16
2	K 766.490 Radial†	7103.8	6912.7	4913.5 µg/L	4913.5 ppb	14:41:16
2	Mg 279.077 IEC†	51410.3	50945.0	473920 µg/L	473920 ppb	14:41:16
2	Na 589.592 Radial†	15635.7	14955.7	4923.5 µg/L	4923.5 ppb	14:41:16
2	Sr 421.552†	47418.4	46960.1	486.80 µg/L	486.80 ppb	14:41:16
2	Sc 361.383	1837075.1	1837075.1	96.190 %		14:42:10
2	Y 371.029	1253427.6	1253427.6	95.687 %		14:42:10
2	Ag 328.068†	27052.1	28688.2	242.21 µg/L	242.21 ppb	14:42:16
2	As 188.979†	226.7	234.5	443.77 µg/L	443.77 ppb	14:42:37
2	B 249.677†	11617.2	11745.8	418.76 µg/L	418.76 ppb	14:42:16
2	Ba 233.527†	17456.8	18174.2	474.07 µg/L	474.07 ppb	14:42:16
2	Be 313.107†	337736.8	354554.8	231.36 µg/L	231.36 ppb	14:42:10
2	Cd 226.502†	15582.5	16341.8	430.62 µg/L	430.62 ppb	14:42:16
2	Co 228.616†	8172.6	8505.1	417.96 µg/L	417.96 ppb	14:42:37
2	Cr 267.716†	20089.6	20937.7	460.84 µg/L	460.84 ppb	14:42:16
2	Cu 324.752†	69141.0	69393.5	510.12 µg/L	510.12 ppb	14:42:16
2	Mn 257.610†	124994.1	130189.1	456.15 µg/L	456.15 ppb	14:42:16
2	Mo 202.031†	4295.8	4473.5	484.36 µg/L	484.36 ppb	14:42:37
2	Ni 231.604†	7541.0	7537.5	413.99 µg/L	413.99 ppb	14:42:37
2	P 214.914†	1237.1	1258.5	2651.1 µg/L	2651.1 ppb	14:42:37
2	Pb 220.353†	1701.2	1671.4	466.10 µg/L	466.10 ppb	14:42:37

2	S 181.975 Axial†	598.3	607.2	2660.4 µg/L	2660.4 ppb	14:42:37
2	Sb 206.836†	550.2	545.1	498.59 µg/L	498.59 ppb	14:42:37
2	Se 196.026†	1466.3	1508.6	2247.3 µg/L	2247.3 ppb	14:42:37
2	SiO2†	47231.2	47852.0	10305 µg/L	10305 ppb	14:42:16
2	Si 251.611†	57079.6	59027.6	4852.4 µg/L	4852.4 ppb	14:42:16
2	Sn 189.927†	972.7	1012.1	499.64 µg/L	499.64 ppb	14:42:37
2	Ti 334.940†	198343.7	206083.8	465.72 µg/L	465.72 ppb	14:42:16
2	Tl 190.801†	259.5	294.1	435.56 µg/L	435.56 ppb	14:42:37
2	U 409.014†	4974.7	5225.3	419.28 µg/L	419.28 ppb	14:42:16
2	V 292.402†	41844.6	43546.2	490.82 µg/L	490.82 ppb	14:42:16
2	Zn 213.857†	18719.4	18985.3	435.92 µg/L	435.92 ppb	14:42:16
3	Sc RADIAL	54836.5	54836.5	100 %		14:41:27
3	Al 396.153Radial†	666707.4	663530.3	494540 µg/L	494540 ppb	14:41:21
3	Ca 317.933Radial†	500342.9	497771.9	468680 µg/L	468680 ppb	14:41:21
3	Fe 238.204 Radial†	21386.7	21269.9	180290 µg/L	180290 ppb	14:41:27
3	K 766.490 Radial†	6994.6	6832.8	4856.7 µg/L	4856.7 ppb	14:41:27
3	Mg 279.077 IEC†	50805.9	50551.7	470260 µg/L	470260 ppb	14:41:27
3	Na 589.592 Radial†	15470.0	14854.1	4890.0 µg/L	4890.0 ppb	14:41:27
3	Sr 421.552†	46844.7	46581.2	482.87 µg/L	482.87 ppb	14:41:27
3	Sc 361.383	1833431.9	1833431.9	95.999 %		14:42:43
3	Y 371.029	1252123.0	1252123.0	95.588 %		14:42:43
3	Ag 328.068†	27588.4	29302.7	247.00 µg/L	247.00 ppb	14:42:49
3	As 188.979†	241.1	250.0	473.71 µg/L	473.71 ppb	14:43:09
3	B 249.677†	11855.2	12017.8	431.89 µg/L	431.89 ppb	14:42:49
3	Ba 233.527†	17813.9	18582.3	484.71 µg/L	484.71 ppb	14:42:49
3	Be 313.107†	338767.0	356325.5	232.51 µg/L	232.51 ppb	14:42:43
3	Cd 226.502†	15965.4	16772.9	442.77 µg/L	442.77 ppb	14:42:49
3	Co 228.616†	8119.3	8466.6	416.04 µg/L	416.04 ppb	14:43:09
3	Cr 267.716†	20600.1	21511.0	473.46 µg/L	473.46 ppb	14:42:49
3	Cu 324.752†	70720.9	71182.1	522.28 µg/L	522.28 ppb	14:42:49
3	Mn 257.610†	127685.2	133250.6	466.59 µg/L	466.59 ppb	14:42:49
3	Mo 202.031†	4277.4	4463.2	483.17 µg/L	483.17 ppb	14:43:09
3	Ni 231.604†	7478.0	7487.4	411.22 µg/L	411.22 ppb	14:43:09
3	P 214.914†	1197.0	1219.3	2568.4 µg/L	2568.4 ppb	14:43:09
3	Pb 220.353†	1703.7	1677.5	467.96 µg/L	467.96 ppb	14:43:09
3	S 181.975 Axial†	585.7	595.2	2608.0 µg/L	2608.0 ppb	14:43:09
3	Sb 206.836†	542.2	537.9	491.06 µg/L	491.06 ppb	14:43:09
3	Se 196.026†	1453.1	1497.9	2227.0 µg/L	2227.0 ppb	14:43:09
3	SiO2†	48266.6	49028.1	10558 µg/L	10558 ppb	14:42:49
3	Si 251.611†	58341.2	60459.7	4970.1 µg/L	4970.1 ppb	14:42:49
3	Sn 189.927†	964.4	1005.4	496.36 µg/L	496.36 ppb	14:43:09
3	Ti 334.940†	202865.6	211203.9	478.37 µg/L	478.37 ppb	14:42:49
3	Tl 190.801†	278.4	314.2	463.55 µg/L	463.55 ppb	14:43:09
3	U 409.014†	5159.4	5428.1	437.79 µg/L	437.79 ppb	14:42:49
3	V 292.402†	42697.4	44521.1	500.97 µg/L	500.97 ppb	14:42:49
3	Zn 213.857†	19157.2	19480.1	448.59 µg/L	448.59 ppb	14:42:49

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1839121.1	96.297 %	0.3635			0.38%
Sc RADIAL	54880.3	101 %	0.3			0.30%
Y 371.029	1254617.1	95.778 %	0.2486			0.26%
Ag 328.068†	28939.9	244.14 µg/L	2.532	244.14 ppb	2.532	1.04%
QC value within limits for Ag 328.068 Recovery = 97.66%						
Al 396.153Radial†	661039.6	492680 µg/L	1706.7	492680 ppb	1706.7	0.35%
QC value within limits for Al 396.153Radial Recovery = 98.54%						
As 188.979†	242.9	459.99 µg/L	15.123	459.99 ppb	15.123	3.29%
QC value within limits for As 188.979 Recovery = 92.00%						
B 249.677†	11849.4	424.12 µg/L	6.887	424.12 ppb	6.887	1.62%
QC value within limits for B 249.677 Recovery = 84.82%						
Ba 233.527†	18366.5	479.08 µg/L	5.348	479.08 ppb	5.348	1.12%
QC value within limits for Ba 233.527 Recovery = 95.82%						
Be 313.107†	355191.9	231.77 µg/L	0.640	231.77 ppb	0.640	0.28%
QC value within limits for Be 313.107 Recovery = 92.71%						
Ca 317.933Radial†	496363.2	467360 µg/L	1416.6	467360 ppb	1416.6	0.30%
QC value within limits for Ca 317.933Radial Recovery = 93.47%						
Cd 226.502†	16555.7	436.70 µg/L	6.077	436.70 ppb	6.077	1.39%
QC value within limits for Cd 226.502 Recovery = 87.34%						
Co 228.616†	8476.9	416.56 µg/L	1.225	416.56 ppb	1.225	0.29%

QC value within limits for Co 228.616 Recovery = 83.31%						
Cr 267.716†	21197.4	466.55 µg/L	6.392	466.55 ppb	6.392	1.37%
QC value within limits for Cr 267.716 Recovery = 93.31%						
Cu 324.752†	70196.0	515.50 µg/L	6.202	515.50 ppb	6.202	1.20%
QC value within limits for Cu 324.752 Recovery = 103.10%						
Fe 238.204 Radial†	21359.6	181050 µg/L	1382.0	181050 ppb	1382.0	0.76%
QC value within limits for Fe 238.204 Radial Recovery = 90.52%						
K 766.490 Radial†	6851.3	4869.9 µg/L	38.72	4869.9 ppb	38.72	0.80%
QC value within limits for K 766.490 Radial Recovery = 97.40%						
Mg 279.077 IEC†	50694.8	471600 µg/L	2021.9	471600 ppb	2021.9	0.43%
QC value within limits for Mg 279.077 IEC Recovery = 94.32%						
Mn 257.610†	131617.4	460.98 µg/L	5.261	460.98 ppb	5.261	1.14%
QC value within limits for Mn 257.610 Recovery = 92.20%						
Mo 202.031†	4466.8	483.58 µg/L	0.671	483.58 ppb	0.671	0.14%
QC value within limits for Mo 202.031 Recovery = 96.72%						
Na 589.592 Radial†	14891.8	4902.4 µg/L	18.32	4902.4 ppb	18.32	0.37%
QC value within limits for Na 589.592 Radial Recovery = 98.05%						
Ni 231.604†	7505.2	412.20 µg/L	1.552	412.20 ppb	1.552	0.38%
QC value within limits for Ni 231.604 Recovery = 82.44%						
P 214.914†	1232.7	2596.7 µg/L	47.05	2596.7 ppb	47.05	1.81%
QC value within limits for P 214.914 Recovery = 103.87%						
Pb 220.353†	1671.1	466.15 µg/L	1.785	466.15 ppb	1.785	0.38%
QC value within limits for Pb 220.353 Recovery = 93.23%						
S 181.975 Axial†	598.4	2621.9 µg/L	33.79	2621.9 ppb	33.79	1.29%
QC value within limits for S 181.975 Axial Recovery = 104.87%						
Sb 206.836†	541.6	494.95 µg/L	3.768	494.95 ppb	3.768	0.76%
QC value within limits for Sb 206.836 Recovery = 98.99%						
Se 196.026†	1504.0	2237.7 µg/L	10.19	2237.7 ppb	10.19	0.46%
QC value within limits for Se 196.026 Recovery = 89.51%						
SiO2†	48376.2	10418 µg/L	128.9	10418 ppb	128.9	1.24%
QC value within limits for SiO2 Recovery = 97.41%						
Si 251.611†	59667.4	4905.0 µg/L	59.86	4905.0 ppb	59.86	1.22%
QC value within limits for Si 251.611 Recovery = 98.10%						
Sn 189.927†	1004.7	496.10 µg/L	3.686	496.10 ppb	3.686	0.74%
QC value within limits for Sn 189.927 Recovery = 99.22%						
Sr 421.552†	46744.2	484.56 µg/L	2.020	484.56 ppb	2.020	0.42%
QC value within limits for Sr 421.552 Recovery = 96.91%						
Ti 334.940†	208377.1	471.44 µg/L	6.410	471.44 ppb	6.410	1.36%
QC value within limits for Ti 334.940 Recovery = 94.29%						
Tl 190.801†	307.0	453.45 µg/L	15.538	453.45 ppb	15.538	3.43%
QC value within limits for Tl 190.801 Recovery = 90.69%						
U 409.014†	5311.8	427.24 µg/L	9.525	427.24 ppb	9.525	2.23%
QC value within limits for U 409.014 Recovery = 85.45%						
V 292.402†	44012.4	495.61 µg/L	5.099	495.61 ppb	5.099	1.03%
QC value within limits for V 292.402 Recovery = 99.12%						
Zn 213.857†	19220.1	441.99 µg/L	6.349	441.99 ppb	6.349	1.44%
QC value within limits for Zn 213.857 Recovery = 88.40%						
All analyte(s) passed QC.						

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/11/2010 14:43:19

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	54698.7	54698.7	100 %		14:43:59
1	Al 396.153Radial†	649050.7	647585.6	482670 µg/L	482670 ppb	14:43:54
1	Ca 317.933Radial†	489494.3	488202.6	459670 µg/L	459670 ppb	14:43:54
1	Fe 238.204 Radial†	51606.4	51474.6	436280 µg/L	436280 ppb	14:43:59
1	K 766.490 Radial†	59.9	-68.6	-48.776 µg/L	-48.776 ppb	14:43:59
1	Mg 279.077 IEC†	49787.3	49662.9	461710 µg/L	461710 ppb	14:43:59
1	Na 589.592 Radial†	1412387.5	1408635.5	463730 µg/L	463730 ppb	14:43:54
1	Sr 421.552†	535.1	494.4	5.1247 µg/L	5.1247 ppb	14:43:59
1	Sc 361.383	1832827.1	1832827.1	95.968 %		14:44:34
1	Y 371.029	1243371.2	1243371.2	94.920 %		14:44:34
1	Ag 328.068†	-5331.8	-4991.3	-12.516 µg/L	-12.516 ppb	14:44:40
1	As 188.979†	-25.3	-27.5	-52.401 µg/L	-52.401 ppb	14:45:01
1	B 249.677†	1493.7	1225.0	-174.11 µg/L	-174.11 ppb	14:44:40
1	Ba 233.527†	574.9	625.1	16.169 µg/L	16.169 ppb	14:45:01
1	Be 313.107†	-11067.4	-8092.0	-5.2972 µg/L	-5.2972 ppb	14:44:40
1	Cd 226.502†	1038.3	1224.0	-15.542 µg/L	-15.542 ppb	14:44:40
1	Co 228.616†	189.5	206.3	10.066 µg/L	10.066 ppb	14:45:01
1	Cr 267.716†	137.7	195.9	4.2704 µg/L	4.2704 ppb	14:45:01
1	Cu 324.752†	-8795.2	-11650.9	-20.741 µg/L	-20.741 ppb	14:44:40
1	Mn 257.610†	-7006.5	-7056.8	15.101 µg/L	15.101 ppb	14:44:34
1	Mo 202.031†	-203.3	-204.2	-5.2185 µg/L	-5.2185 ppb	14:45:01
1	Ni 231.604†	92.3	-206.0	-5.6060 µg/L	-5.6060 ppb	14:45:01
1	P 214.914†	278.7	262.7	357.28 µg/L	357.28 ppb	14:45:01
1	Pb 220.353†	191.0	101.8	23.594 µg/L	23.594 ppb	14:45:01
1	S 181.975 Axial†	34.6	21.2	93.001 µg/L	93.001 ppb	14:45:01
1	Sb 206.836†	60.3	35.8	-5.1147 µg/L	-5.1147 ppb	14:45:01
1	Se 196.026†	-124.6	-145.7	431.09 µg/L	431.09 ppb	14:45:01
1	SiO2†	971.9	-237.3	-51.105 µg/L	-51.105 ppb	14:45:01
1	Si 251.611†	-251.2	-574.6	-47.235 µg/L	-47.235 ppb	14:45:01
1	Sn 189.927†	-32.5	-33.0	-9.5042 µg/L	-9.5042 ppb	14:45:01
1	Ti 334.940†	13370.7	13816.4	4.0770 µg/L	4.0770 ppb	14:44:40
1	Tl 190.801†	-49.5	-27.3	33.449 µg/L	33.449 ppb	14:45:01
1	U 409.014†	138681.8	144562.6	13000 µg/L	13000 ppb	14:44:40
1	V 292.402†	-5434.6	-5618.7	4.9101 µg/L	4.9101 ppb	14:44:40
1	Zn 213.857†	2732.6	2371.8	12.479 µg/L	12.479 ppb	14:45:01
2	Sc RADIAL	54113.0	54113.0	99.2 %		14:44:11
2	Al 396.153Radial†	645987.5	651505.9	485590 µg/L	485590 ppb	14:44:06
2	Ca 317.933Radial†	485663.6	489625.6	461010 µg/L	461010 ppb	14:44:06
2	Fe 238.204 Radial†	51235.5	51657.9	437830 µg/L	437830 ppb	14:44:11
2	K 766.490 Radial†	83.9	-43.8	-31.167 µg/L	-31.167 ppb	14:44:11
2	Mg 279.077 IEC†	49624.6	50036.5	465180 µg/L	465180 ppb	14:44:11
2	Na 589.592 Radial†	1405673.5	1417117.7	466520 µg/L	466520 ppb	14:44:06
2	Sr 421.552†	505.9	470.7	4.8794 µg/L	4.8794 ppb	14:44:11
2	Sc 361.383	1837825.9	1837825.9	96.229 %		14:45:07
2	Y 371.029	1247268.6	1247268.6	95.217 %		14:45:07
2	Ag 328.068†	-5248.4	-4889.5	-11.624 µg/L	-11.624 ppb	14:45:13
2	As 188.979†	-21.7	-23.6	-44.761 µg/L	-44.761 ppb	14:45:33
2	B 249.677†	1467.3	1193.4	-176.30 µg/L	-176.30 ppb	14:45:13
2	Ba 233.527†	558.0	605.8	15.663 µg/L	15.663 ppb	14:45:33
2	Be 313.107†	-10966.6	-7955.9	-5.2083 µg/L	-5.2083 ppb	14:45:13
2	Cd 226.502†	1019.9	1202.0	-16.327 µg/L	-16.327 ppb	14:45:13
2	Co 228.616†	178.5	194.3	9.4767 µg/L	9.4767 ppb	14:45:33
2	Cr 267.716†	83.6	139.3	3.0246 µg/L	3.0246 ppb	14:45:33
2	Cu 324.752†	-8717.3	-11545.0	-19.786 µg/L	-19.786 ppb	14:45:13
2	Mn 257.610†	-6988.4	-7018.1	15.303 µg/L	15.303 ppb	14:45:07
2	Mo 202.031†	-191.4	-191.4	-3.7840 µg/L	-3.7840 ppb	14:45:33
2	Ni 231.604†	81.9	-217.1	-6.1913 µg/L	-6.1913 ppb	14:45:33
2	P 214.914†	298.0	282.1	398.14 µg/L	398.14 ppb	14:45:33
2	Pb 220.353†	188.3	98.5	22.919 µg/L	22.919 ppb	14:45:33

2	S 181.975 Axial†	34.5	21.1	92.318 µg/L	92.318 ppb	14:45:33
2	Sb 206.836†	49.5	24.4	-16.430 µg/L	-16.430 ppb	14:45:33
2	Se 196.026†	-135.7	-156.8	414.89 µg/L	414.89 ppb	14:45:33
2	SiO2†	995.7	-215.3	-46.357 µg/L	-46.357 ppb	14:45:33
2	Si 251.611†	-242.1	-564.4	-46.400 µg/L	-46.400 ppb	14:45:33
2	Sn 189.927†	-48.8	-49.9	-17.017 µg/L	-17.017 ppb	14:45:33
2	Ti 334.940†	13350.9	13757.9	3.6830 µg/L	3.6830 ppb	14:45:13
2	Tl 190.801†	-50.6	-28.2	32.395 µg/L	32.395 ppb	14:45:33
2	U 409.014†	138028.8	143491.0	12902 µg/L	12902 ppb	14:45:13
2	V 292.402†	-5635.2	-5811.8	2.9425 µg/L	2.9425 ppb	14:45:13
2	Zn 213.857†	2709.5	2340.1	11.417 µg/L	11.417 ppb	14:45:33
3	Sc RADIAL	54398.5	54398.5	99.7 %		14:44:23
3	Al 396.153Radial†	647423.4	649527.5	484110 µg/L	484110 ppb	14:44:18
3	Ca 317.933Radial†	488211.3	489611.2	461000 µg/L	461000 ppb	14:44:18
3	Fe 238.204 Radial†	51015.9	51166.4	433670 µg/L	433670 ppb	14:44:23
3	K 766.490 Radial†	138.6	10.6	7.5591 µg/L	7.5591 ppb	14:44:23
3	Mg 279.077 IEC†	49363.7	49512.1	460310 µg/L	460310 ppb	14:44:23
3	Na 589.592 Radial†	1412371.3	1416397.4	466280 µg/L	466280 ppb	14:44:18
3	Sr 421.552†	507.2	469.3	4.8646 µg/L	4.8646 ppb	14:44:23
3	Sc 361.383	1837461.1	1837461.1	96.210 %		14:45:40
3	Y 371.029	1245635.1	1245635.1	95.093 %		14:45:40
3	Ag 328.068†	-5107.3	-4744.0	-10.729 µg/L	-10.729 ppb	14:45:45
3	As 188.979†	-16.7	-18.5	-34.960 µg/L	-34.960 ppb	14:46:06
3	B 249.677†	1484.3	1211.3	-173.35 µg/L	-173.35 ppb	14:45:45
3	Ba 233.527†	553.8	601.6	15.554 µg/L	15.554 ppb	14:46:06
3	Be 313.107†	-10842.7	-7829.4	-5.1258 µg/L	-5.1258 ppb	14:45:45
3	Cd 226.502†	1000.6	1182.1	-16.404 µg/L	-16.404 ppb	14:45:45
3	Co 228.616†	166.8	182.2	8.8812 µg/L	8.8812 ppb	14:46:06
3	Cr 267.716†	114.6	171.5	3.7340 µg/L	3.7340 ppb	14:46:06
3	Cu 324.752†	-8778.8	-11610.6	-20.823 µg/L	-20.823 ppb	14:45:45
3	Mn 257.610†	-6849.7	-6875.4	15.438 µg/L	15.438 ppb	14:45:40
3	Mo 202.031†	-180.2	-179.7	-2.7014 µg/L	-2.7014 ppb	14:46:06
3	Ni 231.604†	78.6	-220.5	-6.4261 µg/L	-6.4261 ppb	14:46:06
3	P 214.914†	292.5	276.4	389.07 µg/L	389.07 ppb	14:46:06
3	Pb 220.353†	166.9	76.3	17.067 µg/L	17.067 ppb	14:46:06
3	S 181.975 Axial†	27.8	14.1	61.607 µg/L	61.607 ppb	14:46:06
3	Sb 206.836†	44.0	18.8	-21.940 µg/L	-21.940 ppb	14:46:06
3	Se 196.026†	-130.2	-151.2	416.38 µg/L	416.38 ppb	14:46:06
3	SiO2†	1012.2	-197.9	-42.626 µg/L	-42.626 ppb	14:46:06
3	Si 251.611†	-265.6	-588.9	-48.410 µg/L	-48.410 ppb	14:46:06
3	Sn 189.927†	-42.0	-42.7	-13.864 µg/L	-13.864 ppb	14:46:06
3	Ti 334.940†	13514.7	13930.9	4.4846 µg/L	4.4846 ppb	14:45:45
3	Tl 190.801†	-39.7	-17.0	47.407 µg/L	47.407 ppb	14:46:06
3	U 409.014†	138148.6	143644.0	12917 µg/L	12917 ppb	14:45:45
3	V 292.402†	-5603.1	-5779.6	2.8210 µg/L	2.8210 ppb	14:45:45
3	Zn 213.857†	2726.7	2358.5	12.353 µg/L	12.353 ppb	14:46:06

Mean Data: LRI

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1836038.0	96.136 %	0.1459			0.15%
Sc RADIAL	54403.4	99.7 %	0.54			0.54%
Y 371.029	1245425.0	95.077 %	0.1494			0.16%
Ag 328.068†	-4875.0	-11.623 µg/L	0.8935	-11.623 ppb	0.8935	7.69%
Al 396.153Radial†	649539.7	484120 µg/L	1461.0	484120 ppb	1461.0	0.30%
QC value within limits for Al 396.153Radial Recovery = 96.82%						
As 188.979†	-23.2	-44.041 µg/L	8.7426	-44.041 ppb	8.7426	19.85%
B 249.677†	1209.9	-174.59 µg/L	1.536	-174.59 ppb	1.536	0.88%
Ba 233.527†	610.9	15.795 µg/L	0.3282	15.795 ppb	0.3282	2.08%
Be 313.107†	-7959.1	-5.2104 µg/L	0.08573	-5.2104 ppb	0.08573	1.65%
Ca 317.933Radial†	489146.5	460560 µg/L	769.6	460560 ppb	769.6	0.17%
QC value within limits for Ca 317.933Radial Recovery = 92.11%						
Cd 226.502†	1202.7	-16.091 µg/L	0.4769	-16.091 ppb	0.4769	2.96%
Co 228.616†	194.3	9.4746 µg/L	0.59237	9.4746 ppb	0.59237	6.25%
Cr 267.716†	168.9	3.6764 µg/L	0.62486	3.6764 ppb	0.62486	17.00%
Cu 324.752†	-11602.2	-20.450 µg/L	0.5769	-20.450 ppb	0.5769	2.82%
Fe 238.204 Radial†	51433.0	435930 µg/L	2105.0	435930 ppb	2105.0	0.48%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.19%						
K 766.490 Radial†	-33.9	-24.128 µg/L	28.8197	-24.128 ppb	28.8197	119.44%
Mg 279.077 IEC†	49737.1	462400 µg/L	2510.3	462400 ppb	2510.3	0.54%

QC value within limits for Mg 279.077 IEC Recovery = 92.48%

Mn 257.610†	-6983.5	15.281 µg/L	0.1695	15.281 ppb	0.1695	1.11%
Mo 202.031†	-191.8	-3.9013 µg/L	1.26264	-3.9013 ppb	1.26264	32.36%
Na 589.592 Radial†	1414050.2	465510 µg/L	1548.3	465510 ppb	1548.3	0.33%

QC value within limits for Na 589.592 Radial Recovery = 93.10%

Ni 231.604†	-214.5	-6.0745 µg/L	0.42234	-6.0745 ppb	0.42234	6.95%
P 214.914†	273.7	381.50 µg/L	21.461	381.50 ppb	21.461	5.63%
Pb 220.353†	92.2	21.194 µg/L	3.5893	21.194 ppb	3.5893	16.94%
S 181.975 Axial†	18.8	82.309 µg/L	17.9317	82.309 ppb	17.9317	21.79%
Sb 206.836†	26.4	-14.495 µg/L	8.5779	-14.495 ppb	8.5779	59.18%
Se 196.026†	-151.2	420.79 µg/L	8.956	420.79 ppb	8.956	2.13%
SiO2†	-216.8	-46.696 µg/L	4.2500	-46.696 ppb	4.2500	9.10%
Si 251.611†	-576.0	-47.348 µg/L	1.0098	-47.348 ppb	1.0098	2.13%
Sn 189.927†	-41.9	-13.462 µg/L	3.7726	-13.462 ppb	3.7726	28.02%
Sr 421.552†	478.1	4.9562 µg/L	0.14608	4.9562 ppb	0.14608	2.95%
Ti 334.940†	13835.1	4.0815 µg/L	0.40078	4.0815 ppb	0.40078	9.82%
Tl 190.801†	-24.2	37.750 µg/L	8.3798	37.750 ppb	8.3798	22.20%
U 409.014†	143899.2	12939 µg/L	52.5	12939 ppb	52.5	0.41%

QC value less than the lower limit for U 409.014 Recovery = 86.26%

V 292.402†	-5736.7	3.5579 µg/L	1.17264	3.5579 ppb	1.17264	32.96%
Zn 213.857†	2356.8	12.083 µg/L	0.5800	12.083 ppb	0.5800	4.80%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/11/2010 14:46:15

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	55399.0	55399.0	102 %		14:46:58
1	Al 396.153Radial†	399.7	403.8	92.521 µg/L	92.521 ppb	14:46:58
1	Ca 317.933Radial†	334.1	149.9	141.18 µg/L	141.18 ppb	14:47:18
1	Fe 238.204 Radial†	7.1	-7.5	138.28 µg/L	138.28 ppb	14:47:18
1	K 766.490 Radial†	420398.0	414012.0	294280 µg/L	294280 ppb	14:46:52
1	Mg 279.077 IEC†	6.8	-4.5	128.44 µg/L	128.44 ppb	14:47:18
1	Na 589.592 Radial†	1342.1	780.2	256.86 µg/L	256.86 ppb	14:46:58
1	Sr 421.552†	951196.0	936997.9	9713.1 µg/L	9713.1 ppb	14:46:52
1	Sc 361.383	1973675.2	1973675.2	103.34 %		14:48:49
1	Y 371.029	1341693.6	1341693.6	102.43 %		14:48:49
1	Ag 328.068†	-7295.5	-6495.0	14.834 µg/L	14.834 ppb	14:48:55
1	As 188.979†	5210.7	5041.0	9833.2 µg/L	9833.2 ppb	14:48:55
1	B 249.677†	116645.4	112541.3	4957.2 µg/L	4957.2 ppb	14:48:49
1	Ba 233.527†	564583.2	546348.7	14244 µg/L	14244 ppb	14:48:49
1	Be 313.107†	4590165.2	4445144.6	2899.1 µg/L	2899.1 ppb	14:48:39
1	Cd 226.502†	360765.0	349238.8	9644.6 µg/L	9644.6 ppb	14:48:49
1	Co 228.616†	199452.7	193010.6	9487.0 µg/L	9487.0 ppb	14:48:49
1	Cr 267.716†	1141741.3	1104866.0	24309 µg/L	24309 ppb	14:48:49
1	Cu 324.752†	2993464.1	2894159.5	20216 µg/L	20216 ppb	14:48:49
1	Mn 257.610†	2858381.7	2766176.3	9578.9 µg/L	9578.9 ppb	14:48:49
1	Mo 202.031†	98264.3	95093.6	10148 µg/L	10148 ppb	14:48:49
1	Ni 231.604†	183070.7	176847.4	9657.8 µg/L	9657.8 ppb	14:48:49
1	P 214.914†	7469.6	7200.4	13482 µg/L	13482 ppb	14:48:55
1	Pb 220.353†	97644.4	94389.0	25180 µg/L	25180 ppb	14:48:49
1	S 181.975 Axial†	12516.5	12096.9	53001 µg/L	53001 ppb	14:48:55
1	Sb 206.836†	11239.2	10848.7	10569 µg/L	10569 ppb	14:48:55
1	Se 196.026†	6584.9	6356.1	9690.0 µg/L	9690.0 ppb	14:48:55
1	SiO2†	476520.0	459857.7	99033 µg/L	99033 ppb	14:48:49
1	Si 251.611†	580361.7	561278.0	46140 µg/L	46140 ppb	14:48:49
1	Sn 189.927†	23760.5	22992.8	10575 µg/L	10575 ppb	14:48:55
1	Ti 334.940†	4290484.1	4151599.7	9986.4 µg/L	9986.4 ppb	14:48:39
1	Tl 190.801†	7036.0	6832.7	9632.0 µg/L	9632.0 ppb	14:48:55
1	U 409.014†	835.4	862.0	78.046 µg/L	78.046 ppb	14:48:49
1	V 292.402†	975452.7	943947.6	10194 µg/L	10194 ppb	14:48:49
1	Zn 213.857†	598917.9	579071.4	14385 µg/L	14385 ppb	14:48:49
2	Sc RADIAL	55030.3	55030.3	101 %		14:47:30
2	Al 396.153Radial†	384.6	391.5	90.444 µg/L	90.444 ppb	14:47:30
2	Ca 317.933Radial†	398.0	215.6	202.97 µg/L	202.97 ppb	14:47:50
2	Fe 238.204 Radial†	10.5	-4.0	160.36 µg/L	160.36 ppb	14:47:50
2	K 766.490 Radial†	423060.2	419427.1	298130 µg/L	298130 ppb	14:47:24
2	Mg 279.077 IEC†	11.3	-0.0	164.54 µg/L	164.54 ppb	14:47:50
2	Na 589.592 Radial†	1212.5	660.6	217.48 µg/L	217.48 ppb	14:47:30
2	Sr 421.552†	957912.4	949937.4	9847.2 µg/L	9847.2 ppb	14:47:24
2	Sc 361.383	1973904.3	1973904.3	103.35 %		14:49:14
2	Y 371.029	1342735.7	1342735.7	102.51 %		14:49:14
2	Ag 328.068†	-6836.3	-6049.9	16.075 µg/L	16.075 ppb	14:49:19
2	As 188.979†	5005.3	4841.7	9444.3 µg/L	9444.3 ppb	14:49:19
2	B 249.677†	114403.0	110358.5	4860.1 µg/L	4860.1 ppb	14:49:14
2	Ba 233.527†	548071.4	530309.5	13826 µg/L	13826 ppb	14:49:14
2	Be 313.107†	4469193.3	4327583.5	2822.5 µg/L	2822.5 ppb	14:49:04
2	Cd 226.502†	349367.5	338170.7	9338.9 µg/L	9338.9 ppb	14:49:14
2	Co 228.616†	192536.9	186296.8	9156.8 µg/L	9156.8 ppb	14:49:14
2	Cr 267.716†	1093055.4	1057632.1	23270 µg/L	23270 ppb	14:49:14
2	Cu 324.752†	2898656.7	2802093.0	19573 µg/L	19573 ppb	14:49:14
2	Mn 257.610†	2761508.2	2672125.9	9253.2 µg/L	9253.2 ppb	14:49:14
2	Mo 202.031†	94921.3	91848.1	9802.1 µg/L	9802.1 ppb	14:49:14
2	Ni 231.604†	176871.2	170828.6	9329.1 µg/L	9329.1 ppb	14:49:14
2	P 214.914†	7023.8	6768.2	12612 µg/L	12612 ppb	14:49:19
2	Pb 220.353†	95131.3	91946.6	24529 µg/L	24529 ppb	14:49:14

2	S 181.975 Axial†	12036.4	11630.9	50959 µg/L	50959 ppb	14:49:19
2	Sb 206.836†	10693.6	10319.6	10054 µg/L	10054 ppb	14:49:19
2	Se 196.026†	6359.9	6137.7	9357.1 µg/L	9357.1 ppb	14:49:19
2	SiO2†	465181.8	448834.1	96659 µg/L	96659 ppb	14:49:14
2	Si 251.611†	566752.0	548044.9	45052 µg/L	45052 ppb	14:49:14
2	Sn 189.927†	22166.4	21447.8	9864.4 µg/L	9864.4 ppb	14:49:19
2	Ti 334.940†	4180020.8	4044239.7	9728.1 µg/L	9728.1 ppb	14:49:04
2	Tl 190.801†	6890.0	6690.7	9431.4 µg/L	9431.4 ppb	14:49:19
2	U 409.014†	947.2	970.1	87.818 µg/L	87.818 ppb	14:49:14
2	V 292.402†	941864.4	911339.9	9841.7 µg/L	9841.7 ppb	14:49:14
2	Zn 213.857†	579745.6	560454.1	13922 µg/L	13922 ppb	14:49:14
3	Sc RADIAL	56038.9	56038.9	103 %		14:48:02
3	Al 396.153Radial†	479.5	477.1	179.56 µg/L	179.56 ppb	14:48:02
3	Ca 317.933Radial†	383.6	194.4	183.07 µg/L	183.07 ppb	14:48:22
3	Fe 238.204 Radial†	9.4	-5.4	124.22 µg/L	124.22 ppb	14:48:22
3	K 766.490 Radial†	428756.3	417423.2	296700 µg/L	296700 ppb	14:47:56
3	Mg 279.077 IEC†	6.3	-5.2	95.926 µg/L	95.926 ppb	14:48:22
3	Na 589.592 Radial†	1260.6	685.8	225.77 µg/L	225.77 ppb	14:48:02
3	Sr 421.552†	974533.2	949026.3	9837.8 µg/L	9837.8 ppb	14:47:56
3	Sc 361.383	1967182.2	1967182.2	103.00 %		14:49:39
3	Y 371.029	1337106.2	1337106.2	102.08 %		14:49:39
3	Ag 328.068†	-5873.5	-5137.8	14.957 µg/L	14.957 ppb	14:49:44
3	As 188.979†	4335.2	4207.7	8207.5 µg/L	8207.5 ppb	14:49:44
3	B 249.677†	103256.6	99915.3	4398.2 µg/L	4398.2 ppb	14:49:39
3	Ba 233.527†	483121.0	469064.3	12229 µg/L	12229 ppb	14:49:39
3	Be 313.107†	4064814.3	3949767.9	2576.0 µg/L	2576.0 ppb	14:49:28
3	Cd 226.502†	306350.7	297562.9	8217.4 µg/L	8217.4 ppb	14:49:39
3	Co 228.616†	167417.3	162546.1	7988.6 µg/L	7988.6 ppb	14:49:39
3	Cr 267.716†	928569.1	901554.3	19836 µg/L	19836 ppb	14:49:39
3	Cu 324.752†	2527919.1	2451745.7	17126 µg/L	17126 ppb	14:49:39
3	Mn 257.610†	2402081.4	2332306.4	8076.5 µg/L	8076.5 ppb	14:49:39
3	Mo 202.031†	82713.5	80310.0	8570.8 µg/L	8570.8 ppb	14:49:39
3	Ni 231.604†	153785.8	149000.9	8137.1 µg/L	8137.1 ppb	14:49:39
3	P 214.914†	6020.9	5817.7	10807 µg/L	10807 ppb	14:49:44
3	Pb 220.353†	84806.2	82236.9	21938 µg/L	21938 ppb	14:49:39
3	S 181.975 Axial†	10412.0	10093.6	44224 µg/L	44224 ppb	14:49:44
3	Sb 206.836†	9221.8	8926.1	8701.4 µg/L	8701.4 ppb	14:49:44
3	Se 196.026†	5513.0	5336.4	8135.5 µg/L	8135.5 ppb	14:49:44
3	SiO2†	415353.7	401996.4	86572 µg/L	86572 ppb	14:49:39
3	Si 251.611†	505959.6	490898.3	40354 µg/L	40354 ppb	14:49:39
3	Sn 189.927†	18682.4	18138.7	8342.5 µg/L	8342.5 ppb	14:49:44
3	Ti 334.940†	3801346.2	3690423.2	8877.0 µg/L	8877.0 ppb	14:49:28
3	Tl 190.801†	6155.2	6000.1	8459.0 µg/L	8459.0 ppb	14:49:44
3	U 409.014†	834.8	864.1	78.225 µg/L	78.225 ppb	14:49:39
3	V 292.402†	816284.9	792534.9	8558.2 µg/L	8558.2 ppb	14:49:39
3	Zn 213.857†	507712.5	492437.5	12233 µg/L	12233 ppb	14:49:39

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1971587.2	103.23 %	0.200			0.19%
Sc RADIAL	55489.4	102 %	0.9			0.92%
Y 371.029	1340511.8	102.34 %	0.229			0.22%
Ag 328.068†	-5894.2	15.288 µg/L	0.6836	15.288 ppb	0.6836	4.47%
Al 396.153Radial†	424.2	120.84 µg/L	50.861	120.84 ppb	50.861	42.09%
As 188.979†	4696.8	9161.7 µg/L	848.90	9161.7 ppb	848.90	9.27%
QC value within limits for As 188.979 Recovery = 91.62%						
B 249.677†	107605.0	4738.5 µg/L	298.66	4738.5 ppb	298.66	6.30%
QC value within limits for B 249.677 Recovery = 94.77%						
Ba 233.527†	515240.8	13433 µg/L	1063.5	13433 ppb	1063.5	7.92%
QC value less than the lower limit for Ba 233.527 Recovery = 89.55%						
Be 313.107†	4240832.0	2765.9 µg/L	168.81	2765.9 ppb	168.81	6.10%
QC value within limits for Be 313.107 Recovery = 92.20%						
Ca 317.933Radial†	186.6	175.74 µg/L	31.540	175.74 ppb	31.540	17.95%
Cd 226.502†	328324.1	9067.0 µg/L	751.45	9067.0 ppb	751.45	8.29%
QC value within limits for Cd 226.502 Recovery = 90.67%						
Co 228.616†	180617.8	8877.5 µg/L	787.27	8877.5 ppb	787.27	8.87%
QC value less than the lower limit for Co 228.616 Recovery = 88.77%						
Cr 267.716†	1021350.8	22472 µg/L	2340.9	22472 ppb	2340.9	10.42%
QC value less than the lower limit for Cr 267.716 Recovery = 89.89%						

Cu 324.752†	2715999.4	18972 µg/L	1630.6	18972 ppb	1630.6	8.59%
QC value within limits for Cu 324.752 Recovery = 94.86%						
Fe 238.204 Radial†	-5.6	140.95 µg/L	18.221	140.95 ppb	18.221	12.93%
K 766.490 Radial†	416954.1	296370 µg/L	1946.1	296370 ppb	1946.1	0.66%
QC value within limits for K 766.490 Radial Recovery = 98.79%						
Mg 279.077 IEC†	-3.2	129.64 µg/L	34.323	129.64 ppb	34.323	26.48%
Mn 257.610†	2590202.9	8969.5 µg/L	790.37	8969.5 ppb	790.37	8.81%
QC value less than the lower limit for Mn 257.610 Recovery = 89.70%						
Mo 202.031†	89083.9	9507.1 µg/L	829.20	9507.1 ppb	829.20	8.72%
QC value within limits for Mo 202.031 Recovery = 95.07%						
Na 589.592 Radial†	708.9	233.37 µg/L	20.762	233.37 ppb	20.762	8.90%
Ni 231.604†	165559.0	9041.3 µg/L	800.17	9041.3 ppb	800.17	8.85%
QC value within limits for Ni 231.604 Recovery = 90.41%						
P 214.914†	6595.5	12300 µg/L	1364.7	12300 ppb	1364.7	11.09%
QC value less than the lower limit for P 214.914 Recovery = 82.00%						
Pb 220.353†	89524.2	23882 µg/L	1714.8	23882 ppb	1714.8	7.18%
QC value within limits for Pb 220.353 Recovery = 95.53%						
S 181.975 Axial†	11273.8	49394 µg/L	4592.8	49394 ppb	4592.8	9.30%
QC value within limits for S 181.975 Axial Recovery = 98.79%						
Sb 206.836†	10031.5	9774.9 µg/L	964.64	9774.9 ppb	964.64	9.87%
QC value within limits for Sb 206.836 Recovery = 97.75%						
Se 196.026†	5943.4	9060.9 µg/L	818.48	9060.9 ppb	818.48	9.03%
QC value within limits for Se 196.026 Recovery = 90.61%						
SiO2†	436896.1	94088 µg/L	6616.3	94088 ppb	6616.3	7.03%
QC value less than the lower limit for SiO2 Recovery = 87.93%						
Si 251.611†	533407.1	43849 µg/L	3074.8	43849 ppb	3074.8	7.01%
QC value less than the lower limit for Si 251.611 Recovery = 87.70%						
Sn 189.927†	20859.8	9594.0 µg/L	1140.59	9594.0 ppb	1140.59	11.89%
QC value within limits for Sn 189.927 Recovery = 95.94%						
Sr 421.552†	945320.6	9799.4 µg/L	74.86	9799.4 ppb	74.86	0.76%
QC value within limits for Sr 421.552 Recovery = 97.99%						
Ti 334.940†	3962087.5	9530.5 µg/L	580.46	9530.5 ppb	580.46	6.09%
QC value within limits for Ti 334.940 Recovery = 95.30%						
Tl 190.801†	6507.8	9174.1 µg/L	627.37	9174.1 ppb	627.37	6.84%
QC value within limits for Tl 190.801 Recovery = 91.74%						
U 409.014†	898.7	81.363 µg/L	5.5909	81.363 ppb	5.5909	6.87%
V 292.402†	882607.5	9531.4 µg/L	861.08	9531.4 ppb	861.08	9.03%
QC value within limits for V 292.402 Recovery = 95.31%						
Zn 213.857†	543987.7	13513 µg/L	1132.6	13513 ppb	1132.6	8.38%
QC value within limits for Zn 213.857 Recovery = 90.09%						

QC Failed. Continue with analysis.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 14:49:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56804.1	56804.1	104 %		14:50:31
1	Al 396.153Radial†	6842.1	6583.7	4896.3 µg/L	4896.3 ppb	14:50:31
1	Ca 317.933Radial†	5575.3	5177.3	4874.7 µg/L	4874.7 ppb	14:50:52
1	Fe 238.204 Radial†	620.0	581.2	4936.5 µg/L	4936.5 ppb	14:50:52
1	K 766.490 Radial†	7520.1	7096.5	5044.1 µg/L	5044.1 ppb	14:50:31
1	Mg 279.077 IEC†	574.4	540.6	5034.2 µg/L	5034.2 ppb	14:50:52
1	Na 589.592 Radial†	31573.0	29791.8	9807.5 µg/L	9807.5 ppb	14:50:31
1	Sr 421.552†	48614.5	46666.6	483.75 µg/L	483.75 ppb	14:50:31
1	Sc 361.383	1985086.2	1985086.2	103.94 %		14:51:55
1	Y 371.029	1355705.3	1355705.3	103.50 %		14:51:55
1	Ag 328.068†	63419.1	61579.6	492.20 µg/L	492.20 ppb	14:52:00
1	As 188.979†	283.1	271.2	529.04 µg/L	529.04 ppb	14:52:21
1	B 249.677†	12082.8	11293.3	491.77 µg/L	491.77 ppb	14:52:00
1	Ba 233.527†	19621.7	18904.0	493.12 µg/L	493.12 ppb	14:52:00
1	Be 313.107†	773609.6	747725.8	488.12 µg/L	488.12 ppb	14:51:55
1	Cd 226.502†	18494.8	17935.8	494.76 µg/L	494.76 ppb	14:52:00
1	Co 228.616†	10503.4	10114.1	497.19 µg/L	497.19 ppb	14:52:00
1	Cr 267.716†	23548.0	22707.7	499.79 µg/L	499.79 ppb	14:52:00
1	Cu 324.752†	76174.0	70800.5	495.24 µg/L	495.24 ppb	14:52:00
1	Mn 257.610†	149145.1	143735.7	498.19 µg/L	498.19 ppb	14:51:55
1	Mo 202.031†	5080.3	4895.3	522.62 µg/L	522.62 ppb	14:52:21
1	Ni 231.604†	9759.2	9087.1	496.31 µg/L	496.31 ppb	14:52:00
1	P 214.914†	1255.3	1180.1	2486.8 µg/L	2486.8 ppb	14:52:21
1	Pb 220.353†	2124.3	1946.6	519.63 µg/L	519.63 ppb	14:52:21
1	S 181.975 Axial†	258.7	234.1	1025.7 µg/L	1025.7 ppb	14:52:21
1	Sb 206.836†	589.1	539.9	533.84 µg/L	533.84 ppb	14:52:21
1	Se 196.026†	360.1	330.7	511.73 µg/L	511.73 ppb	14:52:21
1	SiO2†	26768.3	24503.7	5277.0 µg/L	5277.0 ppb	14:52:00
1	Si 251.611†	31600.0	30089.3	2473.5 µg/L	2473.5 ppb	14:52:00
1	Sn 189.927†	1182.0	1138.1	523.47 µg/L	523.47 ppb	14:52:21
1	Ti 334.940†	213092.8	204899.2	492.55 µg/L	492.55 ppb	14:51:55
1	Tl 190.801†	347.4	358.5	506.37 µg/L	506.37 ppb	14:52:21
1	U 409.014†	5696.3	5534.0	500.04 µg/L	500.04 ppb	14:52:00
1	V 292.402†	48064.4	46286.7	499.57 µg/L	499.57 ppb	14:52:00
1	Zn 213.857†	21219.3	19939.4	494.39 µg/L	494.39 ppb	14:52:00
2	Sc RADIAL	56818.7	56818.7	104 %		14:50:57
2	Al 396.153Radial†	6864.1	6603.1	4910.8 µg/L	4910.8 ppb	14:50:57
2	Ca 317.933Radial†	5535.1	5137.3	4837.1 µg/L	4837.1 ppb	14:51:17
2	Fe 238.204 Radial†	615.6	576.8	4899.1 µg/L	4899.1 ppb	14:51:17
2	K 766.490 Radial†	7426.8	7005.0	4979.1 µg/L	4979.1 ppb	14:50:57
2	Mg 279.077 IEC†	575.7	541.7	5044.4 µg/L	5044.4 ppb	14:51:17
2	Na 589.592 Radial†	31604.5	29814.2	9814.9 µg/L	9814.9 ppb	14:50:57
2	Sr 421.552†	48545.6	46588.5	482.94 µg/L	482.94 ppb	14:50:57
2	Sc 361.383	1982851.3	1982851.3	103.82 %		14:52:28
2	Y 371.029	1354649.3	1354649.3	103.41 %		14:52:28
2	Ag 328.068†	64081.0	62286.0	497.83 µg/L	497.83 ppb	14:52:34
2	As 188.979†	276.6	265.3	517.47 µg/L	517.47 ppb	14:52:54
2	B 249.677†	12111.5	11334.1	493.59 µg/L	493.59 ppb	14:52:34
2	Ba 233.527†	19855.9	19150.8	499.56 µg/L	499.56 ppb	14:52:34
2	Be 313.107†	767601.6	742777.9	484.89 µg/L	484.89 ppb	14:52:28
2	Cd 226.502†	18724.1	18176.8	501.42 µg/L	501.42 ppb	14:52:34
2	Co 228.616†	10623.9	10241.5	503.47 µg/L	503.47 ppb	14:52:34
2	Cr 267.716†	23965.4	23135.3	509.20 µg/L	509.20 ppb	14:52:34
2	Cu 324.752†	76944.2	71624.9	501.00 µg/L	501.00 ppb	14:52:34
2	Mn 257.610†	147951.6	142747.9	494.77 µg/L	494.77 ppb	14:52:28
2	Mo 202.031†	5059.8	4881.0	521.09 µg/L	521.09 ppb	14:52:54
2	Ni 231.604†	9897.9	9231.3	504.18 µg/L	504.18 ppb	14:52:34
2	P 214.914†	1254.5	1180.6	2487.4 µg/L	2487.4 ppb	14:52:54
2	Pb 220.353†	2113.7	1938.7	517.51 µg/L	517.51 ppb	14:52:54

2	S 181.975 Axial†	253.9	229.7	1006.6 µg/L	1006.6 ppb	14:52:54
2	Sb 206.836†	570.0	522.0	516.18 µg/L	516.18 ppb	14:52:54
2	Se 196.026†	357.5	328.5	508.28 µg/L	508.28 ppb	14:52:54
2	SiO2†	27016.3	24771.5	5334.7 µg/L	5334.7 ppb	14:52:34
2	Si 251.611†	31927.7	30439.2	2502.3 µg/L	2502.3 ppb	14:52:34
2	Sn 189.927†	1183.2	1140.5	524.61 µg/L	524.61 ppb	14:52:54
2	Ti 334.940†	211586.4	203679.4	489.61 µg/L	489.61 ppb	14:52:28
2	Tl 190.801†	345.3	356.8	503.93 µg/L	503.93 ppb	14:52:54
2	U 409.014†	5694.5	5538.4	500.46 µg/L	500.46 ppb	14:52:34
2	V 292.402†	48494.6	46753.2	504.55 µg/L	504.55 ppb	14:52:34
2	Zn 213.857†	21488.9	20222.1	501.41 µg/L	501.41 ppb	14:52:34
3	Sc RADIAL	57349.9	57349.9	105 %		14:51:23
3	Al 396.153Radial†	6954.4	6628.0	4931.1 µg/L	4931.1 ppb	14:51:23
3	Ca 317.933Radial†	5532.3	5085.5	4788.3 µg/L	4788.3 ppb	14:51:43
3	Fe 238.204 Radial†	617.1	572.8	4864.4 µg/L	4864.4 ppb	14:51:43
3	K 766.490 Radial†	7512.2	7020.2	4989.9 µg/L	4989.9 ppb	14:51:23
3	Mg 279.077 IEC†	569.2	530.4	4937.8 µg/L	4937.8 ppb	14:51:43
3	Na 589.592 Radial†	31885.8	29800.8	9810.5 µg/L	9810.5 ppb	14:51:23
3	Sr 421.552†	49101.8	46686.0	483.95 µg/L	483.95 ppb	14:51:23
3	Sc 361.383	1990626.4	1990626.4	104.23 %		14:53:01
3	Y 371.029	1359542.7	1359542.7	103.79 %		14:53:01
3	Ag 328.068†	60113.1	58238.1	465.39 µg/L	465.39 ppb	14:53:07
3	As 188.979†	235.3	224.6	438.16 µg/L	438.16 ppb	14:53:28
3	B 249.677†	11347.7	10555.7	459.50 µg/L	459.50 ppb	14:53:07
3	Ba 233.527†	18299.9	17583.2	458.65 µg/L	458.65 ppb	14:53:07
3	Be 313.107†	726470.7	700428.5	457.24 µg/L	457.24 ppb	14:53:01
3	Cd 226.502†	17137.6	16584.2	457.44 µg/L	457.44 ppb	14:53:07
3	Co 228.616†	9675.2	9291.3	456.68 µg/L	456.68 ppb	14:53:07
3	Cr 267.716†	21632.8	20807.2	457.96 µg/L	457.96 ppb	14:53:07
3	Cu 324.752†	71181.3	65806.4	460.35 µg/L	460.35 ppb	14:53:07
3	Mn 257.610†	140886.2	135412.6	469.36 µg/L	469.36 ppb	14:53:01
3	Mo 202.031†	4241.7	4077.1	435.30 µg/L	435.30 ppb	14:53:28
3	Ni 231.604†	9011.2	8343.3	455.69 µg/L	455.69 ppb	14:53:07
3	P 214.914†	1075.3	1004.1	2111.2 µg/L	2111.2 ppb	14:53:28
3	Pb 220.353†	1866.0	1693.1	451.84 µg/L	451.84 ppb	14:53:28
3	S 181.975 Axial†	232.5	208.2	912.40 µg/L	912.40 ppb	14:53:28
3	Sb 206.836†	504.7	457.3	451.62 µg/L	451.62 ppb	14:53:28
3	Se 196.026†	310.0	281.6	436.86 µg/L	436.86 ppb	14:53:28
3	SiO2†	25184.9	22912.8	4934.4 µg/L	4934.4 ppb	14:53:07
3	Si 251.611†	29623.3	28108.2	2310.6 µg/L	2310.6 ppb	14:53:07
3	Sn 189.927†	974.4	935.7	430.40 µg/L	430.40 ppb	14:53:28
3	Ti 334.940†	200395.3	192146.5	461.88 µg/L	461.88 ppb	14:53:01
3	Tl 190.801†	314.8	326.3	461.00 µg/L	461.00 ppb	14:53:28
3	U 409.014†	5084.0	4931.3	445.50 µg/L	445.50 ppb	14:53:07
3	V 292.402†	43900.0	42162.6	454.79 µg/L	454.79 ppb	14:53:07
3	Zn 213.857†	19753.8	18476.6	458.11 µg/L	458.11 ppb	14:53:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1986188.0	104.00 %	0.210			0.20%
Sc RADIAL	56990.9	104 %	0.6			0.55%
Y 371.029	1356632.4	103.57 %	0.197			0.19%
Ag 328.068†	60701.2	485.14 µg/L	17.336	485.14 ppb	17.336	3.57%
QC value within limits for Ag 328.068 Recovery = 97.03%						
Al 396.153Radial†	6604.9	4912.7 µg/L	17.49	4912.7 ppb	17.49	0.36%
QC value within limits for Al 396.153Radial Recovery = 98.25%						
As 188.979†	253.7	494.89 µg/L	49.467	494.89 ppb	49.467	10.00%
QC value within limits for As 188.979 Recovery = 98.98%						
B 249.677†	11061.0	481.62 µg/L	19.175	481.62 ppb	19.175	3.98%
QC value within limits for B 249.677 Recovery = 96.32%						
Ba 233.527†	18546.0	483.78 µg/L	21.996	483.78 ppb	21.996	4.55%
QC value within limits for Ba 233.527 Recovery = 96.76%						
Be 313.107†	730310.7	476.75 µg/L	16.971	476.75 ppb	16.971	3.56%
QC value within limits for Be 313.107 Recovery = 95.35%						
Ca 317.933Radial†	5133.4	4833.4 µg/L	43.35	4833.4 ppb	43.35	0.90%
QC value within limits for Ca 317.933Radial Recovery = 96.67%						
Cd 226.502†	17565.6	484.54 µg/L	23.706	484.54 ppb	23.706	4.89%
QC value within limits for Cd 226.502 Recovery = 96.91%						
Co 228.616†	9882.3	485.78 µg/L	25.392	485.78 ppb	25.392	5.23%

Cr	267.716†	22216.8	488.98 µg/L	27.276	488.98 ppb	27.276	5.58%
Cu	324.752†	69410.6	485.53 µg/L	21.996	485.53 ppb	21.996	4.53%
Fe	238.204 Radial†	576.9	4900.0 µg/L	36.10	4900.0 ppb	36.10	0.74%
K	766.490 Radial†	7040.6	5004.4 µg/L	34.84	5004.4 ppb	34.84	0.70%
Mg	279.077 IEC†	537.5	5005.5 µg/L	58.81	5005.5 ppb	58.81	1.17%
Mn	257.610†	140632.1	487.44 µg/L	15.748	487.44 ppb	15.748	3.23%
Mo	202.031†	4617.8	493.00 µg/L	49.981	493.00 ppb	49.981	10.14%
Na	589.592 Radial†	29802.3	9811.0 µg/L	3.72	9811.0 ppb	3.72	0.04%
Ni	231.604†	8887.2	485.39 µg/L	26.026	485.39 ppb	26.026	5.36%
P	214.914†	1121.6	2361.8 µg/L	217.03	2361.8 ppb	217.03	9.19%
Pb	220.353†	1859.5	496.33 µg/L	38.539	496.33 ppb	38.539	7.76%
S	181.975 Axial†	224.0	981.57 µg/L	60.664	981.57 ppb	60.664	6.18%
Sb	206.836†	506.4	500.55 µg/L	43.281	500.55 ppb	43.281	8.65%
Se	196.026†	313.6	485.62 µg/L	42.263	485.62 ppb	42.263	8.70%
SiO2†		24062.6	5182.0 µg/L	216.38	5182.0 ppb	216.38	4.18%
Si	251.611†	29545.6	2428.8 µg/L	103.33	2428.8 ppb	103.33	4.25%
Sn	189.927†	1071.4	492.83 µg/L	54.065	492.83 ppb	54.065	10.97%
Sr	421.552†	46647.0	483.55 µg/L	0.535	483.55 ppb	0.535	0.11%
Ti	334.940†	200241.7	481.35 µg/L	16.923	481.35 ppb	16.923	3.52%
Tl	190.801†	347.2	490.43 µg/L	25.519	490.43 ppb	25.519	5.20%
U	409.014†	5334.6	482.00 µg/L	31.611	482.00 ppb	31.611	6.56%
V	292.402†	45067.5	486.30 µg/L	27.408	486.30 ppb	27.408	5.64%
Zn	213.857†	19546.0	484.64 µg/L	23.239	484.64 ppb	23.239	4.80%

QC value within limits for Zn 213.857 Recovery = 96.93%

All analyte(s) passed QC.

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

Autosampler Location: 8
 Date Collected: 2/11/2010 14:53:37
 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	56199.9	56199.9	103 %		14:54:10
1	Al 396.153Radial†	38.0	47.1	35.072 µg/L	35.072 ppb	14:54:10
1	Ca 317.933Radial†	231.4	45.6	42.930 µg/L	42.930 ppb	14:54:31
1	Fe 238.204 Radial†	23.4	8.2	69.822 µg/L	69.822 ppb	14:54:31
1	K 766.490 Radial†	243.5	108.1	76.828 µg/L	76.828 ppb	14:54:10
1	Mg 279.077 IEC†	18.5	6.7	62.643 µg/L	62.643 ppb	14:54:31
1	Na 589.592 Radial†	743.1	179.7	59.159 µg/L	59.159 ppb	14:54:10
1	Sr 421.552†	105.8	63.2	0.6552 µg/L	0.6552 ppb	14:54:10
1	Sc 361.383	1982476.6	1982476.6	103.80 %		14:55:33
1	Y 371.029	1357413.1	1357413.1	103.63 %		14:55:33
1	Ag 328.068†	-522.2	61.5	0.4946 µg/L	0.4946 ppb	14:55:38
1	As 188.979†	1.8	0.6	1.0901 µg/L	1.0901 ppb	14:55:59
1	B 249.677†	408.1	61.7	2.6625 µg/L	2.6625 ppb	14:55:59
1	Ba 233.527†	2.5	28.5	0.7415 µg/L	0.7415 ppb	14:55:59
1	Be 313.107†	-3213.4	344.8	0.2250 µg/L	0.2250 ppb	14:55:38
1	Cd 226.502†	-134.6	12.5	0.3368 µg/L	0.3368 ppb	14:55:59
1	Co 228.616†	-7.7	1.4	0.0712 µg/L	0.0712 ppb	14:55:59
1	Cr 267.716†	4.1	56.4	1.2401 µg/L	1.2401 ppb	14:55:59
1	Cu 324.752†	2752.9	165.9	1.1688 µg/L	1.1688 ppb	14:55:38
1	Mn 257.610†	-137.5	111.6	0.3934 µg/L	0.3934 ppb	14:55:59
1	Mo 202.031†	2.7	10.2	1.0859 µg/L	1.0859 ppb	14:55:59
1	Ni 231.604†	309.2	-4.3	-0.2339 µg/L	-0.2339 ppb	14:55:59
1	P 214.914†	25.1	-3.5	-7.5860 µg/L	-7.5860 ppb	14:55:59
1	Pb 220.353†	124.3	22.6	6.0147 µg/L	6.0147 ppb	14:55:59
1	S 181.975 Axial†	16.6	1.2	5.2644 µg/L	5.2644 ppb	14:55:59
1	Sb 206.836†	32.4	4.3	4.2069 µg/L	4.2069 ppb	14:55:59
1	Se 196.026†	17.5	1.0	1.6734 µg/L	1.6734 ppb	14:55:59
1	SiO2†	1299.2	1.6	0.3503 µg/L	0.3503 ppb	14:55:38
1	Si 251.611†	379.1	52.3	4.3027 µg/L	4.3027 ppb	14:55:59
1	Sn 189.927†	7.8	8.4	3.8780 µg/L	3.8780 ppb	14:55:59
1	Ti 334.940†	271.8	145.7	0.3462 µg/L	0.3462 ppb	14:55:38
1	Tl 190.801†	-19.8	5.2	7.2432 µg/L	7.2432 ppb	14:55:59
1	U 409.014†	-9.7	44.3	3.9980 µg/L	3.9980 ppb	14:55:38
1	V 292.402†	-10.8	33.8	0.3839 µg/L	0.3839 ppb	14:55:38
1	Zn 213.857†	539.3	44.0	1.0899 µg/L	1.0899 ppb	14:55:59
2	Sc RADIAL	56663.5	56663.5	104 %		14:54:36
2	Al 396.153Radial†	53.4	61.6	45.892 µg/L	45.892 ppb	14:54:36
2	Ca 317.933Radial†	224.0	36.6	34.458 µg/L	34.458 ppb	14:54:57
2	Fe 238.204 Radial†	18.3	3.1	26.399 µg/L	26.399 ppb	14:54:57
2	K 766.490 Radial†	257.1	119.2	84.727 µg/L	84.727 ppb	14:54:36
2	Mg 279.077 IEC†	17.6	5.7	53.162 µg/L	53.162 ppb	14:54:57
2	Na 589.592 Radial†	788.5	217.6	71.620 µg/L	71.620 ppb	14:54:36
2	Sr 421.552†	88.8	46.0	0.4764 µg/L	0.4764 ppb	14:54:36
2	Sc 361.383	1976808.7	1976808.7	103.51 %		14:56:05
2	Y 371.029	1355511.3	1355511.3	103.48 %		14:56:05
2	Ag 328.068†	-510.0	71.8	0.5752 µg/L	0.5752 ppb	14:56:10
2	As 188.979†	1.2	0.0	0.0279 µg/L	0.0279 ppb	14:56:31
2	B 249.677†	396.3	51.4	2.2364 µg/L	2.2364 ppb	14:56:31
2	Ba 233.527†	2.6	28.5	0.7438 µg/L	0.7438 ppb	14:56:31
2	Be 313.107†	-3268.6	282.6	0.1844 µg/L	0.1844 ppb	14:56:10
2	Cd 226.502†	-122.2	24.1	0.6618 µg/L	0.6618 ppb	14:56:31
2	Co 228.616†	-10.0	-0.8	-0.0395 µg/L	-0.0395 ppb	14:56:31
2	Cr 267.716†	5.1	57.3	1.2611 µg/L	1.2611 ppb	14:56:31
2	Cu 324.752†	2702.2	124.6	0.8738 µg/L	0.8738 ppb	14:56:10
2	Mn 257.610†	-107.9	139.8	0.4856 µg/L	0.4856 ppb	14:56:31
2	Mo 202.031†	-1.1	6.4	0.6888 µg/L	0.6888 ppb	14:56:31
2	Ni 231.604†	302.7	-9.7	-0.5298 µg/L	-0.5298 ppb	14:56:31
2	P 214.914†	20.2	-8.1	-17.441 µg/L	-17.441 ppb	14:56:31
2	Pb 220.353†	118.9	17.7	4.7183 µg/L	4.7183 ppb	14:56:31

2	S 181.975 Axial†	14.4	-0.9	-4.1582 µg/L	-4.1582 ppb	14:56:31
2	Sb 206.836†	28.3	0.4	0.3915 µg/L	0.3915 ppb	14:56:31
2	Se 196.026†	9.3	-6.9	-10.429 µg/L	-10.429 ppb	14:56:31
2	SiO2†	1222.9	-68.6	-14.765 µg/L	-14.765 ppb	14:56:10
2	Si 251.611†	359.0	34.0	2.7936 µg/L	2.7936 ppb	14:56:31
2	Sn 189.927†	7.1	7.7	3.5568 µg/L	3.5568 ppb	14:56:31
2	Ti 334.940†	232.6	108.6	0.2576 µg/L	0.2576 ppb	14:56:10
2	Tl 190.801†	-24.5	0.6	0.8244 µg/L	0.8244 ppb	14:56:31
2	U 409.014†	-107.5	-50.2	-4.5523 µg/L	-4.5523 ppb	14:56:10
2	V 292.402†	15.1	58.8	0.6333 µg/L	0.6333 ppb	14:56:10
2	Zn 213.857†	534.3	40.7	1.0126 µg/L	1.0126 ppb	14:56:31
3	Sc RADIAL	56320.6	56320.6	103 %		14:55:02
3	Al 396.153Radial†	8.5	18.4	13.663 µg/L	13.663 ppb	14:55:02
3	Ca 317.933Radial†	216.9	31.1	29.241 µg/L	29.241 ppb	14:55:23
3	Fe 238.204 Radial†	17.6	2.6	21.668 µg/L	21.668 ppb	14:55:23
3	K 766.490 Radial†	236.5	100.7	71.584 µg/L	71.584 ppb	14:55:02
3	Mg 279.077 IEC†	12.2	0.5	5.0859 µg/L	5.0859 ppb	14:55:23
3	Na 589.592 Radial†	760.7	195.3	64.287 µg/L	64.287 ppb	14:55:02
3	Sr 421.552†	71.7	29.9	0.3097 µg/L	0.3097 ppb	14:55:02
3	Sc 361.383	1993913.4	1993913.4	104.40 %		14:56:37
3	Y 371.029	1367504.2	1367504.2	104.40 %		14:56:37
3	Ag 328.068†	-498.3	87.2	0.6944 µg/L	0.6944 ppb	14:56:43
3	As 188.979†	0.4	-0.8	-1.5138 µg/L	-1.5138 ppb	14:57:03
3	B 249.677†	385.9	38.1	1.6564 µg/L	1.6564 ppb	14:57:03
3	Ba 233.527†	1.2	27.2	0.7082 µg/L	0.7082 ppb	14:57:03
3	Be 313.107†	-3126.9	445.4	0.2907 µg/L	0.2907 ppb	14:56:43
3	Cd 226.502†	-117.4	29.7	0.8162 µg/L	0.8162 ppb	14:57:03
3	Co 228.616†	-8.6	0.6	0.0304 µg/L	0.0304 ppb	14:57:03
3	Cr 267.716†	2.0	54.3	1.1938 µg/L	1.1938 ppb	14:57:03
3	Cu 324.752†	2701.6	101.6	0.7126 µg/L	0.7126 ppb	14:56:43
3	Mn 257.610†	-86.5	161.3	0.5611 µg/L	0.5611 ppb	14:57:03
3	Mo 202.031†	5.2	12.5	1.3355 µg/L	1.3355 ppb	14:57:03
3	Ni 231.604†	315.6	0.1	0.0043 µg/L	0.0043 ppb	14:57:03
3	P 214.914†	33.2	4.1	8.8077 µg/L	8.8077 ppb	14:57:03
3	Pb 220.353†	109.3	7.5	2.0114 µg/L	2.0114 ppb	14:57:03
3	S 181.975 Axial†	10.6	-4.7	-20.521 µg/L	-20.521 ppb	14:57:03
3	Sb 206.836†	25.8	-2.2	-2.1813 µg/L	-2.1813 ppb	14:57:03
3	Se 196.026†	17.8	1.2	1.8776 µg/L	1.8776 ppb	14:57:03
3	SiO2†	1292.2	-12.3	-2.6550 µg/L	-2.6550 ppb	14:56:43
3	Si 251.611†	371.3	42.8	3.5163 µg/L	3.5163 ppb	14:57:03
3	Sn 189.927†	-2.0	-1.0	-0.4777 µg/L	-0.4777 ppb	14:57:03
3	Ti 334.940†	313.8	184.5	0.4438 µg/L	0.4438 ppb	14:56:43
3	Tl 190.801†	-24.1	1.2	1.6892 µg/L	1.6892 ppb	14:57:03
3	U 409.014†	-22.6	31.9	2.8863 µg/L	2.8863 ppb	14:56:43
3	V 292.402†	-34.6	11.0	0.1363 µg/L	0.1363 ppb	14:56:43
3	Zn 213.857†	532.5	34.5	0.8590 µg/L	0.8590 ppb	14:57:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1984399.6	103.90 %		0.456				0.44%
Sc RADIAL	56394.7	103 %		0.4				0.43%
Y 371.029	1360142.9	103.83 %		0.492				0.47%
Ag 328.068†	73.5	0.5881 µg/L		0.10050	0.5881 ppb		0.10050	17.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	42.3	31.542 µg/L		16.4016	31.542 ppb		16.4016	52.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.1319 µg/L		1.30928	-0.1319 ppb		1.30928	992.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	50.4	2.1851 µg/L		0.50501	2.1851 ppb		0.50501	23.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	28.1	0.7312 µg/L		0.01993	0.7312 ppb		0.01993	2.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	357.6	0.2334 µg/L		0.05362	0.2334 ppb		0.05362	22.97%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	37.7	35.543 µg/L		6.9088	35.543 ppb		6.9088	19.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	22.1	0.6049 µg/L		0.24471	0.6049 ppb		0.24471	40.45%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.4	0.0207 µg/L		0.05597	0.0207 ppb		0.05597	270.39%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	56.0	1.2317 µg/L	0.03444	1.2317 ppb
			0.03444	2.80%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	130.7	0.9184 µg/L	0.23134	0.9184 ppb
			0.23134	25.19%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	4.6	39.296 µg/L	26.5417	39.296 ppb
			26.5417	67.54%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	109.3	77.713 µg/L	6.6157	77.713 ppb
			6.6157	8.51%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	4.3	40.297 µg/L	30.8602	40.297 ppb
			30.8602	76.58%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	137.6	0.4800 µg/L	0.08402	0.4800 ppb
			0.08402	17.50%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	9.7	1.0367 µg/L	0.32615	1.0367 ppb
			0.32615	31.46%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	197.5	65.022 µg/L	6.2628	65.022 ppb
			6.2628	9.63%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	-4.6	-0.2531 µg/L	0.26755	-0.2531 ppb
			0.26755	105.70%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	-2.5	-5.4063 µg/L	13.25932	-5.4063 ppb
			13.25932	245.25%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	15.9	4.2482 µg/L	2.04263	4.2482 ppb
			2.04263	48.08%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	-1.5	-6.4715 µg/L	13.04721	-6.4715 ppb
			13.04721	201.61%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	0.8	0.8057 µg/L	3.21418	0.8057 ppb
			3.21418	398.93%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	-1.5	-2.2926 µg/L	7.04698	-2.2926 ppb
			7.04698	307.37%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	-26.4	-5.6898 µg/L	8.00142	-5.6898 ppb
			8.00142	140.63%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	43.0	3.5375 µg/L	0.75475	3.5375 ppb
			0.75475	21.34%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	5.0	2.3190 µg/L	2.42737	2.3190 ppb
			2.42737	104.67%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	46.3	0.4804 µg/L	0.17278	0.4804 ppb
			0.17278	35.96%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	146.3	0.3492 µg/L	0.09310	0.3492 ppb
			0.09310	26.66%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	2.3	3.2523 µg/L	3.48319	3.2523 ppb
			3.48319	107.10%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	8.7	0.7773 µg/L	4.64898	0.7773 ppb
			4.64898	598.06%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	34.6	0.3845 µg/L	0.24848	0.3845 ppb
			0.24848	64.62%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	39.7	0.9871 µg/L	0.11756	0.9871 ppb
			0.11756	11.91%

All analyte(s) passed QC.

=====

Analysis Begun

Start Time: 2/11/2010 15:08:34

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optima\Results\Results.mdb

=====

Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/11/2010 13:51:13

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: 113

Sample ID: LR1

Date Collected: 2/11/2010 15:08:34

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

=====

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55775.1	55775.1	102 %		15:09:19
1	Al 396.153Radial†	-12.5	-2.1	-1.5477 µg/L	-1.5477 ppb	15:09:19
1	Ca 317.933Radial†	109.7	-71.8	-67.596 µg/L	-67.596 ppb	15:09:39
1	Fe 238.204 Radial†	12.5	-2.2	-18.859 µg/L	-18.859 ppb	15:09:39

1	K 766.490 Radial†	153.1	21.4	15.223 µg/L	15.223 ppb	15:09:19
1	Mg 279.077 IEC†	21.3	9.6	89.132 µg/L	89.132 ppb	15:09:39
1	Na 589.592 Radial†	561.6	7.7	2.5239 µg/L	2.5239 ppb	15:09:19
1	Sr 421.552†	60.6	19.8	0.2050 µg/L	0.2050 ppb	15:09:19
1	Sc 361.383	1979575.8	1979575.8	103.65 %		15:10:41
1	Y 371.029	1359463.7	1359463.7	103.78 %		15:10:41
1	Ag 328.068†	-475.7	105.6	0.7790 µg/L	0.7790 ppb	15:10:47
1	As 188.979†	3.5	2.2	4.2811 µg/L	4.2811 ppb	15:11:08
1	B 249.677†	236.6	-103.2	-4.4890 µg/L	-4.4890 ppb	15:10:47
1	Ba 233.527†	-43.0	-15.5	-0.4185 µg/L	-0.4185 ppb	15:11:08
1	Be 313.107†	-9167.3	-5403.9	-3.5311 µg/L	-3.5311 ppb	15:10:47
1	Cd 226.502†	-304.4	-151.6	-4.1785 µg/L	-4.1785 ppb	15:11:08
1	Co 228.616†	19.8	27.9	1.3617 µg/L	1.3617 ppb	15:11:08
1	Cr 267.716†	233.0	277.1	6.0903 µg/L	6.0903 ppb	15:10:47
1	Cu 324.752†	1310.7	-1221.6	-8.5355 µg/L	-8.5355 ppb	15:10:47
1	Mn 257.610†	14.0	257.6	0.8861 µg/L	0.8861 ppb	15:10:47
1	Mo 202.031†	-13.4	-5.4	-0.5763 µg/L	-0.5763 ppb	15:11:08
1	Ni 231.604†	324.2	10.6	0.5789 µg/L	0.5789 ppb	15:11:08
1	P 214.914†	39.4	10.4	23.307 µg/L	23.307 ppb	15:11:08
1	Pb 220.353†	132.9	31.0	-2.3589 µg/L	-2.3589 ppb	15:11:08
1	S 181.975 Axial†	17.0	1.6	6.9914 µg/L	6.9914 ppb	15:11:08
1	Sb 206.836†	24.0	-3.8	-3.8211 µg/L	-3.8211 ppb	15:11:08
1	Se 196.026†	11.2	-5.0	-7.7508 µg/L	-7.7508 ppb	15:11:08
1	SiO2†	1260.6	-33.8	-7.2860 µg/L	-7.2860 ppb	15:10:47
1	Si 251.611†	175.4	-143.6	-11.809 µg/L	-11.809 ppb	15:11:08
1	Sn 189.927†	6.2	6.9	3.1737 µg/L	3.1737 ppb	15:11:08
1	Ti 334.940†	2413.3	2212.1	5.3130 µg/L	5.3130 ppb	15:10:47
1	Tl 190.801†	-31.2	-5.9	4.3972 µg/L	4.3972 ppb	15:11:08
1	U 409.014†	117155.1	113081.6	10238 µg/L	10238 ppb	15:10:41
1	V 292.402†	-897.2	-821.4	1.8907 µg/L	1.8907 ppb	15:10:47
1	Zn 213.857†	499.8	6.6	0.1728 µg/L	0.1728 ppb	15:11:08
2	Sc RADIAL	55251.0	55251.0	101 %		15:09:44
2	Al 396.153Radial†	-27.7	-17.2	-12.820 µg/L	-12.820 ppb	15:09:44
2	Ca 317.933Radial†	107.7	-72.8	-68.561 µg/L	-68.561 ppb	15:10:05
2	Fe 238.204 Radial†	14.6	-0.1	-0.7560 µg/L	-0.7560 ppb	15:10:05
2	K 766.490 Radial†	163.9	33.5	23.798 µg/L	23.798 ppb	15:09:44
2	Mg 279.077 IEC†	21.5	10.0	92.921 µg/L	92.921 ppb	15:10:05
2	Na 589.592 Radial†	549.7	1.1	0.3683 µg/L	0.3683 ppb	15:09:44
2	Sr 421.552†	65.4	25.1	0.2600 µg/L	0.2600 ppb	15:09:44
2	Sc 361.383	1991488.7	1991488.7	104.28 %		15:11:14
2	Y 371.029	1367480.0	1367480.0	104.39 %		15:11:14
2	Ag 328.068†	-460.8	122.6	0.9153 µg/L	0.9153 ppb	15:11:20
2	As 188.979†	3.4	2.1	4.1976 µg/L	4.1976 ppb	15:11:40
2	B 249.677†	245.3	-96.3	-4.1987 µg/L	-4.1987 ppb	15:11:20
2	Ba 233.527†	-30.4	-3.2	-0.0984 µg/L	-0.0984 ppb	15:11:40
2	Be 313.107†	-9053.1	-5241.5	-3.4251 µg/L	-3.4251 ppb	15:11:20
2	Cd 226.502†	-307.5	-152.7	-4.2119 µg/L	-4.2119 ppb	15:11:40
2	Co 228.616†	2.2	10.9	0.5250 µg/L	0.5250 ppb	15:11:40
2	Cr 267.716†	184.1	229.0	5.0309 µg/L	5.0309 ppb	15:11:20
2	Cu 324.752†	1378.2	-1164.4	-8.1337 µg/L	-8.1337 ppb	15:11:20
2	Mn 257.610†	56.5	298.3	1.0291 µg/L	1.0291 ppb	15:11:20
2	Mo 202.031†	-9.4	-1.5	-0.1584 µg/L	-0.1584 ppb	15:11:40
2	Ni 231.604†	337.2	21.2	1.1562 µg/L	1.1562 ppb	15:11:40
2	P 214.914†	47.1	17.5	38.462 µg/L	38.462 ppb	15:11:40
2	Pb 220.353†	140.3	37.4	-0.6060 µg/L	-0.6060 ppb	15:11:40
2	S 181.975 Axial†	16.6	1.1	4.9128 µg/L	4.9128 ppb	15:11:40
2	Sb 206.836†	18.1	-9.6	-9.5490 µg/L	-9.5490 ppb	15:11:40
2	Se 196.026†	12.7	-3.7	-5.6705 µg/L	-5.6705 ppb	15:11:40
2	SiO2†	1277.1	-25.3	-5.4423 µg/L	-5.4423 ppb	15:11:20
2	Si 251.611†	186.7	-133.8	-10.999 µg/L	-10.999 ppb	15:11:40
2	Sn 189.927†	5.7	6.3	2.9120 µg/L	2.9120 ppb	15:11:40
2	Ti 334.940†	2507.4	2288.5	5.4964 µg/L	5.4964 ppb	15:11:20
2	Tl 190.801†	-28.7	-3.2	8.0207 µg/L	8.0207 ppb	15:11:40
2	U 409.014†	117240.7	112487.6	10184 µg/L	10184 ppb	15:11:14
2	V 292.402†	-895.5	-814.6	1.9102 µg/L	1.9102 ppb	15:11:20
2	Zn 213.857†	510.6	14.1	0.3551 µg/L	0.3551 ppb	15:11:40
3	Sc RADIAL	56112.5	56112.5	103 %		15:10:10
3	Al 396.153Radial†	-19.4	-8.8	-6.5548 µg/L	-6.5548 ppb	15:10:10
3	Ca 317.933Radial†	114.8	-67.5	-63.545 µg/L	-63.545 ppb	15:10:31
3	Fe 238.204 Radial†	16.7	1.7	14.838 µg/L	14.838 ppb	15:10:31
3	K 766.490 Radial†	156.5	23.8	16.907 µg/L	16.907 ppb	15:10:10

3	Mg 279.077 IEC†	18.3	6.5	60.273 µg/L	60.273 ppb	15:10:31
3	Na 589.592 Radial†	544.2	-12.6	-4.1463 µg/L	-4.1463 ppb	15:10:10
3	Sr 421.552†	60.1	18.9	0.1962 µg/L	0.1962 ppb	15:10:10
3	Sc 361.383	1998454.5	1998454.5	104.64 %		15:11:47
3	Y 371.029	1371253.2	1371253.2	104.68 %		15:11:47
3	Ag 328.068†	-504.4	82.5	0.6071 µg/L	0.6071 ppb	15:11:53
3	As 188.979†	2.1	0.9	1.6782 µg/L	1.6782 ppb	15:12:13
3	B 249.677†	284.2	-59.9	-2.6163 µg/L	-2.6163 ppb	15:11:53
3	Ba 233.527†	-15.1	11.6	0.2883 µg/L	0.2883 ppb	15:12:13
3	Be 313.107†	-8272.3	-4465.0	-2.9180 µg/L	-2.9180 ppb	15:11:53
3	Cd 226.502†	-264.9	-111.0	-3.0636 µg/L	-3.0636 ppb	15:12:13
3	Co 228.616†	14.5	22.7	1.1081 µg/L	1.1081 ppb	15:12:13
3	Cr 267.716†	231.8	273.9	6.0206 µg/L	6.0206 ppb	15:11:53
3	Cu 324.752†	1499.3	-1053.3	-7.3552 µg/L	-7.3552 ppb	15:11:53
3	Mn 257.610†	138.5	376.5	1.3032 µg/L	1.3032 ppb	15:11:53
3	Mo 202.031†	-2.6	5.1	0.5398 µg/L	0.5398 ppb	15:12:13
3	Ni 231.604†	337.9	20.7	1.1315 µg/L	1.1315 ppb	15:12:13
3	P 214.914†	49.3	19.5	42.611 µg/L	42.611 ppb	15:12:13
3	Pb 220.353†	138.7	35.4	-0.5823 µg/L	-0.5823 ppb	15:12:13
3	S 181.975 Axial†	15.8	0.3	1.1838 µg/L	1.1838 ppb	15:12:13
3	Sb 206.836†	21.8	-6.1	-6.0924 µg/L	-6.0924 ppb	15:12:13
3	Se 196.026†	12.8	-3.6	-5.5591 µg/L	-5.5591 ppb	15:12:13
3	SiO2†	1308.9	0.8	0.1805 µg/L	0.1805 ppb	15:11:53
3	Si 251.611†	268.0	-56.8	-4.6690 µg/L	-4.6690 ppb	15:12:13
3	Sn 189.927†	4.1	4.8	2.1976 µg/L	2.1976 ppb	15:12:13
3	Ti 334.940†	2521.6	2293.7	5.5115 µg/L	5.5115 ppb	15:11:53
3	Tl 190.801†	-25.5	-0.1	11.785 µg/L	11.785 ppb	15:12:13
3	U 409.014†	111497.5	106607.2	9651.9 µg/L	9651.9 ppb	15:11:47
3	V 292.402†	-762.7	-684.7	2.7514 µg/L	2.7514 ppb	15:11:53
3	Zn 213.857†	523.6	24.8	0.6223 µg/L	0.6223 ppb	15:12:13

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1989839.7	104.19 %		0.500			0.48%
Sc RADIAL	55712.9	102 %		0.8			0.78%
Y 371.029	1366065.6	104.29 %		0.460			0.44%
Ag 328.068†	103.5	0.7671 µg/L		0.15443	0.7671 ppb	0.15443	20.13%
Al 396.153Radial†	-9.4	-6.9743 µg/L		5.64801	-6.9743 ppb	5.64801	80.98%
As 188.979†	1.7	3.3856 µg/L		1.47930	3.3856 ppb	1.47930	43.69%
B 249.677†	-86.4	-3.7680 µg/L		1.00792	-3.7680 ppb	1.00792	26.75%
Ba 233.527†	-2.4	-0.0762 µg/L		0.35392	-0.0762 ppb	0.35392	464.36%
Be 313.107†	-5036.8	-3.2914 µg/L		0.32768	-3.2914 ppb	0.32768	9.96%
Ca 317.933Radial†	-70.7	-66.567 µg/L		2.6618	-66.567 ppb	2.6618	4.00%
Cd 226.502†	-138.4	-3.8180 µg/L		0.65352	-3.8180 ppb	0.65352	17.12%
Co 228.616†	20.5	0.9983 µg/L		0.42901	0.9983 ppb	0.42901	42.97%
Cr 267.716†	260.0	5.7139 µg/L		0.59254	5.7139 ppb	0.59254	10.37%
Cu 324.752†	-1146.4	-8.0081 µg/L		0.60007	-8.0081 ppb	0.60007	7.49%
Fe 238.204 Radial†	-0.2	-1.5922 µg/L		16.86410	-1.5922 ppb	16.86410	>999.9%
K 766.490 Radial†	26.2	18.643 µg/L		4.5435	18.643 ppb	4.5435	24.37%
Mg 279.077 IEC†	8.7	80.775 µg/L		17.8566	80.775 ppb	17.8566	22.11%
Mn 257.610†	310.8	1.0728 µg/L		0.21196	1.0728 ppb	0.21196	19.76%
Mo 202.031†	-0.6	-0.0649 µg/L		0.56388	-0.0649 ppb	0.56388	868.32%
Na 589.592 Radial†	-1.3	-0.4181 µg/L		3.40391	-0.4181 ppb	3.40391	814.20%
Ni 231.604†	17.5	0.9555 µg/L		0.32641	0.9555 ppb	0.32641	34.16%
P 214.914†	15.8	34.793 µg/L		10.1611	34.793 ppb	10.1611	29.20%
Pb 220.353†	34.6	-1.1824 µg/L		1.01895	-1.1824 ppb	1.01895	86.18%
S 181.975 Axial†	1.0	4.3627 µg/L		2.94264	4.3627 ppb	2.94264	67.45%
Sb 206.836†	-6.5	-6.4875 µg/L		2.88435	-6.4875 ppb	2.88435	44.46%
Se 196.026†	-4.1	-6.3268 µg/L		1.23447	-6.3268 ppb	1.23447	19.51%
SiO2†	-19.4	-4.1826 µg/L		3.88938	-4.1826 ppb	3.88938	92.99%
Si 251.611†	-111.4	-9.1588 µg/L		3.90936	-9.1588 ppb	3.90936	42.68%
Sn 189.927†	6.0	2.7611 µg/L		0.50522	2.7611 ppb	0.50522	18.30%
Sr 421.552†	21.3	0.2204 µg/L		0.03458	0.2204 ppb	0.03458	15.69%
Ti 334.940†	2264.8	5.4403 µg/L		0.11049	5.4403 ppb	0.11049	2.03%
Tl 190.801†	-3.0	8.0675 µg/L		3.69388	8.0675 ppb	3.69388	45.79%
U 409.014†	110725.5	10025 µg/L		324.0	10025 ppb	324.0	3.23%
V 292.402†	-773.6	2.1841 µg/L		0.49139	2.1841 ppb	0.49139	22.50%
Zn 213.857†	15.2	0.3834 µg/L		0.22607	0.3834 ppb	0.22607	58.97%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 2/11/2010 15:12:22

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	53713.3	53713.3	98.4 %		15:12:55
1	Al 396.153Radial†	-16.2	-6.3	-4.7161 µg/L	-4.7161 ppb	15:12:55
1	Ca 317.933Radial†	188.0	11.9	11.198 µg/L	11.198 ppb	15:13:15
1	Fe 238.204 Radial†	4.2	-10.3	23.498 µg/L	23.498 ppb	15:13:15
1	K 766.490 Radial†	165.7	39.9	28.393 µg/L	28.393 ppb	15:12:55
1	Mg 279.077 IEC†	10.1	-1.1	-9.7514 µg/L	-9.7514 ppb	15:13:15
1	Na 589.592 Radial†	614.8	82.8	27.252 µg/L	27.252 ppb	15:12:55
1	Sr 421.552†	64.3	25.8	0.2675 µg/L	0.2675 ppb	15:12:55
1	Sc 361.383	1941418.8	1941418.8	101.65 %		15:14:18
1	Y 371.029	1323859.1	1323859.1	101.06 %		15:14:18
1	Ag 328.068†	-525.2	47.9	0.3781 µg/L	0.3781 ppb	15:14:24
1	As 188.979†	-3.1	-4.2	-8.1869 µg/L	-8.1869 ppb	15:14:45
1	B 249.677†	750.9	407.3	17.845 µg/L	17.845 ppb	15:14:24
1	Ba 233.527†	-16.3	10.0	0.2610 µg/L	0.2610 ppb	15:14:45
1	Be 313.107†	-3458.2	38.5	0.0250 µg/L	0.0250 ppb	15:14:24
1	Cd 226.502†	-114.7	29.2	0.8189 µg/L	0.8189 ppb	15:14:45
1	Co 228.616†	107569.3	105828.5	5208.2 µg/L	5208.2 ppb	15:14:24
1	Cr 267.716†	-25.9	26.9	0.5925 µg/L	0.5925 ppb	15:14:45
1	Cu 324.752†	1814.1	-701.5	-4.9124 µg/L	-4.9124 ppb	15:14:24
1	Mn 257.610†	-161.2	85.5	0.2849 µg/L	0.2849 ppb	15:14:45
1	Mo 202.031†	-1.5	6.0	0.6418 µg/L	0.6418 ppb	15:14:45
1	Ni 231.604†	346.8	39.0	-4.0742 µg/L	-4.0742 ppb	15:14:45
1	P 214.914†	5345.7	5231.1	11233 µg/L	11233 ppb	15:14:24
1	Pb 220.353†	111.4	12.4	3.3090 µg/L	3.3090 ppb	15:14:45
1	S 181.975 Axial†	16.5	1.4	5.9830 µg/L	5.9830 ppb	15:14:45
1	Sb 206.836†	21.7	-5.6	-5.5036 µg/L	-5.5036 ppb	15:14:45
1	Se 196.026†	12.6	-3.4	-5.4894 µg/L	-5.4894 ppb	15:14:45
1	SiO2†	400045.4	392288.3	84482 µg/L	84482 ppb	15:14:18
1	Si 251.611†	483396.1	475220.4	39066 µg/L	39066 ppb	15:14:18
1	Sn 189.927†	3.3	4.1	1.8920 µg/L	1.8920 ppb	15:14:45
1	Ti 334.940†	305.9	184.8	0.4456 µg/L	0.4456 ppb	15:14:24
1	Tl 190.801†	-3.7	20.7	11.360 µg/L	11.360 ppb	15:14:45
1	U 409.014†	25.3	78.5	7.1194 µg/L	7.1194 ppb	15:14:24
1	V 292.402†	5.9	50.0	0.5361 µg/L	0.5361 ppb	15:14:24
1	Zn 213.857†	522.6	38.6	0.9665 µg/L	0.9665 ppb	15:14:45
2	Sc RADIAL	54832.8	54832.8	100 %		15:13:21
2	Al 396.153Radial†	1.7	11.8	8.7929 µg/L	8.7929 ppb	15:13:21
2	Ca 317.933Radial†	190.7	10.6	10.005 µg/L	10.005 ppb	15:13:42
2	Fe 238.204 Radial†	3.0	-11.5	14.135 µg/L	14.135 ppb	15:13:42
2	K 766.490 Radial†	204.4	75.0	53.328 µg/L	53.328 ppb	15:13:21
2	Mg 279.077 IEC†	11.2	-0.1	-0.6600 µg/L	-0.6600 ppb	15:13:42
2	Na 589.592 Radial†	630.7	85.9	28.272 µg/L	28.272 ppb	15:13:21
2	Sr 421.552†	34.5	-5.2	-0.0538 µg/L	-0.0538 ppb	15:13:21
2	Sc 361.383	1946646.9	1946646.9	101.93 %		15:14:51
2	Y 371.029	1327034.0	1327034.0	101.31 %		15:14:51
2	Ag 328.068†	-584.6	-9.0	-0.0733 µg/L	-0.0733 ppb	15:14:57
2	As 188.979†	-0.2	-1.3	-2.6409 µg/L	-2.6409 ppb	15:15:17
2	B 249.677†	783.8	437.5	19.174 µg/L	19.174 ppb	15:14:57
2	Ba 233.527†	-20.0	6.4	0.1666 µg/L	0.1666 ppb	15:15:17
2	Be 313.107†	-3481.4	24.9	0.0161 µg/L	0.0161 ppb	15:14:57
2	Cd 226.502†	-101.1	42.9	1.1972 µg/L	1.1972 ppb	15:15:17
2	Co 228.616†	108800.7	106752.3	5253.6 µg/L	5253.6 ppb	15:14:57
2	Cr 267.716†	-17.5	35.2	0.7745 µg/L	0.7745 ppb	15:15:17
2	Cu 324.752†	1718.5	-800.1	-5.6024 µg/L	-5.6024 ppb	15:14:57
2	Mn 257.610†	-163.9	83.3	0.2757 µg/L	0.2757 ppb	15:15:17
2	Mo 202.031†	-3.8	3.8	0.4036 µg/L	0.4036 ppb	15:15:17
2	Ni 231.604†	346.9	38.2	-4.1724 µg/L	-4.1724 ppb	15:15:17
2	P 214.914†	5358.7	5229.8	11230 µg/L	11230 ppb	15:14:57
2	Pb 220.353†	113.9	14.6	3.8918 µg/L	3.8918 ppb	15:15:17

2	S 181.975 Axial†	13.2	-1.8	-7.9889	µg/L	-7.9889	ppb	15:15:17
2	Sb 206.836†	30.6	3.1	3.0533	µg/L	3.0533	ppb	15:15:17
2	Se 196.026†	12.9	-3.2	-5.1244	µg/L	-5.1244	ppb	15:15:17
2	SiO2†	401576.7	392733.7	84577	µg/L	84577	ppb	15:14:51
2	Si 251.611†	485309.6	475820.6	39115	µg/L	39115	ppb	15:14:51
2	Sn 189.927†	3.1	3.9	1.7899	µg/L	1.7899	ppb	15:15:17
2	Ti 334.940†	323.3	201.1	0.4839	µg/L	0.4839	ppb	15:14:57
2	Tl 190.801†	-4.0	20.4	10.781	µg/L	10.781	ppb	15:15:17
2	U 409.014†	85.0	137.0	12.417	µg/L	12.417	ppb	15:14:57
2	V 292.402†	14.9	58.8	0.6334	µg/L	0.6334	ppb	15:14:57
2	Zn 213.857†	510.4	25.2	0.6333	µg/L	0.6333	ppb	15:15:17
3	Sc RADIAL	54620.7	54620.7	100	%			15:13:47
3	Al 396.153Radial†	15.7	25.8	19.227	µg/L	19.227	ppb	15:13:47
3	Ca 317.933Radial†	200.8	21.5	20.218	µg/L	20.218	ppb	15:14:07
3	Fe 238.204 Radial†	4.8	-9.7	21.721	µg/L	21.721	ppb	15:14:07
3	K 766.490 Radial†	161.9	33.3	23.669	µg/L	23.669	ppb	15:13:47
3	Mg 279.077 IEC†	10.5	-0.8	-6.9228	µg/L	-6.9228	ppb	15:14:07
3	Na 589.592 Radial†	616.0	73.6	24.220	µg/L	24.220	ppb	15:13:47
3	Sr 421.552†	73.7	34.1	0.3532	µg/L	0.3532	ppb	15:13:47
3	Sc 361.383	1935972.8	1935972.8	101.37	%			15:15:24
3	Y 371.029	1321116.1	1321116.1	100.85	%			15:15:24
3	Ag 328.068†	-522.4	49.2	0.3871	µg/L	0.3871	ppb	15:15:29
3	As 188.979†	-0.6	-1.7	-3.3886	µg/L	-3.3886	ppb	15:15:50
3	B 249.677†	727.0	385.8	16.903	µg/L	16.903	ppb	15:15:29
3	Ba 233.527†	-11.4	14.8	0.3862	µg/L	0.3862	ppb	15:15:50
3	Be 313.107†	-3553.1	-64.7	-0.0425	µg/L	-0.0425	ppb	15:15:29
3	Cd 226.502†	-114.3	29.4	0.8217	µg/L	0.8217	ppb	15:15:50
3	Co 228.616†	100765.6	99414.3	4892.5	µg/L	4892.5	ppb	15:15:29
3	Cr 267.716†	-15.7	36.9	0.8110	µg/L	0.8110	ppb	15:15:50
3	Cu 324.752†	1744.4	-765.3	-5.3569	µg/L	-5.3569	ppb	15:15:29
3	Mn 257.610†	-168.6	77.8	0.2588	µg/L	0.2588	ppb	15:15:50
3	Mo 202.031†	0.8	8.3	0.8836	µg/L	0.8836	ppb	15:15:50
3	Ni 231.604†	347.2	40.4	-3.6217	µg/L	-3.6217	ppb	15:15:50
3	P 214.914†	4995.9	4900.9	10524	µg/L	10524	ppb	15:15:29
3	Pb 220.353†	111.9	13.2	3.5300	µg/L	3.5300	ppb	15:15:50
3	S 181.975 Axial†	14.6	-0.4	-1.9121	µg/L	-1.9121	ppb	15:15:50
3	Sb 206.836†	26.4	-0.9	-0.9265	µg/L	-0.9265	ppb	15:15:50
3	Se 196.026†	6.2	-9.7	-15.059	µg/L	-15.059	ppb	15:15:50
3	SiO2†	389837.5	383325.3	82551	µg/L	82551	ppb	15:15:24
3	Si 251.611†	470845.5	464176.9	38158	µg/L	38158	ppb	15:15:24
3	Sn 189.927†	2.7	3.6	1.6476	µg/L	1.6476	ppb	15:15:50
3	Ti 334.940†	325.3	204.8	0.4935	µg/L	0.4935	ppb	15:15:29
3	Tl 190.801†	-3.6	20.7	12.467	µg/L	12.467	ppb	15:15:50
3	U 409.014†	27.1	80.3	7.2810	µg/L	7.2810	ppb	15:15:29
3	V 292.402†	-16.9	27.5	0.3000	µg/L	0.3000	ppb	15:15:29
3	Zn 213.857†	508.1	25.7	0.6443	µg/L	0.6443	ppb	15:15:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941346.1	101.65	%	0.279			0.27%
Sc RADIAL	54388.9	99.7	%	1.09			1.09%
Y 371.029	1324003.1	101.08	%	0.226			0.22%
Ag 328.068†	29.4	0.2306	µg/L	0.26325	0.2306 ppb	0.26325	114.16%
Al 396.153Radial†	10.4	7.7681	µg/L	12.00458	7.7681 ppb	12.00458	154.54%
As 188.979†	-2.4	-4.7388	µg/L	3.00947	-4.7388 ppb	3.00947	63.51%
B 249.677†	410.2	17.974	µg/L	1.1410	17.974 ppb	1.1410	6.35%
Ba 233.527†	10.4	0.2713	µg/L	0.11018	0.2713 ppb	0.11018	40.61%
Be 313.107†	-0.4	-0.0005	µg/L	0.03663	-0.0005 ppb	0.03663	>999.9%
Ca 317.933Radial†	14.7	13.807	µg/L	5.5841	13.807 ppb	5.5841	40.44%
Cd 226.502†	33.8	0.9459	µg/L	0.21761	0.9459 ppb	0.21761	23.01%
Co 228.616†	103998.4	5118.1	µg/L	196.69	5118.1 ppb	196.69	3.84%
Cr 267.716†	33.0	0.7260	µg/L	0.11700	0.7260 ppb	0.11700	16.12%
Cu 324.752†	-755.6	-5.2906	µg/L	0.34975	-5.2906 ppb	0.34975	6.61%
Fe 238.204 Radial†	-10.5	19.785	µg/L	4.9725	19.785 ppb	4.9725	25.13%
K 766.490 Radial†	49.4	35.130	µg/L	15.9357	35.130 ppb	15.9357	45.36%
Mg 279.077 IEC†	-0.6	-5.7780	µg/L	4.65251	-5.7780 ppb	4.65251	80.52%
Mn 257.610†	82.2	0.2731	µg/L	0.01325	0.2731 ppb	0.01325	4.85%
Mo 202.031†	6.1	0.6430	µg/L	0.24004	0.6430 ppb	0.24004	37.33%
Na 589.592 Radial†	80.7	26.581	µg/L	2.1079	26.581 ppb	2.1079	7.93%

Ni 231.604†	39.2	-3.9561 µg/L	0.29375	-3.9561 ppb	0.29375	7.43%
P 214.914†	5120.6	10995 µg/L	408.6	10995 ppb	408.6	3.72%
Pb 220.353†	13.4	3.5769 µg/L	0.29424	3.5769 ppb	0.29424	8.23%
S 181.975 Axial†	-0.3	-1.3060 µg/L	7.00565	-1.3060 ppb	7.00565	536.41%
Sb 206.836†	-1.1	-1.1256 µg/L	4.28189	-1.1256 ppb	4.28189	380.41%
Se 196.026†	-5.5	-8.5576 µg/L	5.63334	-8.5576 ppb	5.63334	65.83%
SiO2†	389449.1	83870 µg/L	1143.1	83870 ppb	1143.1	1.36%
Si 251.611†	471739.3	38779 µg/L	538.9	38779 ppb	538.9	1.39%
Sn 189.927†	3.8	1.7765 µg/L	0.12277	1.7765 ppb	0.12277	6.91%
Sr 421.552†	18.2	0.1890 µg/L	0.21456	0.1890 ppb	0.21456	113.55%
Ti 334.940†	196.9	0.4743 µg/L	0.02534	0.4743 ppb	0.02534	5.34%
Tl 190.801†	20.6	11.536 µg/L	0.8566	11.536 ppb	0.8566	7.43%
U 409.014†	98.6	8.9390 µg/L	3.01276	8.9390 ppb	3.01276	33.70%
V 292.402†	45.5	0.4899 µg/L	0.17143	0.4899 ppb	0.17143	35.00%
Zn 213.857†	29.8	0.7480 µg/L	0.18929	0.7480 ppb	0.18929	25.31%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 15:15:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54231.5	54231.5	99.4 %		15:16:36
1	Al 396.153Radial†	7106.2	7161.2	5326.1 µg/L	5326.1 ppb	15:16:36
1	Ca 317.933Radial†	5688.9	5545.7	5221.6 µg/L	5221.6 ppb	15:16:56
1	Fe 238.204 Radial†	634.7	624.2	5302.1 µg/L	5302.1 ppb	15:16:56
1	K 766.490 Radial†	7456.0	7374.7	5241.9 µg/L	5241.9 ppb	15:16:36
1	Mg 279.077 IEC†	577.6	570.0	5308.0 µg/L	5308.0 ppb	15:16:56
1	Na 589.592 Radial†	32401.3	32064.3	10556 µg/L	10556 ppb	15:16:36
1	Sr 421.552†	50354.2	50633.0	524.87 µg/L	524.87 ppb	15:16:36
1	Sc 361.383	1899310.9	1899310.9	99.449 %		15:17:59
1	Y 371.029	1297484.4	1297484.4	99.051 %		15:17:59
1	Ag 328.068†	65095.3	66020.7	527.69 µg/L	527.69 ppb	15:18:05
1	As 188.979†	283.8	284.2	554.43 µg/L	554.43 ppb	15:18:26
1	B 249.677†	12153.8	11889.7	517.70 µg/L	517.70 ppb	15:18:05
1	Ba 233.527†	20078.6	20215.9	527.34 µg/L	527.34 ppb	15:18:05
1	Be 313.107†	797857.7	805721.3	525.98 µg/L	525.98 ppb	15:17:59
1	Cd 226.502†	18953.5	19200.7	529.65 µg/L	529.65 ppb	15:18:05
1	Co 228.616†	10779.9	10848.5	533.28 µg/L	533.28 ppb	15:18:05
1	Cr 267.716†	24091.2	24277.1	534.33 µg/L	534.33 ppb	15:18:05
1	Cu 324.752†	77848.6	75794.1	530.18 µg/L	530.18 ppb	15:18:05
1	Mn 257.610†	153606.0	154701.7	536.20 µg/L	536.20 ppb	15:17:59
1	Mo 202.031†	5175.2	5211.4	556.37 µg/L	556.37 ppb	15:18:26
1	Ni 231.604†	10008.1	9761.4	533.14 µg/L	533.14 ppb	15:18:05
1	P 214.914†	1295.2	1274.7	2686.7 µg/L	2686.7 ppb	15:18:26
1	Pb 220.353†	2124.5	2039.1	544.31 µg/L	544.31 ppb	15:18:26
1	S 181.975 Axial†	260.7	247.3	1083.6 µg/L	1083.6 ppb	15:18:26
1	Sb 206.836†	587.4	563.7	557.41 µg/L	557.41 ppb	15:18:26
1	Se 196.026†	370.9	357.1	552.71 µg/L	552.71 ppb	15:18:26
1	SiO2†	27461.3	26363.5	5677.5 µg/L	5677.5 ppb	15:18:05
1	Si 251.611†	32393.9	32260.7	2652.0 µg/L	2652.0 ppb	15:18:05
1	Sn 189.927†	1213.6	1221.2	561.69 µg/L	561.69 ppb	15:18:26
1	Ti 334.940†	219433.8	220534.1	530.14 µg/L	530.14 ppb	15:17:59
1	Tl 190.801†	358.1	384.4	542.92 µg/L	542.92 ppb	15:18:26
1	U 409.014†	5858.6	5944.7	537.16 µg/L	537.16 ppb	15:18:05
1	V 292.402†	49239.4	49556.6	534.84 µg/L	534.84 ppb	15:18:05
1	Zn 213.857†	21646.0	21290.4	527.88 µg/L	527.88 ppb	15:18:05
2	Sc RADIAL	54850.6	54850.6	101 %		15:17:02
2	Al 396.153Radial†	7137.6	7111.8	5289.4 µg/L	5289.4 ppb	15:17:02
2	Ca 317.933Radial†	5661.7	5454.1	5135.3 µg/L	5135.3 ppb	15:17:22
2	Fe 238.204 Radial†	627.5	609.8	5179.7 µg/L	5179.7 ppb	15:17:22
2	K 766.490 Radial†	7509.6	7343.3	5219.6 µg/L	5219.6 ppb	15:17:02
2	Mg 279.077 IEC†	583.7	569.5	5303.7 µg/L	5303.7 ppb	15:17:22
2	Na 589.592 Radial†	32499.9	31794.4	10467 µg/L	10467 ppb	15:17:02
2	Sr 421.552†	50507.4	50213.6	520.52 µg/L	520.52 ppb	15:17:02
2	Sc 361.383	1912998.8	1912998.8	100.17 %		15:18:33
2	Y 371.029	1306161.3	1306161.3	99.713 %		15:18:33
2	Ag 328.068†	65237.5	65694.3	525.07 µg/L	525.07 ppb	15:18:38
2	As 188.979†	280.6	279.0	544.24 µg/L	544.24 ppb	15:18:59
2	B 249.677†	12200.8	11849.2	515.98 µg/L	515.98 ppb	15:18:38
2	Ba 233.527†	20133.5	20126.3	525.01 µg/L	525.01 ppb	15:18:38
2	Be 313.107†	793302.5	795433.1	519.26 µg/L	519.26 ppb	15:18:33
2	Cd 226.502†	18921.4	19032.3	525.02 µg/L	525.02 ppb	15:18:38
2	Co 228.616†	10784.1	10775.1	529.68 µg/L	529.68 ppb	15:18:38
2	Cr 267.716†	24047.5	24060.2	529.56 µg/L	529.56 ppb	15:18:38
2	Cu 324.752†	77783.7	75169.2	525.79 µg/L	525.79 ppb	15:18:38
2	Mn 257.610†	152510.0	152502.3	528.57 µg/L	528.57 ppb	15:18:33
2	Mo 202.031†	5149.2	5148.2	549.62 µg/L	549.62 ppb	15:18:59
2	Ni 231.604†	10009.6	9690.9	529.28 µg/L	529.28 ppb	15:18:38
2	P 214.914†	1298.8	1269.0	2674.9 µg/L	2674.9 ppb	15:18:59
2	Pb 220.353†	2130.1	2029.4	541.73 µg/L	541.73 ppb	15:18:59

2	S 181.975 Axial†	263.5	248.2	1087.5 µg/L	1087.5 ppb	15:18:59
2	Sb 206.836†	579.7	551.8	545.70 µg/L	545.70 ppb	15:18:59
2	Se 196.026†	360.4	343.9	532.32 µg/L	532.32 ppb	15:18:59
2	SiO2†	27531.6	26236.1	5650.1 µg/L	5650.1 ppb	15:18:38
2	Si 251.611†	32505.0	32138.5	2641.9 µg/L	2641.9 ppb	15:18:38
2	Sn 189.927†	1205.3	1204.2	553.89 µg/L	553.89 ppb	15:18:59
2	Ti 334.940†	218053.7	217577.6	523.03 µg/L	523.03 ppb	15:18:33
2	Tl 190.801†	351.0	374.7	529.24 µg/L	529.24 ppb	15:18:59
2	U 409.014†	5767.6	5811.7	525.14 µg/L	525.14 ppb	15:18:38
2	V 292.402†	49305.2	49268.0	531.68 µg/L	531.68 ppb	15:18:38
2	Zn 213.857†	21685.0	21173.7	524.99 µg/L	524.99 ppb	15:18:38
3	Sc RADIAL	55041.7	55041.7	101 %		15:17:27
3	Al 396.153Radial†	7150.5	7100.0	5282.4 µg/L	5282.4 ppb	15:17:27
3	Ca 317.933Radial†	5679.0	5451.7	5133.1 µg/L	5133.1 ppb	15:17:48
3	Fe 238.204 Radial†	630.1	610.3	5182.9 µg/L	5182.9 ppb	15:17:48
3	K 766.490 Radial†	7530.7	7338.3	5216.0 µg/L	5216.0 ppb	15:17:27
3	Mg 279.077 IEC†	585.8	569.6	5302.7 µg/L	5302.7 ppb	15:17:48
3	Na 589.592 Radial†	32646.4	31827.3	10478 µg/L	10478 ppb	15:17:27
3	Sr 421.552†	50673.8	50204.0	520.42 µg/L	520.42 ppb	15:17:27
3	Sc 361.383	1908268.1	1908268.1	99.918 %		15:19:06
3	Y 371.029	1302480.0	1302480.0	99.432 %		15:19:06
3	Ag 328.068†	61722.8	62338.2	498.13 µg/L	498.13 ppb	15:19:11
3	As 188.979†	239.2	238.3	464.88 µg/L	464.88 ppb	15:19:32
3	B 249.677†	11534.0	11212.0	488.05 µg/L	488.05 ppb	15:19:11
3	Ba 233.527†	18616.9	18658.3	486.70 µg/L	486.70 ppb	15:19:11
3	Be 313.107†	758183.0	762248.0	497.60 µg/L	497.60 ppb	15:19:06
3	Cd 226.502†	17482.4	17638.9	486.53 µg/L	486.53 ppb	15:19:11
3	Co 228.616†	9936.5	9953.5	489.22 µg/L	489.22 ppb	15:19:11
3	Cr 267.716†	21502.9	21573.0	474.82 µg/L	474.82 ppb	15:19:11
3	Cu 324.752†	71603.1	69176.0	483.93 µg/L	483.93 ppb	15:19:11
3	Mn 257.610†	146044.9	146409.3	507.47 µg/L	507.47 ppb	15:19:06
3	Mo 202.031†	4268.9	4280.0	456.96 µg/L	456.96 ppb	15:19:32
3	Ni 231.604†	9195.7	8901.1	486.15 µg/L	486.15 ppb	15:19:11
3	P 214.914†	1105.2	1078.5	2268.7 µg/L	2268.7 ppb	15:19:32
3	Pb 220.353†	1828.3	1732.6	462.41 µg/L	462.41 ppb	15:19:32
3	S 181.975 Axial†	232.1	217.5	952.80 µg/L	952.80 ppb	15:19:32
3	Sb 206.836†	493.7	467.1	461.46 µg/L	461.46 ppb	15:19:32
3	Se 196.026†	316.9	301.3	467.33 µg/L	467.33 ppb	15:19:32
3	SiO2†	25842.8	24614.0	5300.8 µg/L	5300.8 ppb	15:19:11
3	Si 251.611†	30435.2	30147.4	2478.3 µg/L	2478.3 ppb	15:19:11
3	Sn 189.927†	977.2	978.9	450.28 µg/L	450.28 ppb	15:19:32
3	Ti 334.940†	207237.8	207292.4	498.29 µg/L	498.29 ppb	15:19:06
3	Tl 190.801†	318.0	342.6	484.22 µg/L	484.22 ppb	15:19:32
3	U 409.014†	5210.6	5268.5	475.96 µg/L	475.96 ppb	15:19:11
3	V 292.402†	44791.7	44872.9	483.94 µg/L	483.94 ppb	15:19:11
3	Zn 213.857†	19890.6	19431.5	481.75 µg/L	481.75 ppb	15:19:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1906859.3	99.844 %	0.3640			0.36%
Sc RADIAL	54707.9	100 %	0.8			0.77%
Y 371.029	1302041.9	99.399 %	0.3325			0.33%
Ag 328.068†	64684.4	516.97 µg/L	16.362	516.97 ppb	16.362	3.16%
QC value within limits for Ag 328.068 Recovery = 103.39%						
Al 396.153Radial†	7124.3	5299.3 µg/L	23.43	5299.3 ppb	23.43	0.44%
QC value within limits for Al 396.153Radial Recovery = 105.99%						
As 188.979†	267.2	521.18 µg/L	49.028	521.18 ppb	49.028	9.41%
QC value within limits for As 188.979 Recovery = 104.24%						
B 249.677†	11650.3	507.24 µg/L	16.645	507.24 ppb	16.645	3.28%
QC value within limits for B 249.677 Recovery = 101.45%						
Ba 233.527†	19666.8	513.02 µg/L	22.823	513.02 ppb	22.823	4.45%
QC value within limits for Ba 233.527 Recovery = 102.60%						
Be 313.107†	787800.8	514.28 µg/L	14.831	514.28 ppb	14.831	2.88%
QC value within limits for Be 313.107 Recovery = 102.86%						
Ca 317.933Radial†	5483.8	5163.4 µg/L	50.50	5163.4 ppb	50.50	0.98%
QC value within limits for Ca 317.933Radial Recovery = 103.27%						
Cd 226.502†	18623.9	513.73 µg/L	23.671	513.73 ppb	23.671	4.61%
QC value within limits for Cd 226.502 Recovery = 102.75%						
Co 228.616†	10525.7	517.39 µg/L	24.470	517.39 ppb	24.470	4.73%

Cr	267.716†	23303.5	512.91 µg/L	33.067	512.91 ppb	33.067	6.45%
Cu	324.752†	73379.7	513.30 µg/L	25.529	513.30 ppb	25.529	4.97%
Fe	238.204 Radial†	614.8	5221.6 µg/L	69.73	5221.6 ppb	69.73	1.34%
K	766.490 Radial†	7352.1	5225.8 µg/L	14.03	5225.8 ppb	14.03	0.27%
Mg	279.077 IEC†	569.7	5304.8 µg/L	2.78	5304.8 ppb	2.78	0.05%
Mn	257.610†	151204.4	524.08 µg/L	14.882	524.08 ppb	14.882	2.84%
Mo	202.031†	4879.9	520.98 µg/L	55.549	520.98 ppb	55.549	10.66%
Na	589.592 Radial†	31895.3	10500 µg/L	48.5	10500 ppb	48.5	0.46%
Ni	231.604†	9451.1	516.19 µg/L	26.085	516.19 ppb	26.085	5.05%
P	214.914†	1207.4	2543.4 µg/L	237.97	2543.4 ppb	237.97	9.36%
Pb	220.353†	1933.7	516.15 µg/L	46.558	516.15 ppb	46.558	9.02%
S	181.975 Axial†	237.7	1041.3 µg/L	76.67	1041.3 ppb	76.67	7.36%
Sb	206.836†	527.5	521.52 µg/L	52.346	521.52 ppb	52.346	10.04%
Se	196.026†	334.1	517.45 µg/L	44.586	517.45 ppb	44.586	8.62%
SiO2†		25737.9	5542.8 µg/L	210.05	5542.8 ppb	210.05	3.79%
Si	251.611†	31515.5	2590.7 µg/L	97.53	2590.7 ppb	97.53	3.76%
Sn	189.927†	1134.8	521.95 µg/L	62.194	521.95 ppb	62.194	11.92%
Sr	421.552†	50350.2	521.94 µg/L	2.539	521.94 ppb	2.539	0.49%
Ti	334.940†	215134.7	517.15 µg/L	16.720	517.15 ppb	16.720	3.23%
Tl	190.801†	367.2	518.79 µg/L	30.715	518.79 ppb	30.715	5.92%
U	409.014†	5675.0	512.76 µg/L	32.426	512.76 ppb	32.426	6.32%
V	292.402†	47899.1	516.82 µg/L	28.516	516.82 ppb	28.516	5.52%
Zn	213.857†	20631.8	511.54 µg/L	25.841	511.54 ppb	25.841	5.05%

QC value within limits for Co 228.616 Recovery = 103.48%

QC value within limits for Cr 267.716 Recovery = 102.58%

QC value within limits for Cu 324.752 Recovery = 102.66%

QC value within limits for Fe 238.204 Radial Recovery = 104.43%

QC value within limits for K 766.490 Radial Recovery = 104.52%

QC value within limits for Mg 279.077 IEC Recovery = 106.10%

QC value within limits for Mn 257.610 Recovery = 104.82%

QC value within limits for Mo 202.031 Recovery = 104.20%

QC value within limits for Na 589.592 Radial Recovery = 105.00%

QC value within limits for Ni 231.604 Recovery = 103.24%

QC value within limits for P 214.914 Recovery = 101.74%

QC value within limits for Pb 220.353 Recovery = 103.23%

QC value within limits for S 181.975 Axial Recovery = 104.13%

QC value within limits for Sb 206.836 Recovery = 104.30%

QC value within limits for Se 196.026 Recovery = 103.49%

QC value within limits for SiO2 Recovery = 103.65%

QC value within limits for Si 251.611 Recovery = 103.63%

QC value within limits for Sn 189.927 Recovery = 104.39%

QC value within limits for Sr 421.552 Recovery = 104.39%

QC value within limits for Ti 334.940 Recovery = 103.43%

QC value within limits for Tl 190.801 Recovery = 103.76%

QC value within limits for U 409.014 Recovery = 102.55%

QC value within limits for V 292.402 Recovery = 103.36%

QC value within limits for Zn 213.857 Recovery = 102.31%

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 15:19:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	53966.4	53966.4	98.9 %		15:20:14
1	Al 396.153Radial†	-26.0	-16.1	-12.005 µg/L	-12.005 ppb	15:20:14
1	Ca 317.933Radial†	184.6	7.5	7.0536 µg/L	7.0536 ppb	15:20:34
1	Fe 238.204 Radial†	14.2	-0.1	-0.8468 µg/L	-0.8468 ppb	15:20:34
1	K 766.490 Radial†	181.9	55.5	39.479 µg/L	39.479 ppb	15:20:14
1	Mg 279.077 IEC†	12.1	1.0	9.1967 µg/L	9.1967 ppb	15:20:34
1	Na 589.592 Radial†	657.2	122.7	40.408 µg/L	40.408 ppb	15:20:14
1	Sr 421.552†	65.1	26.3	0.2722 µg/L	0.2722 ppb	15:20:14
1	Sc 361.383	1911106.6	1911106.6	100.07 %		15:21:36
1	Y 371.029	1309549.6	1309549.6	99.972 %		15:21:36
1	Ag 328.068†	-559.4	5.5	0.0442 µg/L	0.0442 ppb	15:21:42
1	As 188.979†	-3.0	-4.1	-8.0395 µg/L	-8.0395 ppb	15:22:02
1	B 249.677†	346.9	15.2	0.6669 µg/L	0.6669 ppb	15:22:02
1	Ba 233.527†	-26.7	-0.7	-0.0185 µg/L	-0.0185 ppb	15:22:02
1	Be 313.107†	-3454.2	-11.4	-0.0075 µg/L	-0.0075 ppb	15:21:42
1	Cd 226.502†	-139.0	3.2	0.0893 µg/L	0.0893 ppb	15:22:02
1	Co 228.616†	-9.2	-0.3	-0.0170 µg/L	-0.0170 ppb	15:22:02
1	Cr 267.716†	-37.5	14.9	0.3282 µg/L	0.3282 ppb	15:21:42
1	Cu 324.752†	2557.0	69.2	0.4835 µg/L	0.4835 ppb	15:21:42
1	Mn 257.610†	-212.1	32.2	0.1110 µg/L	0.1110 ppb	15:22:02
1	Mo 202.031†	-8.5	-0.9	-0.1000 µg/L	-0.1000 ppb	15:22:02
1	Ni 231.604†	310.7	8.3	0.4558 µg/L	0.4558 ppb	15:22:02
1	P 214.914†	28.4	0.8	1.6386 µg/L	1.6386 ppb	15:22:02
1	Pb 220.353†	104.0	6.7	1.8057 µg/L	1.8057 ppb	15:22:02
1	S 181.975 Axial†	16.5	1.7	7.4394 µg/L	7.4394 ppb	15:22:02
1	Sb 206.836†	29.0	2.0	1.9993 µg/L	1.9993 ppb	15:22:02
1	Se 196.026†	21.9	6.0	9.1749 µg/L	9.1749 ppb	15:22:02
1	SiO2†	1293.6	42.7	9.2028 µg/L	9.2028 ppb	15:21:42
1	Si 251.611†	353.1	40.0	3.2887 µg/L	3.2887 ppb	15:22:02
1	Sn 189.927†	4.9	5.8	2.6719 µg/L	2.6719 ppb	15:22:02
1	Ti 334.940†	159.7	43.4	0.1039 µg/L	0.1039 ppb	15:21:42
1	Tl 190.801†	-23.8	0.5	0.6768 µg/L	0.6768 ppb	15:22:02
1	U 409.014†	-184.4	-130.7	-11.830 µg/L	-11.830 ppb	15:21:42
1	V 292.402†	-35.9	8.3	0.0760 µg/L	0.0760 ppb	15:21:42
1	Zn 213.857†	494.3	18.4	0.4572 µg/L	0.4572 ppb	15:22:02
2	Sc RADIAL	54869.8	54869.8	101 %		15:20:40
2	Al 396.153Radial†	13.7	23.8	17.738 µg/L	17.738 ppb	15:20:40
2	Ca 317.933Radial†	187.7	7.5	7.0950 µg/L	7.0950 ppb	15:21:00
2	Fe 238.204 Radial†	15.7	1.1	9.3064 µg/L	9.3064 ppb	15:21:00
2	K 766.490 Radial†	257.4	127.6	90.719 µg/L	90.719 ppb	15:20:40
2	Mg 279.077 IEC†	16.3	4.9	45.809 µg/L	45.809 ppb	15:21:00
2	Na 589.592 Radial†	606.0	60.8	20.024 µg/L	20.024 ppb	15:20:40
2	Sr 421.552†	22.5	-17.2	-0.1781 µg/L	-0.1781 ppb	15:20:40
2	Sc 361.383	1897412.4	1897412.4	99.349 %		15:22:08
2	Y 371.029	1298760.9	1298760.9	99.148 %		15:22:08
2	Ag 328.068†	-542.2	18.8	0.1523 µg/L	0.1523 ppb	15:22:14
2	As 188.979†	-3.1	-4.3	-8.3435 µg/L	-8.3435 ppb	15:22:34
2	B 249.677†	336.8	7.5	0.3241 µg/L	0.3241 ppb	15:22:34
2	Ba 233.527†	-16.5	9.4	0.2467 µg/L	0.2467 ppb	15:22:34
2	Be 313.107†	-3415.0	3.0	0.0019 µg/L	0.0019 ppb	15:22:14
2	Cd 226.502†	-128.8	12.5	0.3432 µg/L	0.3432 ppb	15:22:34
2	Co 228.616†	-5.7	3.1	0.1511 µg/L	0.1511 ppb	15:22:34
2	Cr 267.716†	-15.6	36.7	0.8074 µg/L	0.8074 ppb	15:22:14
2	Cu 324.752†	2549.9	80.5	0.5637 µg/L	0.5637 ppb	15:22:14
2	Mn 257.610†	-177.5	65.4	0.2260 µg/L	0.2260 ppb	15:22:34
2	Mo 202.031†	-7.3	0.2	0.0178 µg/L	0.0178 ppb	15:22:34
2	Ni 231.604†	306.5	6.3	0.3468 µg/L	0.3468 ppb	15:22:34
2	P 214.914†	31.7	4.3	9.0650 µg/L	9.0650 ppb	15:22:34
2	Pb 220.353†	106.2	9.7	2.5827 µg/L	2.5827 ppb	15:22:34

2	S 181.975 Axial†	17.2	2.5	10.929 µg/L	10.929 ppb	15:22:34
2	Sb 206.836†	25.7	-1.1	-1.0721 µg/L	-1.0721 ppb	15:22:34
2	Se 196.026†	18.6	2.9	4.4089 µg/L	4.4089 ppb	15:22:34
2	SiO2†	1247.0	5.2	1.1103 µg/L	1.1103 ppb	15:22:14
2	Si 251.611†	359.1	48.5	3.9904 µg/L	3.9904 ppb	15:22:34
2	Sn 189.927†	-1.6	-0.8	-0.3440 µg/L	-0.3440 ppb	15:22:34
2	Ti 334.940†	171.3	56.3	0.1319 µg/L	0.1319 ppb	15:22:14
2	Tl 190.801†	-21.8	2.3	3.2311 µg/L	3.2311 ppb	15:22:34
2	U 409.014†	-98.3	-45.3	-4.1055 µg/L	-4.1055 ppb	15:22:14
2	V 292.402†	-5.8	38.4	0.4080 µg/L	0.4080 ppb	15:22:14
2	Zn 213.857†	499.6	27.3	0.6761 µg/L	0.6761 ppb	15:22:34
3	Sc RADIAL	54385.0	54385.0	99.7 %		15:21:06
3	Al 396.153Radial†	-13.7	-3.6	-2.7248 µg/L	-2.7248 ppb	15:21:06
3	Ca 317.933Radial†	185.2	6.7	6.3429 µg/L	6.3429 ppb	15:21:26
3	Fe 238.204 Radial†	16.3	1.8	15.415 µg/L	15.415 ppb	15:21:26
3	K 766.490 Radial†	182.4	54.6	38.797 µg/L	38.797 ppb	15:21:06
3	Mg 279.077 IEC†	9.2	-2.0	-18.753 µg/L	-18.753 ppb	15:21:26
3	Na 589.592 Radial†	592.4	52.6	17.324 µg/L	17.324 ppb	15:21:06
3	Sr 421.552†	-3.5	-43.1	-0.4464 µg/L	-0.4464 ppb	15:21:06
3	Sc 361.383	1884488.6	1884488.6	98.673 %		15:22:40
3	Y 371.029	1291927.9	1291927.9	98.627 %		15:22:40
3	Ag 328.068†	-522.7	34.8	0.2806 µg/L	0.2806 ppb	15:22:46
3	As 188.979†	2.4	1.3	2.4649 µg/L	2.4649 ppb	15:23:06
3	B 249.677†	335.7	8.8	0.3768 µg/L	0.3768 ppb	15:23:06
3	Ba 233.527†	-11.8	14.1	0.3676 µg/L	0.3676 ppb	15:23:06
3	Be 313.107†	-3127.8	270.6	0.1766 µg/L	0.1766 ppb	15:22:46
3	Cd 226.502†	-124.4	16.0	0.4414 µg/L	0.4414 ppb	15:23:06
3	Co 228.616†	7.6	16.5	0.8149 µg/L	0.8149 ppb	15:23:06
3	Cr 267.716†	-23.5	28.6	0.6295 µg/L	0.6295 ppb	15:22:46
3	Cu 324.752†	2622.5	171.7	1.2017 µg/L	1.2017 ppb	15:22:46
3	Mn 257.610†	-142.0	100.2	0.3497 µg/L	0.3497 ppb	15:23:06
3	Mo 202.031†	3.2	10.8	1.1512 µg/L	1.1512 ppb	15:23:06
3	Ni 231.604†	306.2	8.2	0.4462 µg/L	0.4462 ppb	15:23:06
3	P 214.914†	29.6	2.4	5.0144 µg/L	5.0144 ppb	15:23:06
3	Pb 220.353†	103.4	7.6	2.0339 µg/L	2.0339 ppb	15:23:06
3	S 181.975 Axial†	18.5	3.9	17.268 µg/L	17.268 ppb	15:23:06
3	Sb 206.836†	29.4	2.8	2.8126 µg/L	2.8126 ppb	15:23:06
3	Se 196.026†	10.8	-4.9	-7.3717 µg/L	-7.3717 ppb	15:23:06
3	SiO2†	1294.7	62.1	13.372 µg/L	13.372 ppb	15:22:46
3	Si 251.611†	373.7	65.9	5.4177 µg/L	5.4177 ppb	15:23:06
3	Sn 189.927†	0.7	1.6	0.7177 µg/L	0.7177 ppb	15:23:06
3	Ti 334.940†	234.9	122.0	0.2950 µg/L	0.2950 ppb	15:22:46
3	Tl 190.801†	-24.9	-0.9	-1.2684 µg/L	-1.2684 ppb	15:23:06
3	U 409.014†	-88.3	-35.9	-3.2543 µg/L	-3.2543 ppb	15:22:46
3	V 292.402†	2.7	46.9	0.5091 µg/L	0.5091 ppb	15:22:46
3	Zn 213.857†	512.3	43.6	1.0859 µg/L	1.0859 ppb	15:23:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1897669.2	99.363 %	0.6970			0.70%
Sc RADIAL	54407.1	99.7 %	0.83			0.83%
Y 371.029	1300079.5	99.249 %	0.6782			0.68%
Ag 328.068†	19.7	0.1590 µg/L	0.11838	0.1590 ppb	0.11838	74.44%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.4	1.0028 µg/L	15.21758	1.0028 ppb	15.21758	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.4	-4.6394 µg/L	6.15437	-4.6394 ppb	6.15437	132.66%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	10.5	0.4560 µg/L	0.18460	0.4560 ppb	0.18460	40.49%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.6	0.1986 µg/L	0.19747	0.1986 ppb	0.19747	99.44%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	87.4	0.0570 µg/L	0.10368	0.0570 ppb	0.10368	181.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.3	6.8305 µg/L	0.42277	6.8305 ppb	0.42277	6.19%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.6	0.2913 µg/L	0.18170	0.2913 ppb	0.18170	62.37%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.4	0.3163 µg/L	0.43987	0.3163 ppb	0.43987	139.05%

Cr	267.716†	26.7	0.5884 µg/L	0.24227	0.5884 ppb	0.24227	41.18%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	107.2	0.7496 µg/L	0.39354	0.7496 ppb	0.39354	52.50%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.9	7.9581 µg/L	8.21418	7.9581 ppb	8.21418	103.22%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	79.3	56.332 µg/L	29.7823	56.332 ppb	29.7823	52.87%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.3	12.084 µg/L	32.3776	12.084 ppb	32.3776	267.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	65.9	0.2289 µg/L	0.11938	0.2289 ppb	0.11938	52.15%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	3.3	0.3563 µg/L	0.69086	0.3563 ppb	0.69086	193.88%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	78.7	25.918 µg/L	12.6205	25.918 ppb	12.6205	48.69%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	7.6	0.4162 µg/L	0.06037	0.4162 ppb	0.06037	14.50%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	2.5	5.2393 µg/L	3.71831	5.2393 ppb	3.71831	70.97%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	8.0	2.1408 µg/L	0.39934	2.1408 ppb	0.39934	18.65%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.7	11.879 µg/L	4.9829	11.879 ppb	4.9829	41.95%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	1.3	1.2466 µg/L	2.04884	1.2466 ppb	2.04884	164.36%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	1.4	2.0707 µg/L	8.51747	2.0707 ppb	8.51747	411.33%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		36.7	7.8950 µg/L	6.23447	7.8950 ppb	6.23447	78.97%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	51.5	4.2323 µg/L	1.08494	4.2323 ppb	1.08494	25.63%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.2	1.0152 µg/L	1.52977	1.0152 ppb	1.52977	150.68%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-11.3	-0.1174 µg/L	0.36313	-0.1174 ppb	0.36313	309.29%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	73.9	0.1769 µg/L	0.10323	0.1769 ppb	0.10323	58.35%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	0.6	0.8799 µg/L	2.25661	0.8799 ppb	2.25661	256.47%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-70.6	-6.3965 µg/L	4.72449	-6.3965 ppb	4.72449	73.86%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	31.2	0.3310 µg/L	0.22659	0.3310 ppb	0.22659	68.45%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	29.8	0.7397 µg/L	0.31916	0.7397 ppb	0.31916	43.15%
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: 2/11/2010 15:57:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57410.8	57410.8	105 %		15:58:05
1	Al 396.153Radial†	6675.8	6356.1	4727.0 µg/L	4727.0 ppb	15:58:25
1	Ca 317.933Radial†	5505.2	5054.0	4758.7 µg/L	4758.7 ppb	15:58:25
1	Fe 238.204 Radial†	598.7	554.6	4711.3 µg/L	4711.3 ppb	15:58:25
1	K 766.490 Radial†	7251.0	6764.3	4808.0 µg/L	4808.0 ppb	15:58:05
1	Mg 279.077 IEC†	563.5	524.3	4883.2 µg/L	4883.2 ppb	15:58:25
1	Na 589.592 Radial†	31835.2	29720.5	9784.1 µg/L	9784.1 ppb	15:58:05
1	Sr 421.552†	47847.7	45444.2	471.08 µg/L	471.08 ppb	15:58:05
1	Sc 361.383	1983693.6	1983693.6	103.87 %		15:59:29
1	Y 371.029	1353410.2	1353410.2	103.32 %		15:59:29
1	Ag 328.068†	62797.6	61024.1	487.72 µg/L	487.72 ppb	15:59:34
1	As 188.979†	269.1	257.9	503.15 µg/L	503.15 ppb	15:59:55
1	B 249.677†	11717.3	10949.6	476.85 µg/L	476.85 ppb	15:59:34
1	Ba 233.527†	19343.1	18649.0	486.47 µg/L	486.47 ppb	15:59:34
1	Be 313.107†	754921.5	730256.0	476.72 µg/L	476.72 ppb	15:59:29
1	Cd 226.502†	18224.6	17688.2	487.95 µg/L	487.95 ppb	15:59:34
1	Co 228.616†	10367.0	9989.9	491.09 µg/L	491.09 ppb	15:59:34
1	Cr 267.716†	23052.3	22246.4	489.64 µg/L	489.64 ppb	15:59:34
1	Cu 324.752†	74680.1	69413.7	485.52 µg/L	485.52 ppb	15:59:34
1	Mn 257.610†	145483.3	140311.0	486.31 µg/L	486.31 ppb	15:59:29
1	Mo 202.031†	4926.8	4750.9	507.20 µg/L	507.20 ppb	15:59:55
1	Ni 231.604†	9598.3	8938.8	488.20 µg/L	488.20 ppb	15:59:34
1	P 214.914†	1237.2	1163.5	2452.0 µg/L	2452.0 ppb	15:59:55
1	Pb 220.353†	2038.1	1865.0	497.83 µg/L	497.83 ppb	15:59:55
1	S 181.975 Axial†	250.1	226.0	990.17 µg/L	990.17 ppb	15:59:55
1	Sb 206.836†	555.0	507.4	501.78 µg/L	501.78 ppb	15:59:55
1	Se 196.026†	350.7	321.8	497.82 µg/L	497.82 ppb	15:59:55
1	SiO2†	26261.5	24033.7	5175.8 µg/L	5175.8 ppb	15:59:34
1	Si 251.611†	31015.9	29548.3	2429.0 µg/L	2429.0 ppb	15:59:34
1	Sn 189.927†	1145.1	1103.3	507.48 µg/L	507.48 ppb	15:59:55
1	Ti 334.940†	207638.9	199792.4	480.28 µg/L	480.28 ppb	15:59:29
1	Tl 190.801†	339.0	350.7	495.21 µg/L	495.21 ppb	15:59:55
1	U 409.014†	5639.1	5482.7	495.44 µg/L	495.44 ppb	15:59:34
1	V 292.402†	47231.1	45516.9	491.19 µg/L	491.19 ppb	15:59:34
1	Zn 213.857†	20861.0	19608.8	486.21 µg/L	486.21 ppb	15:59:34
2	Sc RADIAL	56826.1	56826.1	104 %		15:58:31
2	Al 396.153Radial†	6645.2	6392.0	4754.0 µg/L	4754.0 ppb	15:58:51
2	Ca 317.933Radial†	5486.3	5089.8	4792.3 µg/L	4792.3 ppb	15:58:51
2	Fe 238.204 Radial†	599.8	561.5	4769.4 µg/L	4769.4 ppb	15:58:51
2	K 766.490 Radial†	7153.6	6741.7	4791.9 µg/L	4791.9 ppb	15:58:31
2	Mg 279.077 IEC†	560.2	526.7	4905.2 µg/L	4905.2 ppb	15:58:51
2	Na 589.592 Radial†	31532.3	29741.0	9790.8 µg/L	9790.8 ppb	15:58:31
2	Sr 421.552†	47455.8	45535.8	472.03 µg/L	472.03 ppb	15:58:31
2	Sc 361.383	1995410.5	1995410.5	104.48 %		16:00:02
2	Y 371.029	1361782.3	1361782.3	103.96 %		16:00:02
2	Ag 328.068†	62246.7	60141.9	480.68 µg/L	480.68 ppb	16:00:08
2	As 188.979†	257.7	245.5	478.82 µg/L	478.82 ppb	16:00:28
2	B 249.677†	11628.5	10798.3	470.20 µg/L	470.20 ppb	16:00:08
2	Ba 233.527†	19125.6	18331.5	478.19 µg/L	478.19 ppb	16:00:08
2	Be 313.107†	755807.0	726835.7	474.48 µg/L	474.48 ppb	16:00:02
2	Cd 226.502†	17996.1	17366.5	479.06 µg/L	479.06 ppb	16:00:08
2	Co 228.616†	10237.6	9807.4	482.11 µg/L	482.11 ppb	16:00:08
2	Cr 267.716†	22930.0	21999.0	484.19 µg/L	484.19 ppb	16:00:08
2	Cu 324.752†	74042.3	68381.0	478.32 µg/L	478.32 ppb	16:00:08
2	Mn 257.610†	145292.8	139306.3	482.84 µg/L	482.84 ppb	16:00:02
2	Mo 202.031†	4851.2	4650.7	496.51 µg/L	496.51 ppb	16:00:28
2	Ni 231.604†	9492.2	8782.9	479.69 µg/L	479.69 ppb	16:00:08
2	P 214.914†	1221.3	1141.3	2405.0 µg/L	2405.0 ppb	16:00:28
2	Pb 220.353†	1997.7	1814.9	484.45 µg/L	484.45 ppb	16:00:28

2	S 181.975 Axial†	253.2	227.5	996.93 µg/L	996.93 ppb	16:00:28
2	Sb 206.836†	551.9	501.3	495.60 µg/L	495.60 ppb	16:00:28
2	Se 196.026†	351.2	320.3	495.61 µg/L	495.61 ppb	16:00:28
2	SiO2†	26072.1	23704.0	5104.8 µg/L	5104.8 ppb	16:00:08
2	Si 251.611†	30669.0	29040.9	2387.3 µg/L	2387.3 ppb	16:00:08
2	Sn 189.927†	1132.5	1084.8	498.96 µg/L	498.96 ppb	16:00:28
2	Ti 334.940†	207816.1	198788.1	477.86 µg/L	477.86 ppb	16:00:02
2	Tl 190.801†	338.3	348.1	491.58 µg/L	491.58 ppb	16:00:28
2	U 409.014†	5511.6	5328.9	481.50 µg/L	481.50 ppb	16:00:08
2	V 292.402†	46887.0	44920.6	484.74 µg/L	484.74 ppb	16:00:08
2	Zn 213.857†	20639.1	19278.4	478.01 µg/L	478.01 ppb	16:00:08
3	Sc RADIAL	56910.2	56910.2	104 %		15:58:57
3	Al 396.153Radial†	6656.6	6393.5	4756.8 µg/L	4756.8 ppb	15:59:17
3	Ca 317.933Radial†	5495.6	5090.9	4793.4 µg/L	4793.4 ppb	15:59:17
3	Fe 238.204 Radial†	602.2	563.0	4781.1 µg/L	4781.1 ppb	15:59:17
3	K 766.490 Radial†	7220.2	6795.5	4830.2 µg/L	4830.2 ppb	15:58:57
3	Mg 279.077 IEC†	560.3	526.1	4897.6 µg/L	4897.6 ppb	15:59:17
3	Na 589.592 Radial†	31637.3	29796.9	9809.2 µg/L	9809.2 ppb	15:58:57
3	Sr 421.552†	47653.8	45658.4	473.30 µg/L	473.30 ppb	15:58:57
3	Sc 361.383	1998435.1	1998435.1	104.64 %		16:00:35
3	Y 371.029	1364968.8	1364968.8	104.20 %		16:00:35
3	Ag 328.068†	58612.3	56578.4	452.09 µg/L	452.09 ppb	16:00:41
3	As 188.979†	224.3	213.2	415.95 µg/L	415.95 ppb	16:01:01
3	B 249.677†	10895.6	10081.1	438.76 µg/L	438.76 ppb	16:00:41
3	Ba 233.527†	17588.9	16835.1	439.14 µg/L	439.14 ppb	16:00:41
3	Be 313.107†	714187.6	685966.5	447.80 µg/L	447.80 ppb	16:00:35
3	Cd 226.502†	16474.5	15886.3	438.17 µg/L	438.17 ppb	16:00:41
3	Co 228.616†	9303.8	8900.2	437.44 µg/L	437.44 ppb	16:00:41
3	Cr 267.716†	20256.0	19410.4	427.22 µg/L	427.22 ppb	16:00:41
3	Cu 324.752†	67621.8	62137.9	434.71 µg/L	434.71 ppb	16:00:41
3	Mn 257.610†	137721.9	131860.5	457.05 µg/L	457.05 ppb	16:00:35
3	Mo 202.031†	4037.0	3865.6	412.72 µg/L	412.72 ppb	16:01:01
3	Ni 231.604†	8629.5	7944.8	433.92 µg/L	433.92 ppb	16:00:41
3	P 214.914†	1036.7	963.1	2025.7 µg/L	2025.7 ppb	16:01:01
3	Pb 220.353†	1739.6	1565.3	417.74 µg/L	417.74 ppb	16:01:01
3	S 181.975 Axial†	221.7	197.0	863.32 µg/L	863.32 ppb	16:01:01
3	Sb 206.836†	474.2	426.2	421.04 µg/L	421.04 ppb	16:01:01
3	Se 196.026†	306.7	277.3	430.08 µg/L	430.08 ppb	16:01:01
3	SiO2†	24196.5	21873.8	4710.6 µg/L	4710.6 ppb	16:00:41
3	Si 251.611†	28513.0	26936.1	2214.3 µg/L	2214.3 ppb	16:00:41
3	Sn 189.927†	924.9	884.8	406.97 µg/L	406.97 ppb	16:01:01
3	Ti 334.940†	195303.4	186529.0	448.37 µg/L	448.37 ppb	16:00:35
3	Tl 190.801†	301.0	311.9	440.85 µg/L	440.85 ppb	16:01:01
3	U 409.014†	4905.4	4741.6	428.33 µg/L	428.33 ppb	16:00:41
3	V 292.402†	42233.7	40405.6	435.79 µg/L	435.79 ppb	16:00:41
3	Zn 213.857†	18819.8	17509.9	434.12 µg/L	434.12 ppb	16:00:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992513.1	104.33 %	0.408			0.39%
Sc RADIAL	57049.0	105 %	0.6			0.55%
Y 371.029	1360053.7	103.83 %	0.456			0.44%
Ag 328.068†	59248.1	473.50 µg/L	18.871	473.50 ppb	18.871	3.99%
QC value within limits for Ag 328.068 Recovery = 94.70%						
Al 396.153Radial†	6380.5	4745.9 µg/L	16.44	4745.9 ppb	16.44	0.35%
QC value within limits for Al 396.153Radial Recovery = 94.92%						
As 188.979†	238.9	465.97 µg/L	44.997	465.97 ppb	44.997	9.66%
QC value within limits for As 188.979 Recovery = 93.19%						
B 249.677†	10609.7	461.94 µg/L	20.345	461.94 ppb	20.345	4.40%
QC value within limits for B 249.677 Recovery = 92.39%						
Ba 233.527†	17938.5	467.93 µg/L	25.276	467.93 ppb	25.276	5.40%
QC value within limits for Ba 233.527 Recovery = 93.59%						
Be 313.107†	714352.7	466.33 µg/L	16.086	466.33 ppb	16.086	3.45%
QC value within limits for Be 313.107 Recovery = 93.27%						
Ca 317.933Radial†	5078.2	4781.5 µg/L	19.75	4781.5 ppb	19.75	0.41%
QC value within limits for Ca 317.933Radial Recovery = 95.63%						
Cd 226.502†	16980.3	468.39 µg/L	26.545	468.39 ppb	26.545	5.67%
QC value within limits for Cd 226.502 Recovery = 93.68%						
Co 228.616†	9565.8	470.21 µg/L	28.733	470.21 ppb	28.733	6.11%

QC value within limits for Co 228.616	Recovery = 94.04%			
Cr 267.716†	21218.6	467.02 µg/L	34.571	467.02 ppb 34.571 7.40%
QC value within limits for Cr 267.716	Recovery = 93.40%			
Cu 324.752†	66644.2	466.19 µg/L	27.494	466.19 ppb 27.494 5.90%
QC value within limits for Cu 324.752	Recovery = 93.24%			
Fe 238.204 Radial†	559.7	4753.9 µg/L	37.39	4753.9 ppb 37.39 0.79%
QC value within limits for Fe 238.204 Radial	Recovery = 95.08%			
K 766.490 Radial†	6767.2	4810.1 µg/L	19.19	4810.1 ppb 19.19 0.40%
QC value within limits for K 766.490 Radial	Recovery = 96.20%			
Mg 279.077 IEC†	525.7	4895.3 µg/L	11.18	4895.3 ppb 11.18 0.23%
QC value within limits for Mg 279.077 IEC	Recovery = 97.91%			
Mn 257.610†	137159.3	475.40 µg/L	15.982	475.40 ppb 15.982 3.36%
QC value within limits for Mn 257.610	Recovery = 95.08%			
Mo 202.031†	4422.4	472.14 µg/L	51.737	472.14 ppb 51.737 10.96%
QC value within limits for Mo 202.031	Recovery = 94.43%			
Na 589.592 Radial†	29752.8	9794.7 µg/L	13.02	9794.7 ppb 13.02 0.13%
QC value within limits for Na 589.592 Radial	Recovery = 97.95%			
Ni 231.604†	8555.5	467.27 µg/L	29.194	467.27 ppb 29.194 6.25%
QC value within limits for Ni 231.604	Recovery = 93.45%			
P 214.914†	1089.3	2294.2 µg/L	233.77	2294.2 ppb 233.77 10.19%
QC value within limits for P 214.914	Recovery = 91.77%			
Pb 220.353†	1748.4	466.67 µg/L	42.900	466.67 ppb 42.900 9.19%
QC value within limits for Pb 220.353	Recovery = 93.33%			
S 181.975 Axial†	216.9	950.14 µg/L	75.264	950.14 ppb 75.264 7.92%
QC value within limits for S 181.975 Axial	Recovery = 95.01%			
Sb 206.836†	478.3	472.81 µg/L	44.937	472.81 ppb 44.937 9.50%
QC value within limits for Sb 206.836	Recovery = 94.56%			
Se 196.026†	306.5	474.50 µg/L	38.486	474.50 ppb 38.486 8.11%
QC value within limits for Se 196.026	Recovery = 94.90%			
SiO2†	23203.8	4997.1 µg/L	250.58	4997.1 ppb 250.58 5.01%
QC value within limits for SiO2	Recovery = 93.45%			
Si 251.611†	28508.4	2343.5 µg/L	113.86	2343.5 ppb 113.86 4.86%
QC value within limits for Si 251.611	Recovery = 93.74%			
Sn 189.927†	1024.3	471.14 µg/L	55.734	471.14 ppb 55.734 11.83%
QC value within limits for Sn 189.927	Recovery = 94.23%			
Sr 421.552†	45546.1	472.14 µg/L	1.114	472.14 ppb 1.114 0.24%
QC value within limits for Sr 421.552	Recovery = 94.43%			
Ti 334.940†	195036.5	468.84 µg/L	17.764	468.84 ppb 17.764 3.79%
QC value within limits for Ti 334.940	Recovery = 93.77%			
Tl 190.801†	336.9	475.88 µg/L	30.390	475.88 ppb 30.390 6.39%
QC value within limits for Tl 190.801	Recovery = 95.18%			
U 409.014†	5184.4	468.43 µg/L	35.417	468.43 ppb 35.417 7.56%
QC value within limits for U 409.014	Recovery = 93.69%			
V 292.402†	43614.3	470.57 µg/L	30.297	470.57 ppb 30.297 6.44%
QC value within limits for V 292.402	Recovery = 94.11%			
Zn 213.857†	18799.0	466.11 µg/L	28.010	466.11 ppb 28.010 6.01%
QC value within limits for Zn 213.857	Recovery = 93.22%			

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:01:11

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	55658.0	55658.0	102 %		16:01:44
1	Al 396.153Radial†	-23.0	-12.4	-9.2620 µg/L	-9.2620 ppb	16:01:44
1	Ca 317.933Radial†	208.0	24.8	23.363 µg/L	23.363 ppb	16:02:05
1	Fe 238.204 Radial†	15.4	0.6	5.4204 µg/L	5.4204 ppb	16:02:05
1	K 766.490 Radial†	204.3	71.9	51.110 µg/L	51.110 ppb	16:01:44
1	Mg 279.077 IEC†	10.5	-1.0	-9.0434 µg/L	-9.0434 ppb	16:02:05
1	Na 589.592 Radial†	1039.6	477.5	157.20 µg/L	157.20 ppb	16:01:44
1	Sr 421.552†	56.9	16.2	0.1684 µg/L	0.1684 ppb	16:01:44
1	Sc 361.383	1982189.6	1982189.6	103.79 %		16:03:07
1	Y 371.029	1359337.0	1359337.0	103.77 %		16:03:07
1	Ag 328.068†	-578.1	7.5	0.0622 µg/L	0.0622 ppb	16:03:12
1	As 188.979†	-1.3	-2.4	-4.6084 µg/L	-4.6084 ppb	16:03:33
1	B 249.677†	325.8	-17.5	-0.7693 µg/L	-0.7693 ppb	16:03:33
1	Ba 233.527†	-23.3	3.6	0.0946 µg/L	0.0946 ppb	16:03:33
1	Be 313.107†	-3422.1	143.2	0.0935 µg/L	0.0935 ppb	16:03:12
1	Cd 226.502†	-146.3	1.2	0.0321 µg/L	0.0321 ppb	16:03:33
1	Co 228.616†	-12.7	-3.4	-0.1679 µg/L	-0.1679 ppb	16:03:33
1	Cr 267.716†	-41.9	12.0	0.2649 µg/L	0.2649 ppb	16:03:33
1	Cu 324.752†	2411.8	-162.3	-1.1332 µg/L	-1.1332 ppb	16:03:12
1	Mn 257.610†	-218.3	33.8	0.1180 µg/L	0.1180 ppb	16:03:33
1	Mo 202.031†	-10.7	-2.7	-0.2926 µg/L	-0.2926 ppb	16:03:33
1	Ni 231.604†	299.4	-13.7	-0.7472 µg/L	-0.7472 ppb	16:03:33
1	P 214.914†	42.9	13.7	29.528 µg/L	29.528 ppb	16:03:33
1	Pb 220.353†	92.5	-8.1	-2.1696 µg/L	-2.1696 ppb	16:03:33
1	S 181.975 Axial†	17.6	2.1	9.2574 µg/L	9.2574 ppb	16:03:33
1	Sb 206.836†	23.2	-4.6	-4.4961 µg/L	-4.4961 ppb	16:03:33
1	Se 196.026†	12.0	-4.3	-6.4748 µg/L	-6.4748 ppb	16:03:33
1	SiO2†	1238.2	-57.1	-12.288 µg/L	-12.288 ppb	16:03:12
1	Si 251.611†	320.8	-3.8	-0.3112 µg/L	-0.3112 ppb	16:03:33
1	Sn 189.927†	0.5	1.4	0.6395 µg/L	0.6395 ppb	16:03:33
1	Ti 334.940†	134.1	13.1	0.0325 µg/L	0.0325 ppb	16:03:12
1	Tl 190.801†	-24.9	0.3	0.4630 µg/L	0.4630 ppb	16:03:33
1	U 409.014†	-12.1	41.9	3.7948 µg/L	3.7948 ppb	16:03:12
1	V 292.402†	-10.2	34.4	0.3695 µg/L	0.3695 ppb	16:03:12
1	Zn 213.857†	479.7	-13.4	-0.3280 µg/L	-0.3280 ppb	16:03:33
2	Sc RADIAL	55313.8	55313.8	101 %		16:02:10
2	Al 396.153Radial†	-3.9	6.3	4.7164 µg/L	4.7164 ppb	16:02:10
2	Ca 317.933Radial†	201.6	19.8	18.599 µg/L	18.599 ppb	16:02:30
2	Fe 238.204 Radial†	15.1	0.4	3.5581 µg/L	3.5581 ppb	16:02:30
2	K 766.490 Radial†	165.7	35.0	24.913 µg/L	24.913 ppb	16:02:10
2	Mg 279.077 IEC†	9.2	-2.2	-20.801 µg/L	-20.801 ppb	16:02:30
2	Na 589.592 Radial†	1009.9	454.5	149.64 µg/L	149.64 ppb	16:02:10
2	Sr 421.552†	43.0	2.9	0.0298 µg/L	0.0298 ppb	16:02:10
2	Sc 361.383	2000056.5	2000056.5	104.72 %		16:03:39
2	Y 371.029	1371413.4	1371413.4	104.69 %		16:03:39
2	Ag 328.068†	-539.4	49.5	0.3929 µg/L	0.3929 ppb	16:03:44
2	As 188.979†	2.0	0.8	1.5259 µg/L	1.5259 ppb	16:04:05
2	B 249.677†	333.1	-13.4	-0.5861 µg/L	-0.5861 ppb	16:04:05
2	Ba 233.527†	-19.7	7.2	0.1863 µg/L	0.1863 ppb	16:04:05
2	Be 313.107†	-3284.4	304.2	0.1986 µg/L	0.1986 ppb	16:03:44
2	Cd 226.502†	-141.7	6.9	0.1883 µg/L	0.1883 ppb	16:04:05
2	Co 228.616†	-14.8	-5.3	-0.2603 µg/L	-0.2603 ppb	16:04:05
2	Cr 267.716†	-34.1	19.8	0.4350 µg/L	0.4350 ppb	16:04:05
2	Cu 324.752†	2452.1	-144.6	-1.0097 µg/L	-1.0097 ppb	16:03:44
2	Mn 257.610†	-201.5	51.7	0.1804 µg/L	0.1804 ppb	16:04:05
2	Mo 202.031†	-5.9	1.9	0.2060 µg/L	0.2060 ppb	16:04:05
2	Ni 231.604†	302.4	-13.4	-0.7317 µg/L	-0.7317 ppb	16:04:05
2	P 214.914†	22.4	-6.2	-13.288 µg/L	-13.288 ppb	16:04:05
2	Pb 220.353†	100.3	-1.4	-0.3652 µg/L	-0.3652 ppb	16:04:05

2	S 181.975 Axial†	18.4	2.7	12.047 µg/L	12.047 ppb	16:04:05
2	Sb 206.836†	25.7	-2.4	-2.3521 µg/L	-2.3521 ppb	16:04:05
2	Se 196.026†	11.2	-5.1	-7.8216 µg/L	-7.8216 ppb	16:04:05
2	SiO2†	1221.5	-83.6	-18.000 µg/L	-18.000 ppb	16:03:44
2	Si 251.611†	319.3	-8.0	-0.6538 µg/L	-0.6538 ppb	16:04:05
2	Sn 189.927†	1.8	2.6	1.1983 µg/L	1.1983 ppb	16:04:05
2	Ti 334.940†	170.3	46.5	0.1138 µg/L	0.1138 ppb	16:03:44
2	Tl 190.801†	-24.1	1.2	1.7367 µg/L	1.7367 ppb	16:04:05
2	U 409.014†	-68.4	-11.7	-1.0610 µg/L	-1.0610 ppb	16:03:44
2	V 292.402†	-47.0	-0.7	-0.0056 µg/L	-0.0056 ppb	16:03:44
2	Zn 213.857†	481.8	-15.5	-0.3808 µg/L	-0.3808 ppb	16:04:05
3	Sc RADIAL	56238.4	56238.4	103 %		16:02:36
3	Al 396.153Radial†	-4.5	5.7	4.2549 µg/L	4.2549 ppb	16:02:36
3	Ca 317.933Radial†	217.1	31.6	29.725 µg/L	29.725 ppb	16:02:56
3	Fe 238.204 Radial†	15.6	0.7	5.5166 µg/L	5.5166 ppb	16:02:56
3	K 766.490 Radial†	152.3	19.4	13.755 µg/L	13.755 ppb	16:02:36
3	Mg 279.077 IEC†	9.8	-1.7	-16.008 µg/L	-16.008 ppb	16:02:56
3	Na 589.592 Radial†	1347.3	765.5	252.01 µg/L	252.01 ppb	16:02:36
3	Sr 421.552†	41.3	0.5	0.0055 µg/L	0.0055 ppb	16:02:36
3	Sc 361.383	1997138.2	1997138.2	104.57 %		16:04:11
3	Y 371.029	1369234.6	1369234.6	104.53 %		16:04:11
3	Ag 328.068†	-498.6	87.7	0.6980 µg/L	0.6980 ppb	16:04:16
3	As 188.979†	2.9	1.6	3.1103 µg/L	3.1103 ppb	16:04:37
3	B 249.677†	327.9	-17.9	-0.7818 µg/L	-0.7818 ppb	16:04:37
3	Ba 233.527†	-15.6	11.1	0.2887 µg/L	0.2887 ppb	16:04:37
3	Be 313.107†	-3097.4	478.5	0.3124 µg/L	0.3124 ppb	16:04:16
3	Cd 226.502†	-131.7	16.2	0.4453 µg/L	0.4453 ppb	16:04:37
3	Co 228.616†	-2.6	6.4	0.3136 µg/L	0.3136 ppb	16:04:37
3	Cr 267.716†	-14.7	38.4	0.8440 µg/L	0.8440 ppb	16:04:37
3	Cu 324.752†	2433.5	-159.0	-1.1099 µg/L	-1.1099 ppb	16:04:16
3	Mn 257.610†	-172.9	78.8	0.2743 µg/L	0.2743 ppb	16:04:37
3	Mo 202.031†	-1.7	5.9	0.6314 µg/L	0.6314 ppb	16:04:37
3	Ni 231.604†	302.9	-12.6	-0.6873 µg/L	-0.6873 ppb	16:04:37
3	P 214.914†	28.9	0.0	0.1351 µg/L	0.1351 ppb	16:04:37
3	Pb 220.353†	98.8	-2.7	-0.7118 µg/L	-0.7118 ppb	16:04:37
3	S 181.975 Axial†	19.3	3.6	15.780 µg/L	15.780 ppb	16:04:37
3	Sb 206.836†	32.5	4.1	4.0170 µg/L	4.0170 ppb	16:04:37
3	Se 196.026†	15.5	-1.0	-1.5777 µg/L	-1.5777 ppb	16:04:37
3	SiO2†	1280.0	-25.9	-5.5874 µg/L	-5.5874 ppb	16:04:16
3	Si 251.611†	323.6	-3.4	-0.2805 µg/L	-0.2805 ppb	16:04:37
3	Sn 189.927†	1.4	2.2	1.0236 µg/L	1.0236 ppb	16:04:37
3	Ti 334.940†	204.8	79.7	0.1935 µg/L	0.1935 ppb	16:04:16
3	Tl 190.801†	-25.7	-0.3	-0.3909 µg/L	-0.3909 ppb	16:04:37
3	U 409.014†	-62.9	-6.5	-0.5917 µg/L	-0.5917 ppb	16:04:16
3	V 292.402†	-21.9	23.3	0.2547 µg/L	0.2547 ppb	16:04:16
3	Zn 213.857†	484.0	-12.7	-0.3127 µg/L	-0.3127 ppb	16:04:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1993128.1	104.36 %		0.502			0.48%
Sc RADIAL	55736.7	102 %		0.9			0.84%
Y 371.029	1366661.7	104.33 %		0.491			0.47%
Ag 328.068†	48.2	0.3844 µg/L		0.31802	0.3844 ppb	0.31802	82.74%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-0.1	-0.0969 µg/L		7.94054	-0.0969 ppb	7.94054	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.0	0.0093 µg/L		4.07671	0.0093 ppb	4.07671	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-16.3	-0.7124 µg/L		0.10959	-0.7124 ppb	0.10959	15.38%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	7.3	0.1899 µg/L		0.09711	0.1899 ppb	0.09711	51.15%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	308.6	0.2015 µg/L		0.10946	0.2015 ppb	0.10946	54.32%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	25.4	23.896 µg/L		5.5823	23.896 ppb	5.5823	23.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	8.1	0.2219 µg/L		0.20862	0.2219 ppb	0.20862	94.02%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-0.8	-0.0382 µg/L		0.30817	-0.0382 ppb	0.30817	806.94%

Cr	267.716†	23.4	0.5146 µg/L	0.29767	0.5146 ppb	0.29767	57.84%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-155.3	-1.0843 µg/L	0.06563	-1.0843 ppb	0.06563	6.05%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	0.6	4.8317 µg/L	1.10403	4.8317 ppb	1.10403	22.85%
	QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	42.1	29.926 µg/L	19.1758	29.926 ppb	19.1758	64.08%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	-1.6	-15.284 µg/L	5.9121	-15.284 ppb	5.9121	38.68%
	QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	54.8	0.1909 µg/L	0.07866	0.1909 ppb	0.07866	41.20%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	1.7	0.1816 µg/L	0.46249	0.1816 ppb	0.46249	254.69%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	565.9	186.28 µg/L	57.047	186.28 ppb	57.047	30.62%
	QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	-13.2	-0.7220 µg/L	0.03109	-0.7220 ppb	0.03109	4.31%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	2.5	5.4583 µg/L	21.89861	5.4583 ppb	21.89861	401.20%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-4.1	-1.0822 µg/L	0.95750	-1.0822 ppb	0.95750	88.48%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	2.8	12.362 µg/L	3.2727	12.362 ppb	3.2727	26.48%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	-1.0	-0.9437 µg/L	4.42784	-0.9437 ppb	4.42784	469.19%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-3.5	-5.2914 µg/L	3.28586	-5.2914 ppb	3.28586	62.10%
	QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†		-55.5	-11.958 µg/L	6.2126	-11.958 ppb	6.2126	51.95%
	QC value within limits for SiO2 Recovery = Not calculated						
Si	251.611†	-5.1	-0.4151 µg/L	0.20723	-0.4151 ppb	0.20723	49.92%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	2.1	0.9538 µg/L	0.28585	0.9538 ppb	0.28585	29.97%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	6.6	0.0679 µg/L	0.08784	0.0679 ppb	0.08784	129.36%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	46.4	0.1133 µg/L	0.08046	0.1133 ppb	0.08046	71.03%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	0.4	0.6030 µg/L	1.07067	0.6030 ppb	1.07067	177.57%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	7.9	0.7140 µg/L	2.67833	0.7140 ppb	2.67833	375.09%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	19.0	0.2062 µg/L	0.19224	0.2062 ppb	0.19224	93.23%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	-13.9	-0.3405 µg/L	0.03570	-0.3405 ppb	0.03570	10.49%
	QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 16:37:49

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	57270.5	57270.5	105 %			16:38:25
1	Al 396.153Radial†	6958.1	6640.6	4939.3 µg/L		4939.3 ppb	16:38:25
1	Ca 317.933Radial†	5712.0	5263.9	4956.3 µg/L		4956.3 ppb	16:38:46
1	Fe 238.204 Radial†	619.2	575.5	4888.0 µg/L		4888.0 ppb	16:38:46
1	K 766.490 Radial†	7274.3	6803.4	4835.8 µg/L		4835.8 ppb	16:38:25
1	Mg 279.077 IEC†	580.4	541.8	5044.9 µg/L		5044.9 ppb	16:38:46
1	Na 589.592 Radial†	31721.9	29686.7	9772.9 µg/L		9772.9 ppb	16:38:25
1	Sr 421.552†	48411.5	46092.9	477.81 µg/L		477.81 ppb	16:38:25
1	Sc 361.383	2050041.7	2050041.7	107.34 %			16:39:49
1	Y 371.029	1400914.7	1400914.7	106.95 %			16:39:49
1	Ag 328.068†	63102.9	59351.9	474.38 µg/L		474.38 ppb	16:39:55
1	As 188.979†	273.7	253.8	495.14 µg/L		495.14 ppb	16:40:15
1	B 249.677†	11802.0	10663.4	464.23 µg/L		464.23 ppb	16:39:55
1	Ba 233.527†	19451.3	18147.1	473.37 µg/L		473.37 ppb	16:39:55
1	Be 313.107†	769937.6	720722.3	470.49 µg/L		470.49 ppb	16:39:49
1	Cd 226.502†	18413.9	17296.7	477.11 µg/L		477.11 ppb	16:39:55
1	Co 228.616†	10377.6	9676.7	475.69 µg/L		475.69 ppb	16:39:55
1	Cr 267.716†	23222.4	21686.6	477.32 µg/L		477.32 ppb	16:39:55
1	Cu 324.752†	74708.1	67112.7	469.48 µg/L		469.48 ppb	16:39:55
1	Mn 257.610†	148224.3	138331.4	479.47 µg/L		479.47 ppb	16:39:49
1	Mo 202.031†	4976.6	4643.8	495.78 µg/L		495.78 ppb	16:40:15
1	Ni 231.604†	9664.7	8701.5	475.25 µg/L		475.25 ppb	16:39:55
1	P 214.914†	1251.0	1137.8	2398.4 µg/L		2398.4 ppb	16:40:15
1	Pb 220.353†	2064.6	1826.2	487.49 µg/L		487.49 ppb	16:40:15
1	S 181.975 Axial†	253.0	220.8	967.55 µg/L		967.55 ppb	16:40:15
1	Sb 206.836†	561.9	496.5	490.97 µg/L		490.97 ppb	16:40:15
1	Se 196.026†	348.6	308.9	478.47 µg/L		478.47 ppb	16:40:15
1	SiO2†	26407.2	23351.2	5028.8 µg/L		5028.8 ppb	16:39:55
1	Si 251.611†	31109.3	28668.8	2356.7 µg/L		2356.7 ppb	16:39:55
1	Sn 189.927†	1168.8	1089.7	501.23 µg/L		501.23 ppb	16:40:15
1	Ti 334.940†	210704.4	196178.3	471.57 µg/L		471.57 ppb	16:39:49
1	Tl 190.801†	345.6	346.3	489.05 µg/L		489.05 ppb	16:40:15
1	U 409.014†	5635.8	5304.0	479.22 µg/L		479.22 ppb	16:39:55
1	V 292.402†	47452.9	44251.8	477.60 µg/L		477.60 ppb	16:39:55
1	Zn 213.857†	20929.0	19022.1	471.63 µg/L		471.63 ppb	16:39:55
2	Sc RADIAL	57824.5	57824.5	106 %			16:38:51
2	Al 396.153Radial†	6951.6	6571.0	4887.5 µg/L		4887.5 ppb	16:38:51
2	Ca 317.933Radial†	5692.9	5193.8	4890.3 µg/L		4890.3 ppb	16:39:12
2	Fe 238.204 Radial†	614.8	565.7	4804.8 µg/L		4804.8 ppb	16:39:12
2	K 766.490 Radial†	7297.3	6758.7	4804.0 µg/L		4804.0 ppb	16:38:51
2	Mg 279.077 IEC†	578.6	534.8	4980.5 µg/L		4980.5 ppb	16:39:12
2	Na 589.592 Radial†	31791.5	29462.7	9699.2 µg/L		9699.2 ppb	16:38:51
2	Sr 421.552†	48548.0	45779.7	474.56 µg/L		474.56 ppb	16:38:51
2	Sc 361.383	2050967.6	2050967.6	107.39 %			16:40:22
2	Y 371.029	1401478.7	1401478.7	106.99 %			16:40:22
2	Ag 328.068†	63066.7	59291.5	473.89 µg/L		473.89 ppb	16:40:28
2	As 188.979†	260.8	241.7	471.43 µg/L		471.43 ppb	16:40:49
2	B 249.677†	11773.8	10632.2	462.91 µg/L		462.91 ppb	16:40:28
2	Ba 233.527†	19468.8	18155.2	473.58 µg/L		473.58 ppb	16:40:28
2	Be 313.107†	769423.9	719920.1	469.97 µg/L		469.97 ppb	16:40:22
2	Cd 226.502†	18369.5	17247.6	475.77 µg/L		475.77 ppb	16:40:28
2	Co 228.616†	10387.8	9681.8	475.93 µg/L		475.93 ppb	16:40:28
2	Cr 267.716†	23230.7	21684.6	477.27 µg/L		477.27 ppb	16:40:28
2	Cu 324.752†	74607.6	66987.7	468.59 µg/L		468.59 ppb	16:40:28
2	Mn 257.610†	147653.6	137737.6	477.41 µg/L		477.41 ppb	16:40:22
2	Mo 202.031†	4936.1	4604.0	491.53 µg/L		491.53 ppb	16:40:49
2	Ni 231.604†	9650.2	8684.0	474.29 µg/L		474.29 ppb	16:40:28
2	P 214.914†	1239.1	1126.2	2373.7 µg/L		2373.7 ppb	16:40:49
2	Pb 220.353†	2036.6	1799.3	480.30 µg/L		480.30 ppb	16:40:49

2	S 181.975 Axial†	251.7	219.6	962.01 µg/L	962.01 ppb	16:40:49
2	Sb 206.836†	560.6	495.1	489.53 µg/L	489.53 ppb	16:40:49
2	Se 196.026†	352.8	312.7	484.04 µg/L	484.04 ppb	16:40:49
2	SiO2†	26423.9	23355.6	5029.8 µg/L	5029.8 ppb	16:40:28
2	Si 251.611†	31116.7	28662.7	2356.2 µg/L	2356.2 ppb	16:40:28
2	Sn 189.927†	1158.0	1079.2	496.40 µg/L	496.40 ppb	16:40:49
2	Ti 334.940†	210552.3	195948.0	471.02 µg/L	471.02 ppb	16:40:22
2	Tl 190.801†	346.0	346.5	489.25 µg/L	489.25 ppb	16:40:49
2	U 409.014†	5584.5	5253.8	474.70 µg/L	474.70 ppb	16:40:28
2	V 292.402†	47503.1	44278.6	477.84 µg/L	477.84 ppb	16:40:28
2	Zn 213.857†	20951.2	19034.0	471.94 µg/L	471.94 ppb	16:40:28
3	Sc RADIAL	57919.3	57919.3	106 %		16:39:17
3	Al 396.153Radial†	6873.3	6486.5	4826.1 µg/L	4826.1 ppb	16:39:17
3	Ca 317.933Radial†	5675.3	5168.4	4866.3 µg/L	4866.3 ppb	16:39:38
3	Fe 238.204 Radial†	612.6	562.7	4778.5 µg/L	4778.5 ppb	16:39:38
3	K 766.490 Radial†	7223.5	6677.9	4746.6 µg/L	4746.6 ppb	16:39:17
3	Mg 279.077 IEC†	577.0	532.4	4956.6 µg/L	4956.6 ppb	16:39:38
3	Na 589.592 Radial†	31537.3	29174.1	9604.2 µg/L	9604.2 ppb	16:39:17
3	Sr 421.552†	47945.0	45136.6	467.89 µg/L	467.89 ppb	16:39:17
3	Sc 361.383	2047169.0	2047169.0	107.19 %		16:40:56
3	Y 371.029	1398213.9	1398213.9	106.74 %		16:40:56
3	Ag 328.068†	59282.1	55869.9	446.44 µg/L	446.44 ppb	16:41:01
3	As 188.979†	231.4	214.7	418.91 µg/L	418.91 ppb	16:41:22
3	B 249.677†	11101.6	10025.4	436.32 µg/L	436.32 ppb	16:41:01
3	Ba 233.527†	17825.1	16655.3	434.45 µg/L	434.45 ppb	16:41:01
3	Be 313.107†	720453.0	675563.8	441.01 µg/L	441.01 ppb	16:40:56
3	Cd 226.502†	16836.0	15848.7	437.13 µg/L	437.13 ppb	16:41:01
3	Co 228.616†	9439.7	8815.3	433.29 µg/L	433.29 ppb	16:41:01
3	Cr 267.716†	20551.5	19225.2	423.15 µg/L	423.15 ppb	16:41:01
3	Cu 324.752†	68186.1	61125.9	427.64 µg/L	427.64 ppb	16:41:01
3	Mn 257.610†	138984.9	129905.6	450.28 µg/L	450.28 ppb	16:40:56
3	Mo 202.031†	4143.4	3873.0	413.51 µg/L	413.51 ppb	16:41:22
3	Ni 231.604†	8808.1	7915.1	432.30 µg/L	432.30 ppb	16:41:01
3	P 214.914†	1067.2	968.0	2036.9 µg/L	2036.9 ppb	16:41:22
3	Pb 220.353†	1797.4	1579.7	421.60 µg/L	421.60 ppb	16:41:22
3	S 181.975 Axial†	226.2	196.2	859.46 µg/L	859.46 ppb	16:41:22
3	Sb 206.836†	485.7	426.1	420.98 µg/L	420.98 ppb	16:41:22
3	Se 196.026†	307.9	271.4	421.09 µg/L	421.09 ppb	16:41:22
3	SiO2†	24533.6	21637.8	4659.8 µg/L	4659.8 ppb	16:41:01
3	Si 251.611†	28891.7	26640.7	2190.0 µg/L	2190.0 ppb	16:41:01
3	Sn 189.927†	954.7	891.5	410.08 µg/L	410.08 ppb	16:41:22
3	Ti 334.940†	196335.7	183048.9	440.00 µg/L	440.00 ppb	16:40:56
3	Tl 190.801†	308.7	312.2	441.18 µg/L	441.18 ppb	16:41:22
3	U 409.014†	5011.7	4729.1	427.20 µg/L	427.20 ppb	16:41:01
3	V 292.402†	42781.7	39956.1	430.99 µg/L	430.99 ppb	16:41:01
3	Zn 213.857†	19123.4	17365.0	430.51 µg/L	430.51 ppb	16:41:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2049392.8	107.31 %	0.104			0.10%
Sc RADIAL	57671.4	106 %	0.6			0.61%
Y 371.029	1400202.5	106.89 %	0.133			0.12%
Ag 328.068†	58171.1	464.90 µg/L	15.993	464.90 ppb	15.993	3.44%
QC value within limits for Ag 328.068 Recovery = 92.98%						
Al 396.153Radial†	6566.1	4884.3 µg/L	56.67	4884.3 ppb	56.67	1.16%
QC value within limits for Al 396.153Radial Recovery = 97.69%						
As 188.979†	236.7	461.83 µg/L	39.012	461.83 ppb	39.012	8.45%
QC value within limits for As 188.979 Recovery = 92.37%						
B 249.677†	10440.3	454.49 µg/L	15.747	454.49 ppb	15.747	3.46%
QC value within limits for B 249.677 Recovery = 90.90%						
Ba 233.527†	17652.5	460.47 µg/L	22.535	460.47 ppb	22.535	4.89%
QC value within limits for Ba 233.527 Recovery = 92.09%						
Be 313.107†	705402.1	460.49 µg/L	16.871	460.49 ppb	16.871	3.66%
QC value within limits for Be 313.107 Recovery = 92.10%						
Ca 317.933Radial†	5208.7	4904.3 µg/L	46.59	4904.3 ppb	46.59	0.95%
QC value within limits for Ca 317.933Radial Recovery = 98.09%						
Cd 226.502†	16797.7	463.34 µg/L	22.703	463.34 ppb	22.703	4.90%
QC value within limits for Cd 226.502 Recovery = 92.67%						
Co 228.616†	9391.3	461.63 µg/L	24.552	461.63 ppb	24.552	5.32%

QC value within limits for Co 228.616 Recovery = 92.33%						
Cr 267.716†	20865.4	459.24 µg/L	31.262	459.24 ppb	31.262	6.81%
QC value within limits for Cr 267.716 Recovery = 91.85%						
Cu 324.752†	65075.5	455.24 µg/L	23.902	455.24 ppb	23.902	5.25%
QC value within limits for Cu 324.752 Recovery = 91.05%						
Fe 238.204 Radial†	568.0	4823.8 µg/L	57.17	4823.8 ppb	57.17	1.19%
QC value within limits for Fe 238.204 Radial Recovery = 96.48%						
K 766.490 Radial†	6746.7	4795.5 µg/L	45.22	4795.5 ppb	45.22	0.94%
QC value within limits for K 766.490 Radial Recovery = 95.91%						
Mg 279.077 IEC†	536.3	4994.0 µg/L	45.66	4994.0 ppb	45.66	0.91%
QC value within limits for Mg 279.077 IEC Recovery = 99.88%						
Mn 257.610†	135324.9	469.05 µg/L	16.289	469.05 ppb	16.289	3.47%
QC value within limits for Mn 257.610 Recovery = 93.81%						
Mo 202.031†	4373.6	466.94 µg/L	46.322	466.94 ppb	46.322	9.92%
QC value within limits for Mo 202.031 Recovery = 93.39%						
Na 589.592 Radial†	29441.2	9692.1 µg/L	84.60	9692.1 ppb	84.60	0.87%
QC value within limits for Na 589.592 Radial Recovery = 96.92%						
Ni 231.604†	8433.5	460.62 µg/L	24.525	460.62 ppb	24.525	5.32%
QC value within limits for Ni 231.604 Recovery = 92.12%						
P 214.914†	1077.3	2269.6 µg/L	201.96	2269.6 ppb	201.96	8.90%
QC value within limits for P 214.914 Recovery = 90.79%						
Pb 220.353†	1735.0	463.13 µg/L	36.146	463.13 ppb	36.146	7.80%
QC value within limits for Pb 220.353 Recovery = 92.63%						
S 181.975 Axial†	212.2	929.67 µg/L	60.871	929.67 ppb	60.871	6.55%
QC value within limits for S 181.975 Axial Recovery = 92.97%						
Sb 206.836†	472.6	467.16 µg/L	39.999	467.16 ppb	39.999	8.56%
QC value within limits for Sb 206.836 Recovery = 93.43%						
Se 196.026†	297.7	461.20 µg/L	34.847	461.20 ppb	34.847	7.56%
QC value within limits for Se 196.026 Recovery = 92.24%						
SiO2†	22781.6	4906.1 µg/L	213.31	4906.1 ppb	213.31	4.35%
QC value within limits for SiO2 Recovery = 91.75%						
Si 251.611†	27990.8	2301.0 µg/L	96.11	2301.0 ppb	96.11	4.18%
QC value within limits for Si 251.611 Recovery = 92.04%						
Sn 189.927†	1020.1	469.24 µg/L	51.288	469.24 ppb	51.288	10.93%
QC value within limits for Sn 189.927 Recovery = 93.85%						
Sr 421.552†	45669.7	473.42 µg/L	5.054	473.42 ppb	5.054	1.07%
QC value within limits for Sr 421.552 Recovery = 94.68%						
Ti 334.940†	191725.1	460.86 µg/L	18.074	460.86 ppb	18.074	3.92%
QC value within limits for Ti 334.940 Recovery = 92.17%						
Tl 190.801†	335.0	473.16 µg/L	27.695	473.16 ppb	27.695	5.85%
QC value within limits for Tl 190.801 Recovery = 94.63%						
U 409.014†	5095.6	460.37 µg/L	28.818	460.37 ppb	28.818	6.26%
QC value within limits for U 409.014 Recovery = 92.07%						
V 292.402†	42828.8	462.14 µg/L	26.978	462.14 ppb	26.978	5.84%
QC value within limits for V 292.402 Recovery = 92.43%						
Zn 213.857†	18473.7	458.03 µg/L	23.826	458.03 ppb	23.826	5.20%
QC value within limits for Zn 213.857 Recovery = 91.61%						

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:41:31

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	58584.5	58584.5	107 %			16:42:04
1	Al 396.153Radial†	51.2	57.8	43.068 µg/L		43.068 ppb	16:42:04
1	Ca 317.933Radial†	241.7	46.0	43.344 µg/L		43.344 ppb	16:42:24
1	Fe 238.204 Radial†	14.5	-1.0	-8.1938 µg/L		-8.1938 ppb	16:42:24
1	K 766.490 Radial†	158.2	19.0	13.495 µg/L		13.495 ppb	16:42:04
1	Mg 279.077 IEC†	19.4	6.8	63.641 µg/L		63.641 ppb	16:42:24
1	Na 589.592 Radial†	1003.5	392.9	129.35 µg/L		129.35 ppb	16:42:04
1	Sr 421.552†	45.5	2.9	0.0298 µg/L		0.0298 ppb	16:42:04
1	Sc 361.383	2059865.1	2059865.1	107.86 %			16:43:26
1	Y 371.029	1412010.5	1412010.5	107.79 %			16:43:26
1	Ag 328.068†	-580.2	26.6	0.2127 µg/L		0.2127 ppb	16:43:32
1	As 188.979†	-2.2	-3.1	-6.1457 µg/L		-6.1457 ppb	16:43:52
1	B 249.677†	314.7	-39.7	-1.7298 µg/L		-1.7298 ppb	16:43:52
1	Ba 233.527†	-34.6	-6.1	-0.1574 µg/L		-0.1574 ppb	16:43:52
1	Be 313.107†	-3476.5	217.1	0.1418 µg/L		0.1418 ppb	16:43:32
1	Cd 226.502†	-142.5	10.0	0.2771 µg/L		0.2771 ppb	16:43:52
1	Co 228.616†	-11.6	-1.9	-0.0950 µg/L		-0.0950 ppb	16:43:52
1	Cr 267.716†	-40.1	15.2	0.3343 µg/L		0.3343 ppb	16:43:32
1	Cu 324.752†	2513.6	-155.6	-1.0878 µg/L		-1.0878 ppb	16:43:32
1	Mn 257.610†	-238.3	23.1	0.0765 µg/L		0.0765 ppb	16:43:52
1	Mo 202.031†	-4.7	3.2	0.3434 µg/L		0.3434 ppb	16:43:52
1	Ni 231.604†	310.9	-14.0	-0.7640 µg/L		-0.7640 ppb	16:43:52
1	P 214.914†	32.2	2.3	4.9663 µg/L		4.9663 ppb	16:43:52
1	Pb 220.353†	102.0	-2.6	-0.7002 µg/L		-0.7002 ppb	16:43:52
1	S 181.975 Axial†	19.3	3.1	13.368 µg/L		13.368 ppb	16:43:52
1	Sb 206.836†	23.2	-5.4	-5.3618 µg/L		-5.3618 ppb	16:43:52
1	Se 196.026†	20.8	3.4	5.1089 µg/L		5.1089 ppb	16:43:52
1	SiO2†	1256.8	-84.7	-18.250 µg/L		-18.250 ppb	16:43:32
1	Si 251.611†	299.6	-35.1	-2.8840 µg/L		-2.8840 ppb	16:43:52
1	Sn 189.927†	-1.9	-0.9	-0.4213 µg/L		-0.4213 ppb	16:43:52
1	Ti 334.940†	103.7	-20.0	-0.0524 µg/L		-0.0524 ppb	16:43:32
1	Tl 190.801†	-18.7	7.0	9.7650 µg/L		9.7650 ppb	16:43:52
1	U 409.014†	8.9	61.9	5.6031 µg/L		5.6031 ppb	16:43:32
1	V 292.402†	-13.8	31.5	0.3435 µg/L		0.3435 ppb	16:43:32
1	Zn 213.857†	488.8	-22.3	-0.5552 µg/L		-0.5552 ppb	16:43:52
2	Sc RADIAL	57826.0	57826.0	106 %			16:42:30
2	Al 396.153Radial†	36.0	44.1	32.860 µg/L		32.860 ppb	16:42:30
2	Ca 317.933Radial†	243.6	50.8	47.787 µg/L		47.787 ppb	16:42:50
2	Fe 238.204 Radial†	18.8	3.3	27.831 µg/L		27.831 ppb	16:42:50
2	K 766.490 Radial†	189.0	49.9	35.479 µg/L		35.479 ppb	16:42:30
2	Mg 279.077 IEC†	19.0	6.7	61.954 µg/L		61.954 ppb	16:42:50
2	Na 589.592 Radial†	991.6	394.0	129.71 µg/L		129.71 ppb	16:42:30
2	Sr 421.552†	62.3	19.3	0.1997 µg/L		0.1997 ppb	16:42:30
2	Sc 361.383	2019733.9	2019733.9	105.75 %			16:43:58
2	Y 371.029	1384706.2	1384706.2	105.71 %			16:43:58
2	Ag 328.068†	-558.4	36.5	0.2916 µg/L		0.2916 ppb	16:44:04
2	As 188.979†	-1.6	-2.7	-5.2610 µg/L		-5.2610 ppb	16:44:24
2	B 249.677†	316.8	-31.9	-1.4069 µg/L		-1.4069 ppb	16:44:24
2	Ba 233.527†	-28.3	-0.8	-0.0199 µg/L		-0.0199 ppb	16:44:24
2	Be 313.107†	-3437.1	190.3	0.1243 µg/L		0.1243 ppb	16:44:04
2	Cd 226.502†	-144.6	5.4	0.1447 µg/L		0.1447 ppb	16:44:24
2	Co 228.616†	-10.6	-1.2	-0.0595 µg/L		-0.0595 ppb	16:44:24
2	Cr 267.716†	-44.1	10.7	0.2350 µg/L		0.2350 ppb	16:44:04
2	Cu 324.752†	2441.7	-177.3	-1.2343 µg/L		-1.2343 ppb	16:44:04
2	Mn 257.610†	-221.2	34.9	0.1222 µg/L		0.1222 ppb	16:44:24
2	Mo 202.031†	-2.8	4.9	0.5203 µg/L		0.5203 ppb	16:44:24
2	Ni 231.604†	305.8	-13.1	-0.7134 µg/L		-0.7134 ppb	16:44:24
2	P 214.914†	32.5	3.1	6.8494 µg/L		6.8494 ppb	16:44:24
2	Pb 220.353†	110.5	7.3	1.9444 µg/L		1.9444 ppb	16:44:24

2	S 181.975 Axial†	18.0	2.2	9.5789 µg/L	9.5789 ppb	16:44:24
2	Sb 206.836†	26.9	-1.5	-1.5033 µg/L	-1.5033 ppb	16:44:24
2	Se 196.026†	9.1	-7.3	-11.082 µg/L	-11.082 ppb	16:44:24
2	SiO2†	1234.9	-82.3	-17.728 µg/L	-17.728 ppb	16:44:04
2	Si 251.611†	315.8	-14.3	-1.1723 µg/L	-1.1723 ppb	16:44:24
2	Sn 189.927†	-0.9	0.0	0.0122 µg/L	0.0122 ppb	16:44:24
2	Ti 334.940†	107.0	-14.9	-0.0400 µg/L	-0.0400 ppb	16:44:04
2	Tl 190.801†	-22.2	3.3	4.6398 µg/L	4.6398 ppb	16:44:24
2	U 409.014†	11.6	64.6	5.8396 µg/L	5.8396 ppb	16:44:04
2	V 292.402†	-47.1	-0.3	0.0106 µg/L	0.0106 ppb	16:44:04
2	Zn 213.857†	485.9	-16.1	-0.4022 µg/L	-0.4022 ppb	16:44:24
3	Sc RADIAL	58203.8	58203.8	107 %		16:42:56
3	Al 396.153Radial†	16.5	25.6	19.057 µg/L	19.057 ppb	16:42:56
3	Ca 317.933Radial†	234.3	40.6	38.198 µg/L	38.198 ppb	16:43:16
3	Fe 238.204 Radial†	16.0	0.5	4.0830 µg/L	4.0830 ppb	16:43:16
3	K 766.490 Radial†	180.9	41.2	29.300 µg/L	29.300 ppb	16:42:56
3	Mg 279.077 IEC†	18.0	5.6	52.283 µg/L	52.283 ppb	16:43:16
3	Na 589.592 Radial†	920.7	321.4	105.80 µg/L	105.80 ppb	16:42:56
3	Sr 421.552†	52.3	9.5	0.0985 µg/L	0.0985 ppb	16:42:56
3	Sc 361.383	1997484.6	1997484.6	104.59 %		16:44:31
3	Y 371.029	1369124.4	1369124.4	104.52 %		16:44:31
3	Ag 328.068†	-544.9	43.6	0.3481 µg/L	0.3481 ppb	16:44:36
3	As 188.979†	3.1	1.8	3.4746 µg/L	3.4746 ppb	16:44:57
3	B 249.677†	317.2	-28.2	-1.2336 µg/L	-1.2336 ppb	16:44:57
3	Ba 233.527†	-26.0	1.1	0.0301 µg/L	0.0301 ppb	16:44:57
3	Be 313.107†	-3380.0	208.8	0.1363 µg/L	0.1363 ppb	16:44:36
3	Cd 226.502†	-138.7	9.5	0.2617 µg/L	0.2617 ppb	16:44:57
3	Co 228.616†	-17.3	-7.7	-0.3772 µg/L	-0.3772 ppb	16:44:57
3	Cr 267.716†	-57.1	-2.2	-0.0487 µg/L	-0.0487 ppb	16:44:36
3	Cu 324.752†	2481.2	-113.8	-0.7943 µg/L	-0.7943 ppb	16:44:36
3	Mn 257.610†	-222.0	31.9	0.1088 µg/L	0.1088 ppb	16:44:57
3	Mo 202.031†	-5.2	2.6	0.2766 µg/L	0.2766 ppb	16:44:57
3	Ni 231.604†	300.3	-15.1	-0.8254 µg/L	-0.8254 ppb	16:44:57
3	P 214.914†	30.5	1.5	3.4004 µg/L	3.4004 ppb	16:44:57
3	Pb 220.353†	108.4	6.5	1.7342 µg/L	1.7342 ppb	16:44:57
3	S 181.975 Axial†	15.4	-0.1	-0.3301 µg/L	-0.3301 ppb	16:44:57
3	Sb 206.836†	27.4	-0.8	-0.7588 µg/L	-0.7588 ppb	16:44:57
3	Se 196.026†	19.0	2.4	3.5402 µg/L	3.5402 ppb	16:44:57
3	SiO2†	1246.0	-58.7	-12.639 µg/L	-12.639 ppb	16:44:36
3	Si 251.611†	309.0	-17.4	-1.4306 µg/L	-1.4306 ppb	16:44:57
3	Sn 189.927†	-0.1	0.8	0.3816 µg/L	0.3816 ppb	16:44:57
3	Ti 334.940†	122.3	0.8	-0.0015 µg/L	-0.0015 ppb	16:44:36
3	Tl 190.801†	-19.4	5.7	7.9510 µg/L	7.9510 ppb	16:44:57
3	U 409.014†	-119.0	-60.2	-5.4508 µg/L	-5.4508 ppb	16:44:36
3	V 292.402†	-13.3	31.5	0.3324 µg/L	0.3324 ppb	16:44:36
3	Zn 213.857†	491.8	-5.3	-0.1315 µg/L	-0.1315 ppb	16:44:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025694.5	106.07 %	1.655			1.56%
Sc RADIAL	58204.8	107 %	0.7			0.65%
Y 371.029	1388613.7	106.01 %	1.657			1.56%
Ag 328.068†	35.6	0.2841 µg/L	0.06799	0.2841 ppb	0.06799	23.93%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	42.5	31.661 µg/L	12.0501	31.661 ppb	12.0501	38.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.4	-2.6440 µg/L	5.31733	-2.6440 ppb	5.31733	201.11%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-33.2	-1.4568 µg/L	0.25185	-1.4568 ppb	0.25185	17.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.9	-0.0491 µg/L	0.09709	-0.0491 ppb	0.09709	197.73%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	205.4	0.1341 µg/L	0.00896	0.1341 ppb	0.00896	6.68%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	45.8	43.110 µg/L	4.7990	43.110 ppb	4.7990	11.13%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.3	0.2278 µg/L	0.07242	0.2278 ppb	0.07242	31.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.1772 µg/L	0.17409	-0.1772 ppb	0.17409	98.23%

Cr	267.716†	7.9	0.1735 µg/L	0.19876	0.1735 ppb	0.19876	114.54%
	QC value within limits for Cr 267.716			Recovery = Not calculated			
Cu	324.752†	-148.9	-1.0388 µg/L	0.22407	-1.0388 ppb	0.22407	21.57%
	QC value within limits for Cu 324.752			Recovery = Not calculated			
Fe	238.204 Radial†	0.9	7.9067 µg/L	18.31420	7.9067 ppb	18.31420	231.63%
	QC value within limits for Fe 238.204 Radial			Recovery = Not calculated			
K	766.490 Radial†	36.7	26.091 µg/L	11.3376	26.091 ppb	11.3376	43.45%
	QC value within limits for K 766.490 Radial			Recovery = Not calculated			
Mg	279.077 IEC†	6.4	59.293 µg/L	6.1293	59.293 ppb	6.1293	10.34%
	QC value within limits for Mg 279.077 IEC			Recovery = Not calculated			
Mn	257.610†	30.0	0.1025 µg/L	0.02350	0.1025 ppb	0.02350	22.92%
	QC value within limits for Mn 257.610			Recovery = Not calculated			
Mo	202.031†	3.6	0.3801 µg/L	0.12595	0.3801 ppb	0.12595	33.13%
	QC value within limits for Mo 202.031			Recovery = Not calculated			
Na	589.592 Radial†	369.4	121.62 µg/L	13.704	121.62 ppb	13.704	11.27%
	QC value within limits for Na 589.592 Radial			Recovery = Not calculated			
Ni	231.604†	-14.0	-0.7676 µg/L	0.05609	-0.7676 ppb	0.05609	7.31%
	QC value within limits for Ni 231.604			Recovery = Not calculated			
P	214.914†	2.3	5.0720 µg/L	1.72695	5.0720 ppb	1.72695	34.05%
	QC value within limits for P 214.914			Recovery = Not calculated			
Pb	220.353†	3.7	0.9928 µg/L	1.46997	0.9928 ppb	1.46997	148.06%
	QC value within limits for Pb 220.353			Recovery = Not calculated			
S	181.975 Axial†	1.7	7.5391 µg/L	7.07334	7.5391 ppb	7.07334	93.82%
	QC value within limits for S 181.975 Axial			Recovery = Not calculated			
Sb	206.836†	-2.6	-2.5413 µg/L	2.47086	-2.5413 ppb	2.47086	97.23%
	QC value within limits for Sb 206.836			Recovery = Not calculated			
Se	196.026†	-0.5	-0.8111 µg/L	8.92964	-0.8111 ppb	8.92964	>999.9%
	QC value within limits for Se 196.026			Recovery = Not calculated			
SiO2†		-75.3	-16.206 µg/L	3.0998	-16.206 ppb	3.0998	19.13%
	QC value within limits for SiO2			Recovery = Not calculated			
Si	251.611†	-22.2	-1.8290 µg/L	0.92279	-1.8290 ppb	0.92279	50.45%
	QC value within limits for Si 251.611			Recovery = Not calculated			
Sn	189.927†	-0.0	-0.0092 µg/L	0.40185	-0.0092 ppb	0.40185	>999.9%
	QC value within limits for Sn 189.927			Recovery = Not calculated			
Sr	421.552†	10.5	0.1093 µg/L	0.08548	0.1093 ppb	0.08548	78.18%
	QC value within limits for Sr 421.552			Recovery = Not calculated			
Ti	334.940†	-11.4	-0.0313 µg/L	0.02652	-0.0313 ppb	0.02652	84.74%
	QC value within limits for Ti 334.940			Recovery = Not calculated			
Tl	190.801†	5.3	7.4520 µg/L	2.59879	7.4520 ppb	2.59879	34.87%
	QC value within limits for Tl 190.801			Recovery = Not calculated			
U	409.014†	22.1	1.9973 µg/L	6.45136	1.9973 ppb	6.45136	323.00%
	QC value within limits for U 409.014			Recovery = Not calculated			
V	292.402†	20.9	0.2288 µg/L	0.18906	0.2288 ppb	0.18906	82.63%
	QC value within limits for V 292.402			Recovery = Not calculated			
Zn	213.857†	-14.6	-0.3630 µg/L	0.21454	-0.3630 ppb	0.21454	59.11%
	QC value within limits for Zn 213.857			Recovery = Not calculated			

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 2/11/2010 16:58:42

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optimal\Results\Results.mdb

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/11/2010 16:58:44

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58304.7	58304.7	107 %		16:59:20
1	Al 396.153Radial†	6786.5	6362.5	4732.0 µg/L	4732.0 ppb	16:59:20
1	Ca 317.933Radial†	5536.9	5003.5	4711.1 µg/L	4711.1 ppb	16:59:40
1	Fe 238.204 Radial†	610.2	556.6	4728.2 µg/L	4728.2 ppb	16:59:40
1	K 766.490 Radial†	7283.7	6689.2	4754.7 µg/L	4754.7 ppb	16:59:20
1	Mg 279.077 IEC†	569.3	521.6	4857.3 µg/L	4857.3 ppb	16:59:40
1	Na 589.592 Radial†	31197.2	28659.4	9434.8 µg/L	9434.8 ppb	16:59:20
1	Sr 421.552†	48428.4	45290.4	469.49 µg/L	469.49 ppb	16:59:20
1	Sc 361.383	2048192.0	2048192.0	107.24 %		17:00:43
1	Y 371.029	1396873.4	1396873.4	106.64 %		17:00:43
1	Ag 328.068†	62792.0	59115.0	472.54 µg/L	472.54 ppb	17:00:49
1	As 188.979†	276.2	256.4	500.17 µg/L	500.17 ppb	17:01:09
1	B 249.677†	11976.6	10836.1	471.87 µg/L	471.87 ppb	17:00:49
1	Ba 233.527†	19779.6	18469.6	481.79 µg/L	481.79 ppb	17:00:49
1	Be 313.107†	782023.1	732639.2	478.28 µg/L	478.28 ppb	17:00:43
1	Cd 226.502†	18757.9	17632.9	486.42 µg/L	486.42 ppb	17:00:49
1	Co 228.616†	10618.7	9910.3	487.18 µg/L	487.18 ppb	17:00:49
1	Cr 267.716†	23605.9	22063.7	485.62 µg/L	485.62 ppb	17:00:49
1	Cu 324.752†	75656.1	68059.5	476.07 µg/L	476.07 ppb	17:00:49
1	Mn 257.610†	150274.2	140367.5	486.51 µg/L	486.51 ppb	17:00:43
1	Mo 202.031†	4970.8	4642.6	495.64 µg/L	495.64 ppb	17:01:09
1	Ni 231.604†	9869.6	8900.8	486.13 µg/L	486.13 ppb	17:00:49
1	P 214.914†	1275.8	1162.0	2449.8 µg/L	2449.8 ppb	17:01:09
1	Pb 220.353†	2092.9	1854.3	494.97 µg/L	494.97 ppb	17:01:09
1	S 181.975 Axial†	258.0	225.7	989.09 µg/L	989.09 ppb	17:01:09
1	Sb 206.836†	558.6	493.9	488.34 µg/L	488.34 ppb	17:01:09
1	Se 196.026†	360.2	320.1	495.20 µg/L	495.20 ppb	17:01:09
1	SiO2†	26598.5	23551.8	5072.0 µg/L	5072.0 ppb	17:00:49
1	Si 251.611†	31394.2	28960.7	2380.7 µg/L	2380.7 ppb	17:00:49
1	Sn 189.927†	1171.7	1093.4	502.93 µg/L	502.93 ppb	17:01:09
1	Ti 334.940†	209687.5	195407.3	469.73 µg/L	469.73 ppb	17:00:43
1	Tl 190.801†	351.0	351.5	496.34 µg/L	496.34 ppb	17:01:09
1	U 409.014†	5705.8	5374.0	485.60 µg/L	485.60 ppb	17:00:49
1	V 292.402†	48262.6	45046.7	486.08 µg/L	486.08 ppb	17:00:49
1	Zn 213.857†	21405.2	19483.8	483.11 µg/L	483.11 ppb	17:00:49
2	Sc RADIAL	57809.4	57809.4	106 %		16:59:45
2	Al 396.153Radial†	6713.1	6347.6	4720.4 µg/L	4720.4 ppb	16:59:45
2	Ca 317.933Radial†	5573.2	5082.2	4785.2 µg/L	4785.2 ppb	17:00:06
2	Fe 238.204 Radial†	613.9	565.0	4800.0 µg/L	4800.0 ppb	17:00:06
2	K 766.490 Radial†	7246.0	6712.1	4770.9 µg/L	4770.9 ppb	16:59:45
2	Mg 279.077 IEC†	566.2	523.3	4873.4 µg/L	4873.4 ppb	17:00:06
2	Na 589.592 Radial†	31072.8	28792.1	9478.5 µg/L	9478.5 ppb	16:59:45
2	Sr 421.552†	48008.7	45282.6	469.41 µg/L	469.41 ppb	16:59:45
2	Sc 361.383	1951160.7	1951160.7	102.16 %		17:01:16
2	Y 371.029	1331856.8	1331856.8	101.67 %		17:01:16
2	Ag 328.068†	64120.5	63327.2	506.22 µg/L	506.22 ppb	17:01:22
2	As 188.979†	277.7	270.7	528.08 µg/L	528.08 ppb	17:01:43

2	B 249.677†	12297.9	11706.0	509.91 µg/L	509.91 ppb	17:01:22
2	Ba 233.527†	20306.8	19902.8	519.17 µg/L	519.17 ppb	17:01:22
2	Be 313.107†	802212.2	788663.9	514.85 µg/L	514.85 ppb	17:01:16
2	Cd 226.502†	19256.8	18991.1	523.92 µg/L	523.92 ppb	17:01:22
2	Co 228.616†	10882.2	10660.6	524.05 µg/L	524.05 ppb	17:01:22
2	Cr 267.716†	24198.0	23738.0	522.47 µg/L	522.47 ppb	17:01:22
2	Cu 324.752†	77364.3	73239.8	512.26 µg/L	512.26 ppb	17:01:22
2	Mn 257.610†	154462.4	151435.4	524.84 µg/L	524.84 ppb	17:01:16
2	Mo 202.031†	4974.0	4876.2	520.57 µg/L	520.57 ppb	17:01:43
2	Ni 231.604†	10143.4	9626.4	525.76 µg/L	525.76 ppb	17:01:22
2	P 214.914†	1278.9	1224.2	2579.9 µg/L	2579.9 ppb	17:01:43
2	Pb 220.353†	2103.7	1962.0	523.68 µg/L	523.68 ppb	17:01:43
2	S 181.975 Axial†	261.1	240.7	1054.7 µg/L	1054.7 ppb	17:01:43
2	Sb 206.836†	565.0	526.1	520.02 µg/L	520.02 ppb	17:01:43
2	Se 196.026†	363.5	340.0	525.72 µg/L	525.72 ppb	17:01:43
2	SiO2†	27321.6	25493.0	5490.1 µg/L	5490.1 ppb	17:01:22
2	Si 251.611†	32162.6	31168.6	2562.2 µg/L	2562.2 ppb	17:01:22
2	Sn 189.927†	1172.7	1148.8	528.40 µg/L	528.40 ppb	17:01:43
2	Ti 334.940†	216025.0	211334.0	508.04 µg/L	508.04 ppb	17:01:16
2	Tl 190.801†	350.8	367.7	519.30 µg/L	519.30 ppb	17:01:43
2	U 409.014†	5846.6	5776.4	522.02 µg/L	522.02 ppb	17:01:22
2	V 292.402†	49557.7	48552.4	523.76 µg/L	523.76 ppb	17:01:22
2	Zn 213.857†	21845.1	20906.9	518.41 µg/L	518.41 ppb	17:01:22
3	Sc RADIAL	58043.7	58043.7	106 %		17:00:11
3	Al 396.153Radial†	6748.6	6355.4	4728.2 µg/L	4728.2 ppb	17:00:11
3	Ca 317.933Radial†	5566.3	5054.5	4759.1 µg/L	4759.1 ppb	17:00:32
3	Fe 238.204 Radial†	616.6	565.2	4800.6 µg/L	4800.6 ppb	17:00:32
3	K 766.490 Radial†	7187.1	6629.1	4711.9 µg/L	4711.9 ppb	17:00:11
3	Mg 279.077 IEC†	562.5	517.6	4819.1 µg/L	4819.1 ppb	17:00:32
3	Na 589.592 Radial†	31179.2	28773.8	9472.4 µg/L	9472.4 ppb	17:00:11
3	Sr 421.552†	48277.8	45352.7	470.13 µg/L	470.13 ppb	17:00:11
3	Sc 361.383	2003631.8	2003631.8	104.91 %		17:01:50
3	Y 371.029	1367447.8	1367447.8	104.39 %		17:01:50
3	Ag 328.068†	59826.0	57590.0	460.26 µg/L	460.26 ppb	17:01:56
3	As 188.979†	236.7	224.5	438.03 µg/L	438.03 ppb	17:02:16
3	B 249.677†	11388.2	10523.6	458.12 µg/L	458.12 ppb	17:01:56
3	Ba 233.527†	18491.5	17651.9	460.45 µg/L	460.45 ppb	17:01:56
3	Be 313.107†	746381.1	714882.8	466.69 µg/L	466.69 ppb	17:01:50
3	Cd 226.502†	17452.2	16777.4	462.78 µg/L	462.78 ppb	17:01:56
3	Co 228.616†	9792.8	9343.2	459.24 µg/L	459.24 ppb	17:01:56
3	Cr 267.716†	21341.5	20394.9	448.89 µg/L	448.89 ppb	17:01:56
3	Cu 324.752†	70171.6	64400.7	450.52 µg/L	450.52 ppb	17:01:56
3	Mn 257.610†	143677.7	137196.1	475.54 µg/L	475.54 ppb	17:01:50
3	Mo 202.031†	4142.0	3955.7	422.34 µg/L	422.34 ppb	17:02:16
3	Ni 231.604†	9135.9	8406.0	459.11 µg/L	459.11 ppb	17:01:56
3	P 214.914†	1088.5	1009.9	2124.6 µg/L	2124.6 ppb	17:02:16
3	Pb 220.353†	1832.8	1649.8	440.26 µg/L	440.26 ppb	17:02:16
3	S 181.975 Axial†	227.5	202.0	885.22 µg/L	885.22 ppb	17:02:16
3	Sb 206.836†	480.8	431.3	425.93 µg/L	425.93 ppb	17:02:16
3	Se 196.026†	317.8	287.1	445.21 µg/L	445.21 ppb	17:02:16
3	SiO2†	25159.1	22731.4	4895.3 µg/L	4895.3 ppb	17:01:56
3	Si 251.611†	29597.8	27899.4	2293.5 µg/L	2293.5 ppb	17:01:56
3	Sn 189.927†	953.9	910.2	418.64 µg/L	418.64 ppb	17:02:16
3	Ti 334.940†	199390.2	189940.4	456.58 µg/L	456.58 ppb	17:01:50
3	Tl 190.801†	316.4	325.9	460.38 µg/L	460.38 ppb	17:02:16
3	U 409.014†	5187.8	4998.6	451.60 µg/L	451.60 ppb	17:01:56
3	V 292.402†	44415.7	42380.8	456.99 µg/L	456.99 ppb	17:01:56
3	Zn 213.857†	19887.4	18480.9	458.23 µg/L	458.23 ppb	17:01:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2000994.9	104.77 %	2.543			2.43%
Sc RADIAL	58052.6	106 %	0.5			0.43%
Y 371.029	1365392.6	104.23 %	2.485			2.38%
Ag 328.068†	60010.7	479.67 µg/L	23.794	479.67 ppb	23.794	4.96%
QC value within limits for Ag 328.068 Recovery = 95.93%						
Al 396.153Radial†	6355.1	4726.8 µg/L	5.90	4726.8 ppb	5.90	0.12%
QC value within limits for Al 396.153Radial Recovery = 94.54%						
As 188.979†	250.5	488.76 µg/L	46.092	488.76 ppb	46.092	9.43%

QC value within limits for As 188.979 Recovery = 97.75%						
B 249.677†	11021.9	479.97 µg/L	26.827	479.97 ppb	26.827	5.59%
QC value within limits for B 249.677 Recovery = 95.99%						
Ba 233.527†	18674.8	487.13 µg/L	29.727	487.13 ppb	29.727	6.10%
QC value within limits for Ba 233.527 Recovery = 97.43%						
Be 313.107†	745395.3	486.60 µg/L	25.138	486.60 ppb	25.138	5.17%
QC value within limits for Be 313.107 Recovery = 97.32%						
Ca 317.933Radial†	5046.7	4751.8 µg/L	37.61	4751.8 ppb	37.61	0.79%
QC value within limits for Ca 317.933Radial Recovery = 95.04%						
Cd 226.502†	17800.5	491.04 µg/L	30.831	491.04 ppb	30.831	6.28%
QC value within limits for Cd 226.502 Recovery = 98.21%						
Co 228.616†	9971.4	490.16 µg/L	32.508	490.16 ppb	32.508	6.63%
QC value within limits for Co 228.616 Recovery = 98.03%						
Cr 267.716†	22065.5	485.66 µg/L	36.788	485.66 ppb	36.788	7.57%
QC value within limits for Cr 267.716 Recovery = 97.13%						
Cu 324.752†	68566.7	479.62 µg/L	31.024	479.62 ppb	31.024	6.47%
QC value within limits for Cu 324.752 Recovery = 95.92%						
Fe 238.204 Radial†	562.3	4776.3 µg/L	41.61	4776.3 ppb	41.61	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 95.53%						
K 766.490 Radial†	6676.8	4745.8 µg/L	30.47	4745.8 ppb	30.47	0.64%
QC value within limits for K 766.490 Radial Recovery = 94.92%						
Mg 279.077 IEC†	520.8	4849.9 µg/L	27.89	4849.9 ppb	27.89	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 97.00%						
Mn 257.610†	142999.7	495.63 µg/L	25.888	495.63 ppb	25.888	5.22%
QC value within limits for Mn 257.610 Recovery = 99.13%						
Mo 202.031†	4491.5	479.52 µg/L	51.064	479.52 ppb	51.064	10.65%
QC value within limits for Mo 202.031 Recovery = 95.90%						
Na 589.592 Radial†	28741.7	9461.9 µg/L	23.68	9461.9 ppb	23.68	0.25%
QC value within limits for Na 589.592 Radial Recovery = 94.62%						
Ni 231.604†	8977.7	490.33 µg/L	33.521	490.33 ppb	33.521	6.84%
QC value within limits for Ni 231.604 Recovery = 98.07%						
P 214.914†	1132.0	2384.7 µg/L	234.53	2384.7 ppb	234.53	9.83%
QC value within limits for P 214.914 Recovery = 95.39%						
Pb 220.353†	1822.0	486.30 µg/L	42.376	486.30 ppb	42.376	8.71%
QC value within limits for Pb 220.353 Recovery = 97.26%						
S 181.975 Axial†	222.8	976.34 µg/L	85.462	976.34 ppb	85.462	8.75%
QC value within limits for S 181.975 Axial Recovery = 97.63%						
Sb 206.836†	483.8	478.10 µg/L	47.873	478.10 ppb	47.873	10.01%
QC value within limits for Sb 206.836 Recovery = 95.62%						
Se 196.026†	315.7	488.71 µg/L	40.646	488.71 ppb	40.646	8.32%
QC value within limits for Se 196.026 Recovery = 97.74%						
SiO2†	23925.4	5152.5 µg/L	305.42	5152.5 ppb	305.42	5.93%
QC value within limits for SiO2 Recovery = 96.35%						
Si 251.611†	29342.9	2412.1 µg/L	137.10	2412.1 ppb	137.10	5.68%
QC value within limits for Si 251.611 Recovery = 96.49%						
Sn 189.927†	1050.8	483.32 µg/L	57.445	483.32 ppb	57.445	11.89%
QC value within limits for Sn 189.927 Recovery = 96.66%						
Sr 421.552†	45308.6	469.68 µg/L	0.398	469.68 ppb	0.398	0.08%
QC value within limits for Sr 421.552 Recovery = 93.94%						
Ti 334.940†	198893.9	478.12 µg/L	26.734	478.12 ppb	26.734	5.59%
QC value within limits for Ti 334.940 Recovery = 95.62%						
Tl 190.801†	348.4	492.01 µg/L	29.696	492.01 ppb	29.696	6.04%
QC value within limits for Tl 190.801 Recovery = 98.40%						
U 409.014†	5383.0	486.40 µg/L	35.218	486.40 ppb	35.218	7.24%
QC value within limits for U 409.014 Recovery = 97.28%						
V 292.402†	45326.6	488.94 µg/L	33.478	488.94 ppb	33.478	6.85%
QC value within limits for V 292.402 Recovery = 97.79%						
Zn 213.857†	19623.9	486.59 µg/L	30.241	486.59 ppb	30.241	6.21%
QC value within limits for Zn 213.857 Recovery = 97.32%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 17:02:26

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	56368.9	56368.9	103 %		17:03:01
1	Al 396.153Radial†	-30.7	-19.6	-14.585 µg/L	-14.585 ppb	17:03:01
1	Ca 317.933Radial†	198.1	12.6	11.864 µg/L	11.864 ppb	17:03:21
1	Fe 238.204 Radial†	17.2	2.2	18.515 µg/L	18.515 ppb	17:03:21
1	K 766.490 Radial†	209.8	74.8	53.133 µg/L	53.133 ppb	17:03:01
1	Mg 279.077 IEC†	16.1	4.3	39.936 µg/L	39.936 ppb	17:03:21
1	Na 589.592 Radial†	774.1	207.6	68.329 µg/L	68.329 ppb	17:03:01
1	Sr 421.552†	33.0	-7.6	-0.0789 µg/L	-0.0789 ppb	17:03:01
1	Sc 361.383	2029236.5	2029236.5	106.25 %		17:04:24
1	Y 371.029	1388942.8	1388942.8	106.03 %		17:04:24
1	Ag 328.068†	-592.1	7.2	0.0607 µg/L	0.0607 ppb	17:04:29
1	As 188.979†	-0.6	-1.7	-3.3695 µg/L	-3.3695 ppb	17:04:50
1	B 249.677†	324.7	-25.9	-1.1417 µg/L	-1.1417 ppb	17:04:50
1	Ba 233.527†	-22.4	4.9	0.1278 µg/L	0.1278 ppb	17:04:50
1	Be 313.107†	-3566.1	84.2	0.0549 µg/L	0.0549 ppb	17:04:29
1	Cd 226.502†	-151.8	-0.8	-0.0243 µg/L	-0.0243 ppb	17:04:50
1	Co 228.616†	-13.1	-3.5	-0.1727 µg/L	-0.1727 ppb	17:04:50
1	Cr 267.716†	-46.3	8.8	0.1931 µg/L	0.1931 ppb	17:04:50
1	Cu 324.752†	2496.7	-136.3	-0.9495 µg/L	-0.9495 ppb	17:04:29
1	Mn 257.610†	-248.9	9.9	0.0351 µg/L	0.0351 ppb	17:04:50
1	Mo 202.031†	-5.8	2.1	0.2273 µg/L	0.2273 ppb	17:04:50
1	Ni 231.604†	303.7	-16.3	-0.8932 µg/L	-0.8932 ppb	17:04:50
1	P 214.914†	32.7	3.2	6.8843 µg/L	6.8843 ppb	17:04:50
1	Pb 220.353†	96.4	-6.5	-1.7203 µg/L	-1.7203 ppb	17:04:50
1	S 181.975 Axial†	20.6	4.6	20.049 µg/L	20.049 ppb	17:04:50
1	Sb 206.836†	26.8	-1.7	-1.7124 µg/L	-1.7124 ppb	17:04:50
1	Se 196.026†	16.1	-0.6	-0.9715 µg/L	-0.9715 ppb	17:04:50
1	SiO2†	1235.6	-87.2	-18.769 µg/L	-18.769 ppb	17:04:29
1	Si 251.611†	286.6	-43.1	-3.5447 µg/L	-3.5447 ppb	17:04:50
1	Sn 189.927†	-4.0	-2.9	-1.3291 µg/L	-1.3291 ppb	17:04:50
1	Ti 334.940†	152.5	27.4	0.0631 µg/L	0.0631 ppb	17:04:29
1	Tl 190.801†	-22.1	3.5	4.9105 µg/L	4.9105 ppb	17:04:50
1	U 409.014†	-71.0	-13.2	-1.1992 µg/L	-1.1992 ppb	17:04:29
1	V 292.402†	-14.4	30.7	0.3301 µg/L	0.3301 ppb	17:04:29
1	Zn 213.857†	481.1	-22.7	-0.5654 µg/L	-0.5654 ppb	17:04:50
2	Sc RADIAL	56481.9	56481.9	103 %		17:03:27
2	Al 396.153Radial†	9.3	19.1	14.233 µg/L	14.233 ppb	17:03:27
2	Ca 317.933Radial†	192.6	6.9	6.5217 µg/L	6.5217 ppb	17:03:47
2	Fe 238.204 Radial†	14.6	-0.3	-2.9604 µg/L	-2.9604 ppb	17:03:47
2	K 766.490 Radial†	162.5	28.6	20.329 µg/L	20.329 ppb	17:03:27
2	Mg 279.077 IEC†	13.0	1.3	11.979 µg/L	11.979 ppb	17:03:47
2	Na 589.592 Radial†	797.1	228.3	75.169 µg/L	75.169 ppb	17:03:27
2	Sr 421.552†	46.5	5.4	0.0561 µg/L	0.0561 ppb	17:03:27
2	Sc 361.383	2012770.6	2012770.6	105.39 %		17:04:56
2	Y 371.029	1377597.1	1377597.1	105.17 %		17:04:56
2	Ag 328.068†	-578.5	15.6	0.1231 µg/L	0.1231 ppb	17:05:01
2	As 188.979†	2.2	1.0	1.9088 µg/L	1.9088 ppb	17:05:22
2	B 249.677†	310.5	-36.9	-1.6105 µg/L	-1.6105 ppb	17:05:22
2	Ba 233.527†	-26.6	0.8	0.0202 µg/L	0.0202 ppb	17:05:22
2	Be 313.107†	-3607.4	17.5	0.0114 µg/L	0.0114 ppb	17:05:01
2	Cd 226.502†	-140.3	9.0	0.2482 µg/L	0.2482 ppb	17:05:22
2	Co 228.616†	-20.8	-10.9	-0.5380 µg/L	-0.5380 ppb	17:05:22
2	Cr 267.716†	-50.1	4.9	0.1067 µg/L	0.1067 ppb	17:05:22
2	Cu 324.752†	2459.5	-152.4	-1.0650 µg/L	-1.0650 ppb	17:05:01
2	Mn 257.610†	-250.9	6.1	0.0201 µg/L	0.0201 ppb	17:05:22
2	Mo 202.031†	-3.2	4.5	0.4823 µg/L	0.4823 ppb	17:05:22
2	Ni 231.604†	300.2	-17.4	-0.9488 µg/L	-0.9488 ppb	17:05:22
2	P 214.914†	25.9	-3.0	-6.3600 µg/L	-6.3600 ppb	17:05:22
2	Pb 220.353†	99.5	-2.8	-0.7298 µg/L	-0.7298 ppb	17:05:22

2	S 181.975 Axial†	20.2	4.3	19.053 µg/L	19.053 ppb	17:05:22
2	Sb 206.836†	24.6	-3.6	-3.5810 µg/L	-3.5810 ppb	17:05:22
2	Se 196.026†	10.7	-5.7	-8.7427 µg/L	-8.7427 ppb	17:05:22
2	SiO2†	1253.5	-60.7	-13.065 µg/L	-13.065 ppb	17:05:01
2	Si 251.611†	291.0	-36.8	-3.0237 µg/L	-3.0237 ppb	17:05:22
2	Sn 189.927†	-0.9	-0.0	-0.0009 µg/L	-0.0009 ppb	17:05:22
2	Ti 334.940†	142.1	18.7	0.0441 µg/L	0.0441 ppb	17:05:01
2	Tl 190.801†	-21.2	4.2	5.8568 µg/L	5.8568 ppb	17:05:22
2	U 409.014†	-66.1	-9.1	-0.8270 µg/L	-0.8270 ppb	17:05:01
2	V 292.402†	-52.0	-5.1	-0.0519 µg/L	-0.0519 ppb	17:05:01
2	Zn 213.857†	477.8	-22.2	-0.5493 µg/L	-0.5493 ppb	17:05:22
3	Sc RADIAL	56062.3	56062.3	103 %		17:03:53
3	Al 396.153Radial†	-13.3	-2.8	-2.1100 µg/L	-2.1100 ppb	17:03:53
3	Ca 317.933Radial†	193.5	9.2	8.6834 µg/L	8.6834 ppb	17:04:13
3	Fe 238.204 Radial†	13.9	-1.0	-8.5236 µg/L	-8.5236 ppb	17:04:13
3	K 766.490 Radial†	145.6	13.3	9.4734 µg/L	9.4734 ppb	17:03:53
3	Mg 279.077 IEC†	12.4	0.8	7.7063 µg/L	7.7063 ppb	17:04:13
3	Na 589.592 Radial†	762.5	200.4	65.960 µg/L	65.960 ppb	17:03:53
3	Sr 421.552†	41.6	1.0	0.0099 µg/L	0.0099 ppb	17:03:53
3	Sc 361.383	1996457.8	1996457.8	104.54 %		17:05:28
3	Y 371.029	1367454.7	1367454.7	104.39 %		17:05:28
3	Ag 328.068†	-552.2	36.3	0.2878 µg/L	0.2878 ppb	17:05:33
3	As 188.979†	-1.4	-2.4	-4.7806 µg/L	-4.7806 ppb	17:05:54
3	B 249.677†	316.6	-28.6	-1.2466 µg/L	-1.2466 ppb	17:05:54
3	Ba 233.527†	-26.5	0.6	0.0163 µg/L	0.0163 ppb	17:05:54
3	Be 313.107†	-3498.2	94.1	0.0615 µg/L	0.0615 ppb	17:05:33
3	Cd 226.502†	-139.5	8.7	0.2407 µg/L	0.2407 ppb	17:05:54
3	Co 228.616†	-2.0	6.9	0.3417 µg/L	0.3417 ppb	17:05:54
3	Cr 267.716†	-37.2	16.7	0.3684 µg/L	0.3684 ppb	17:05:54
3	Cu 324.752†	2465.1	-128.0	-0.8950 µg/L	-0.8950 ppb	17:05:33
3	Mn 257.610†	-235.5	18.8	0.0637 µg/L	0.0637 ppb	17:05:54
3	Mo 202.031†	0.7	8.2	0.8795 µg/L	0.8795 ppb	17:05:54
3	Ni 231.604†	298.8	-16.4	-0.8963 µg/L	-0.8963 ppb	17:05:54
3	P 214.914†	31.0	2.0	4.4888 µg/L	4.4888 ppb	17:05:54
3	Pb 220.353†	112.9	10.8	2.8917 µg/L	2.8917 ppb	17:05:54
3	S 181.975 Axial†	16.6	1.1	4.7192 µg/L	4.7192 ppb	17:05:54
3	Sb 206.836†	24.2	-3.9	-3.7807 µg/L	-3.7807 ppb	17:05:54
3	Se 196.026†	10.9	-5.4	-8.2970 µg/L	-8.2970 ppb	17:05:54
3	SiO2†	1240.9	-63.0	-13.561 µg/L	-13.561 ppb	17:05:33
3	Si 251.611†	299.0	-26.9	-2.2074 µg/L	-2.2074 ppb	17:05:54
3	Sn 189.927†	0.3	1.1	0.5288 µg/L	0.5288 ppb	17:05:54
3	Ti 334.940†	59.1	-59.6	-0.1438 µg/L	-0.1438 ppb	17:05:33
3	Tl 190.801†	-24.5	0.9	1.2389 µg/L	1.2389 ppb	17:05:54
3	U 409.014†	-14.3	40.0	3.6190 µg/L	3.6190 ppb	17:05:33
3	V 292.402†	-38.2	7.6	0.0916 µg/L	0.0916 ppb	17:05:33
3	Zn 213.857†	475.0	-21.1	-0.5227 µg/L	-0.5227 ppb	17:05:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2012821.6	105.39 %	0.858			0.81%
Sc RADIAL	56304.4	103 %	0.4			0.39%
Y 371.029	1377998.2	105.20 %	0.821			0.78%
Ag 328.068†	19.7	0.1572 µg/L	0.11730	0.1572 ppb	0.11730	74.62%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.1	-0.8207 µg/L	14.45235	-0.8207 ppb	14.45235	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.1	-2.0804 µg/L	3.52609	-2.0804 ppb	3.52609	169.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-30.5	-1.3329 µg/L	0.24603	-1.3329 ppb	0.24603	18.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.1	0.0547 µg/L	0.06331	0.0547 ppb	0.06331	115.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	65.3	0.0426 µg/L	0.02720	0.0426 ppb	0.02720	63.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.6	9.0232 µg/L	2.68752	9.0232 ppb	2.68752	29.78%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.7	0.1549 µg/L	0.15521	0.1549 ppb	0.15521	100.22%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.5	-0.1230 µg/L	0.44196	-0.1230 ppb	0.44196	359.31%

QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	10.1	0.2228 µg/L	0.13336	0.2228 ppb	0.13336	59.87%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-138.9	-0.9698 µg/L	0.08678	-0.9698 ppb	0.08678	8.95%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	0.3	2.3437 µg/L	14.27846	2.3437 ppb	14.27846	609.22%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	38.9	27.645 µg/L	22.7308	27.645 ppb	22.7308	82.22%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	2.1	19.874 µg/L	17.5054	19.874 ppb	17.5054	88.08%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	11.6	0.0396 µg/L	0.02217	0.0396 ppb	0.02217	55.91%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	5.0	0.5297 µg/L	0.32865	0.5297 ppb	0.32865	62.05%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	212.1	69.819 µg/L	4.7822	69.819 ppb	4.7822	6.85%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-16.7	-0.9128 µg/L	0.03120	-0.9128 ppb	0.03120	3.42%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	0.7	1.6710 µg/L	7.05748	1.6710 ppb	7.05748	422.34%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	0.5	0.1472 µg/L	2.42781	0.1472 ppb	2.42781	>999.9%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	3.3	14.607 µg/L	8.5775	14.607 ppb	8.5775	58.72%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	-3.1	-3.0247 µg/L	1.14085	-3.0247 ppb	1.14085	37.72%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-3.9	-6.0037 µg/L	4.36372	-6.0037 ppb	4.36372	72.68%			
QC value within limits for Se 196.026 Recovery = Not calculated									
SiO2†	-70.3	-15.131 µg/L	3.1599	-15.131 ppb	3.1599	20.88%			
QC value within limits for SiO2 Recovery = Not calculated									
Si 251.611†	-35.6	-2.9252 µg/L	0.67407	-2.9252 ppb	0.67407	23.04%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	-0.6	-0.2671 µg/L	0.95712	-0.2671 ppb	0.95712	358.38%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	-0.4	-0.0043 µg/L	0.06861	-0.0043 ppb	0.06861	>999.9%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	-4.5	-0.0122 µg/L	0.11438	-0.0122 ppb	0.11438	935.94%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	2.9	4.0021 µg/L	2.43930	4.0021 ppb	2.43930	60.95%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	5.9	0.5309 µg/L	2.68081	0.5309 ppb	2.68081	504.91%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	11.1	0.1233 µg/L	0.19295	0.1233 ppb	0.19295	156.48%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-22.0	-0.5458 µg/L	0.02154	-0.5458 ppb	0.02154	3.95%			
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: 1

Date Collected: 2/11/2010 17:27:43

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	59035.7	59035.7	108 %		17:28:20
1	Al 396.153Radial†	6783.5	6281.0	4671.2 µg/L	4671.2 ppb	17:28:41
1	Ca 317.933Radial†	5601.2	4998.8	4706.7 µg/L	4706.7 ppb	17:28:41
1	Fe 238.204 Radial†	616.0	555.0	4714.2 µg/L	4714.2 ppb	17:28:41
1	K 766.490 Radial†	7145.2	6476.8	4603.7 µg/L	4603.7 ppb	17:28:20
1	Mg 279.077 IEC†	569.6	515.2	4798.3 µg/L	4798.3 ppb	17:28:41
1	Na 589.592 Radial†	30872.0	27997.1	9216.7 µg/L	9216.7 ppb	17:28:20
1	Sr 421.552†	47604.8	43967.8	455.78 µg/L	455.78 ppb	17:28:20
1	Sc 361.383	2041194.6	2041194.6	106.88 %		17:29:44
1	Y 371.029	1394791.7	1394791.7	106.48 %		17:29:44
1	Ag 328.068†	63072.7	59578.4	476.23 µg/L	476.23 ppb	17:29:50
1	As 188.979†	267.6	249.3	486.27 µg/L	486.27 ppb	17:30:10
1	B 249.677†	11989.2	10886.2	474.07 µg/L	474.07 ppb	17:29:50
1	Ba 233.527†	19747.0	18502.3	482.64 µg/L	482.64 ppb	17:29:50
1	Be 313.107†	767703.3	721740.7	471.16 µg/L	471.16 ppb	17:29:44
1	Cd 226.502†	18704.8	17643.2	486.70 µg/L	486.70 ppb	17:29:50
1	Co 228.616†	10605.3	9931.7	488.25 µg/L	488.25 ppb	17:29:50
1	Cr 267.716†	23632.0	22163.6	487.82 µg/L	487.82 ppb	17:29:50
1	Cu 324.752†	76228.6	68837.1	481.50 µg/L	481.50 ppb	17:29:50
1	Mn 257.610†	148178.1	138886.7	481.38 µg/L	481.38 ppb	17:29:44
1	Mo 202.031†	4955.0	4643.6	495.75 µg/L	495.75 ppb	17:30:10
1	Ni 231.604†	9868.1	8930.9	487.78 µg/L	487.78 ppb	17:29:50
1	P 214.914†	1270.5	1161.1	2447.3 µg/L	2447.3 ppb	17:30:10
1	Pb 220.353†	2082.6	1851.4	494.18 µg/L	494.18 ppb	17:30:10
1	S 181.975 Axial†	249.9	219.0	959.68 µg/L	959.68 ppb	17:30:10
1	Sb 206.836†	563.4	500.2	494.49 µg/L	494.49 ppb	17:30:10
1	Se 196.026†	362.5	323.3	500.24 µg/L	500.24 ppb	17:30:10
1	SiO2†	26645.9	23681.2	5099.9 µg/L	5099.9 ppb	17:29:50
1	Si 251.611†	31439.9	29103.8	2392.5 µg/L	2392.5 ppb	17:29:50
1	Sn 189.927†	1158.8	1085.1	499.11 µg/L	499.11 ppb	17:30:10
1	Ti 334.940†	206788.8	193365.5	464.82 µg/L	464.82 ppb	17:29:44
1	Tl 190.801†	353.5	355.1	501.20 µg/L	501.20 ppb	17:30:10
1	U 409.014†	5796.1	5476.7	494.90 µg/L	494.90 ppb	17:29:50
1	V 292.402†	48354.5	45287.0	488.65 µg/L	488.65 ppb	17:29:50
1	Zn 213.857†	21383.2	19531.6	484.30 µg/L	484.30 ppb	17:29:50
2	Sc RADIAL	57479.6	57479.6	105 %		17:28:46
2	Al 396.153Radial†	6775.5	6443.2	4792.2 µg/L	4792.2 ppb	17:29:07
2	Ca 317.933Radial†	5568.2	5107.6	4809.2 µg/L	4809.2 ppb	17:29:07
2	Fe 238.204 Radial†	613.4	567.9	4823.2 µg/L	4823.2 ppb	17:29:07
2	K 766.490 Radial†	7368.3	6867.5	4881.4 µg/L	4881.4 ppb	17:28:46
2	Mg 279.077 IEC†	569.1	529.1	4927.1 µg/L	4927.1 ppb	17:29:07
2	Na 589.592 Radial†	31686.3	29543.0	9725.6 µg/L	9725.6 ppb	17:28:46
2	Sr 421.552†	49060.1	46540.9	482.45 µg/L	482.45 ppb	17:28:46
2	Sc 361.383	2046028.0	2046028.0	107.13 %		17:30:18
2	Y 371.029	1397859.6	1397859.6	106.71 %		17:30:18
2	Ag 328.068†	62181.8	58607.4	468.48 µg/L	468.48 ppb	17:30:23
2	As 188.979†	270.5	251.3	490.33 µg/L	490.33 ppb	17:30:44
2	B 249.677†	11883.0	10760.6	468.51 µg/L	468.51 ppb	17:30:23
2	Ba 233.527†	19447.6	18179.1	474.21 µg/L	474.21 ppb	17:30:23
2	Be 313.107†	766991.4	719379.3	469.62 µg/L	469.62 ppb	17:30:18
2	Cd 226.502†	18417.3	17333.6	478.14 µg/L	478.14 ppb	17:30:23
2	Co 228.616†	10411.2	9727.0	478.18 µg/L	478.18 ppb	17:30:23
2	Cr 267.716†	23232.1	21738.1	478.45 µg/L	478.45 ppb	17:30:23
2	Cu 324.752†	75095.1	67610.5	472.94 µg/L	472.94 ppb	17:30:23
2	Mn 257.610†	147694.9	138108.1	478.69 µg/L	478.69 ppb	17:30:18
2	Mo 202.031†	4924.2	4604.0	491.52 µg/L	491.52 ppb	17:30:44
2	Ni 231.604†	9689.5	8742.4	477.48 µg/L	477.48 ppb	17:30:23
2	P 214.914†	1255.9	1144.7	2412.6 µg/L	2412.6 ppb	17:30:44
2	Pb 220.353†	2059.1	1824.8	487.10 µg/L	487.10 ppb	17:30:44

2	S 181.975 Axial†	252.0	220.4	965.86 µg/L	965.86 ppb	17:30:44
2	Sb 206.836†	552.5	488.7	483.25 µg/L	483.25 ppb	17:30:44
2	Se 196.026†	360.1	320.3	495.71 µg/L	495.71 ppb	17:30:44
2	SiO2†	26270.0	23271.4	5011.6 µg/L	5011.6 ppb	17:30:23
2	Si 251.611†	31001.1	28624.7	2353.1 µg/L	2353.1 ppb	17:30:23
2	Sn 189.927†	1147.6	1072.1	493.14 µg/L	493.14 ppb	17:30:44
2	Ti 334.940†	206329.6	192479.8	462.68 µg/L	462.68 ppb	17:30:18
2	Tl 190.801†	343.3	344.8	486.80 µg/L	486.80 ppb	17:30:44
2	U 409.014†	5690.4	5365.3	484.79 µg/L	484.79 ppb	17:30:23
2	V 292.402†	47623.9	44498.2	480.19 µg/L	480.19 ppb	17:30:23
2	Zn 213.857†	21043.3	19167.1	475.24 µg/L	475.24 ppb	17:30:23
3	Sc RADIAL	58545.2	58545.2	107 %		17:29:12
3	Al 396.153Radial†	6838.5	6384.8	4750.3 µg/L	4750.3 ppb	17:29:33
3	Ca 317.933Radial†	5643.2	5081.3	4784.4 µg/L	4784.4 ppb	17:29:33
3	Fe 238.204 Radial†	621.5	564.8	4796.6 µg/L	4796.6 ppb	17:29:33
3	K 766.490 Radial†	7265.1	6643.9	4722.5 µg/L	4722.5 ppb	17:29:12
3	Mg 279.077 IEC†	574.9	524.6	4884.3 µg/L	4884.3 ppb	17:29:33
3	Na 589.592 Radial†	31113.3	28461.2	9369.5 µg/L	9369.5 ppb	17:29:12
3	Sr 421.552†	48089.7	44788.5	464.29 µg/L	464.29 ppb	17:29:12
3	Sc 361.383	2017377.3	2017377.3	105.63 %		17:30:51
3	Y 371.029	1378304.1	1378304.1	105.22 %		17:30:51
3	Ag 328.068†	59471.1	56865.5	454.46 µg/L	454.46 ppb	17:30:57
3	As 188.979†	229.9	216.5	422.47 µg/L	422.47 ppb	17:31:17
3	B 249.677†	11339.4	10403.4	452.85 µg/L	452.85 ppb	17:30:57
3	Ba 233.527†	18247.7	17301.0	451.29 µg/L	451.29 ppb	17:30:57
3	Be 313.107†	738207.7	702297.7	458.47 µg/L	458.47 ppb	17:30:51
3	Cd 226.502†	17185.8	16411.8	452.68 µg/L	452.68 ppb	17:30:57
3	Co 228.616†	9649.4	9143.9	449.43 µg/L	449.43 ppb	17:30:57
3	Cr 267.716†	20989.9	19923.4	438.52 µg/L	438.52 ppb	17:30:57
3	Cu 324.752†	69862.4	63652.3	445.29 µg/L	445.29 ppb	17:30:57
3	Mn 257.610†	142669.2	135308.3	469.00 µg/L	469.00 ppb	17:30:51
3	Mo 202.031†	4082.7	3872.6	413.47 µg/L	413.47 ppb	17:31:17
3	Ni 231.604†	8980.8	8199.9	447.86 µg/L	447.86 ppb	17:30:57
3	P 214.914†	1067.7	983.2	2067.7 µg/L	2067.7 ppb	17:31:17
3	Pb 220.353†	1798.7	1605.6	428.46 µg/L	428.46 ppb	17:31:17
3	S 181.975 Axial†	223.6	196.9	862.47 µg/L	862.47 ppb	17:31:17
3	Sb 206.836†	480.2	427.6	422.29 µg/L	422.29 ppb	17:31:17
3	Se 196.026†	311.3	278.8	432.49 µg/L	432.49 ppb	17:31:17
3	SiO2†	24862.0	22286.7	4799.6 µg/L	4799.6 ppb	17:30:57
3	Si 251.611†	29262.2	27389.5	2251.6 µg/L	2251.6 ppb	17:30:57
3	Sn 189.927†	942.0	892.7	410.61 µg/L	410.61 ppb	17:31:17
3	Ti 334.940†	197920.3	187254.0	450.12 µg/L	450.12 ppb	17:30:51
3	Tl 190.801†	315.4	322.9	456.18 µg/L	456.18 ppb	17:31:17
3	U 409.014†	5127.6	4907.9	443.39 µg/L	443.39 ppb	17:30:57
3	V 292.402†	43917.4	41620.5	448.79 µg/L	448.79 ppb	17:30:57
3	Zn 213.857†	19595.2	18075.2	448.15 µg/L	448.15 ppb	17:30:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2034866.6	106.55 %	0.803			0.75%
Sc RADIAL	58353.5	107 %	1.5			1.36%
Y 371.029	1390318.5	106.14 %	0.803			0.76%
Ag 328.068†	58350.4	466.39 µg/L	11.039	466.39 ppb	11.039	2.37%
QC value within limits for Ag 328.068 Recovery = 93.28%						
Al 396.153Radial†	6369.7	4737.9 µg/L	61.46	4737.9 ppb	61.46	1.30%
QC value within limits for Al 396.153Radial Recovery = 94.76%						
As 188.979†	239.1	466.36 µg/L	38.059	466.36 ppb	38.059	8.16%
QC value within limits for As 188.979 Recovery = 93.27%						
B 249.677†	10683.4	465.15 µg/L	11.003	465.15 ppb	11.003	2.37%
QC value within limits for B 249.677 Recovery = 93.03%						
Ba 233.527†	17994.1	469.38 µg/L	16.223	469.38 ppb	16.223	3.46%
QC value within limits for Ba 233.527 Recovery = 93.88%						
Be 313.107†	714472.6	466.42 µg/L	6.926	466.42 ppb	6.926	1.48%
QC value within limits for Be 313.107 Recovery = 93.28%						
Ca 317.933Radial†	5062.6	4766.7 µg/L	53.48	4766.7 ppb	53.48	1.12%
QC value within limits for Ca 317.933Radial Recovery = 95.33%						
Cd 226.502†	17129.5	472.51 µg/L	17.696	472.51 ppb	17.696	3.75%
QC value within limits for Cd 226.502 Recovery = 94.50%						
Co 228.616†	9600.9	471.95 µg/L	20.142	471.95 ppb	20.142	4.27%

Cr	267.716†	21275.0	468.26 µg/L	26.182	468.26 ppb	26.182	5.59%
Cu	324.752†	66699.9	466.58 µg/L	18.924	466.58 ppb	18.924	4.06%
Fe	238.204 Radial†	562.6	4778.0 µg/L	56.85	4778.0 ppb	56.85	1.19%
K	766.490 Radial†	6662.7	4735.8 µg/L	139.33	4735.8 ppb	139.33	2.94%
Mg	279.077 IEC†	523.0	4869.9 µg/L	65.60	4869.9 ppb	65.60	1.35%
Mn	257.610†	137434.4	476.36 µg/L	6.514	476.36 ppb	6.514	1.37%
Mo	202.031†	4373.4	466.91 µg/L	46.335	466.91 ppb	46.335	9.92%
Na	589.592 Radial†	28667.1	9437.3 µg/L	261.13	9437.3 ppb	261.13	2.77%
Ni	231.604†	8624.4	471.04 µg/L	20.725	471.04 ppb	20.725	4.40%
P	214.914†	1096.3	2309.2 µg/L	209.89	2309.2 ppb	209.89	9.09%
Pb	220.353†	1760.6	469.91 µg/L	36.070	469.91 ppb	36.070	7.68%
S	181.975 Axial†	212.1	929.34 µg/L	57.991	929.34 ppb	57.991	6.24%
Sb	206.836†	472.2	466.68 µg/L	38.846	466.68 ppb	38.846	8.32%
Se	196.026†	307.5	476.15 µg/L	37.872	476.15 ppb	37.872	7.95%
SiO2†		23079.8	4970.4 µg/L	154.36	4970.4 ppb	154.36	3.11%
Si	251.611†	28372.7	2332.4 µg/L	72.71	2332.4 ppb	72.71	3.12%
Sn	189.927†	1016.6	467.62 µg/L	49.463	467.62 ppb	49.463	10.58%
Sr	421.552†	45099.0	467.50 µg/L	13.625	467.50 ppb	13.625	2.91%
Ti	334.940†	191033.1	459.21 µg/L	7.946	459.21 ppb	7.946	1.73%
Tl	190.801†	340.9	481.40 µg/L	22.992	481.40 ppb	22.992	4.78%
U	409.014†	5250.0	474.36 µg/L	27.295	474.36 ppb	27.295	5.75%
V	292.402†	43801.9	472.54 µg/L	21.006	472.54 ppb	21.006	4.45%
Zn	213.857†	18924.6	469.23 µg/L	18.806	469.23 ppb	18.806	4.01%

QC value within limits for Co 228.616 Recovery = 94.39%

QC value within limits for Cr 267.716 Recovery = 93.65%

QC value within limits for Cu 324.752 Recovery = 93.32%

QC value within limits for Fe 238.204 Radial Recovery = 95.56%

QC value within limits for K 766.490 Radial Recovery = 94.72%

QC value within limits for Mg 279.077 IEC Recovery = 97.40%

QC value within limits for Mn 257.610 Recovery = 95.27%

QC value within limits for Mo 202.031 Recovery = 93.38%

QC value within limits for Na 589.592 Radial Recovery = 94.37%

QC value within limits for Ni 231.604 Recovery = 94.21%

QC value within limits for P 214.914 Recovery = 92.37%

QC value within limits for Pb 220.353 Recovery = 93.98%

QC value within limits for S 181.975 Axial Recovery = 92.93%

QC value within limits for Sb 206.836 Recovery = 93.34%

QC value within limits for Se 196.026 Recovery = 95.23%

QC value within limits for SiO2 Recovery = 92.95%

QC value within limits for Si 251.611 Recovery = 93.30%

QC value within limits for Sn 189.927 Recovery = 93.52%

QC value within limits for Sr 421.552 Recovery = 93.50%

QC value within limits for Ti 334.940 Recovery = 91.84%

QC value within limits for Tl 190.801 Recovery = 96.28%

QC value within limits for U 409.014 Recovery = 94.87%

QC value within limits for V 292.402 Recovery = 94.51%

QC value within limits for Zn 213.857 Recovery = 93.85%

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 2/11/2010 17:31:26
 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	57249.4	57249.4	105 %		17:32:01
1	Al 396.153Radial†	-19.1	-8.1	-6.0314 µg/L	-6.0314 ppb	17:32:01
1	Ca 317.933Radial†	186.6	-1.3	-1.1941 µg/L	-1.1941 ppb	17:32:21
1	Fe 238.204 Radial†	16.2	0.9	8.0275 µg/L	8.0275 ppb	17:32:21
1	K 766.490 Radial†	205.8	67.8	48.166 µg/L	48.166 ppb	17:32:01
1	Mg 279.077 IEC†	11.8	-0.0	-0.3578 µg/L	-0.3578 ppb	17:32:21
1	Na 589.592 Radial†	713.1	137.9	45.390 µg/L	45.390 ppb	17:32:01
1	Sr 421.552†	47.1	5.3	0.0553 µg/L	0.0553 ppb	17:32:01
1	Sc 361.383	2021263.0	2021263.0	105.83 %		17:33:23
1	Y 371.029	1385458.4	1385458.4	105.77 %		17:33:23
1	Ag 328.068†	-548.3	46.5	0.3696 µg/L	0.3696 ppb	17:33:29
1	As 188.979†	-3.1	-4.1	-8.0437 µg/L	-8.0437 ppb	17:33:50
1	B 249.677†	328.8	-20.8	-0.9109 µg/L	-0.9109 ppb	17:33:50
1	Ba 233.527†	-23.9	3.4	0.0895 µg/L	0.0895 ppb	17:33:50
1	Be 313.107†	-3534.2	101.1	0.0660 µg/L	0.0660 ppb	17:33:29
1	Cd 226.502†	-135.6	14.0	0.3833 µg/L	0.3833 ppb	17:33:50
1	Co 228.616†	-7.8	1.5	0.0715 µg/L	0.0715 ppb	17:33:50
1	Cr 267.716†	-39.7	14.9	0.3275 µg/L	0.3275 ppb	17:33:29
1	Cu 324.752†	2441.6	-179.0	-1.2495 µg/L	-1.2495 ppb	17:33:29
1	Mn 257.610†	-227.7	28.9	0.1013 µg/L	0.1013 ppb	17:33:50
1	Mo 202.031†	-11.3	-3.1	-0.3352 µg/L	-0.3352 ppb	17:33:50
1	Ni 231.604†	297.1	-21.4	-1.1721 µg/L	-1.1721 ppb	17:33:50
1	P 214.914†	29.1	-0.1	-0.1206 µg/L	-0.1206 ppb	17:33:50
1	Pb 220.353†	93.1	-9.2	-2.4716 µg/L	-2.4716 ppb	17:33:50
1	S 181.975 Axial†	17.0	1.2	5.2600 µg/L	5.2600 ppb	17:33:50
1	Sb 206.836†	21.2	-7.0	-6.8579 µg/L	-6.8579 ppb	17:33:50
1	Se 196.026†	17.1	0.4	0.5587 µg/L	0.5587 ppb	17:33:50
1	SiO2†	1257.7	-61.7	-13.286 µg/L	-13.286 ppb	17:33:29
1	Si 251.611†	315.2	-15.0	-1.2350 µg/L	-1.2350 ppb	17:33:50
1	Sn 189.927†	-0.7	0.2	0.0875 µg/L	0.0875 ppb	17:33:50
1	Ti 334.940†	99.4	-22.2	-0.0533 µg/L	-0.0533 ppb	17:33:29
1	Tl 190.801†	-25.0	0.6	0.8769 µg/L	0.8769 ppb	17:33:50
1	U 409.014†	-2.8	50.9	4.6107 µg/L	4.6107 ppb	17:33:29
1	V 292.402†	-42.3	4.3	0.0496 µg/L	0.0496 ppb	17:33:29
1	Zn 213.857†	478.9	-23.0	-0.5682 µg/L	-0.5682 ppb	17:33:50
2	Sc RADIAL	57058.0	57058.0	105 %		17:32:27
2	Al 396.153Radial†	-2.2	8.1	5.9887 µg/L	5.9887 ppb	17:32:27
2	Ca 317.933Radial†	185.4	-1.8	-1.6973 µg/L	-1.6973 ppb	17:32:47
2	Fe 238.204 Radial†	16.9	1.6	13.808 µg/L	13.808 ppb	17:32:47
2	K 766.490 Radial†	159.2	23.8	16.947 µg/L	16.947 ppb	17:32:27
2	Mg 279.077 IEC†	16.4	4.4	41.355 µg/L	41.355 ppb	17:32:47
2	Na 589.592 Radial†	724.2	150.8	49.634 µg/L	49.634 ppb	17:32:27
2	Sr 421.552†	-4.4	-43.8	-0.4540 µg/L	-0.4540 ppb	17:32:27
2	Sc 361.383	2001081.9	2001081.9	104.78 %		17:33:56
2	Y 371.029	1372125.9	1372125.9	104.75 %		17:33:56
2	Ag 328.068†	-553.2	36.5	0.2946 µg/L	0.2946 ppb	17:34:01
2	As 188.979†	-0.6	-1.7	-3.3761 µg/L	-3.3761 ppb	17:34:22
2	B 249.677†	320.5	-25.5	-1.1231 µg/L	-1.1231 ppb	17:34:22
2	Ba 233.527†	-11.0	15.5	0.4048 µg/L	0.4048 ppb	17:34:22
2	Be 313.107†	-3526.3	74.9	0.0489 µg/L	0.0489 ppb	17:34:01
2	Cd 226.502†	-133.8	14.4	0.3950 µg/L	0.3950 ppb	17:34:22
2	Co 228.616†	-11.0	-1.6	-0.0801 µg/L	-0.0801 ppb	17:34:22
2	Cr 267.716†	-44.3	10.1	0.2231 µg/L	0.2231 ppb	17:34:01
2	Cu 324.752†	2455.1	-143.0	-0.9967 µg/L	-0.9967 ppb	17:34:01
2	Mn 257.610†	-230.3	24.3	0.0842 µg/L	0.0842 ppb	17:34:22
2	Mo 202.031†	-2.3	5.3	0.5710 µg/L	0.5710 ppb	17:34:22
2	Ni 231.604†	304.4	-11.7	-0.6402 µg/L	-0.6402 ppb	17:34:22
2	P 214.914†	29.3	0.4	0.8548 µg/L	0.8548 ppb	17:34:22
2	Pb 220.353†	101.4	-0.5	-0.1165 µg/L	-0.1165 ppb	17:34:22

2	S 181.975 Axial†	19.4	3.7	16.024 µg/L	16.024 ppb	17:34:22
2	Sb 206.836†	27.6	-0.6	-0.5726 µg/L	-0.5726 ppb	17:34:22
2	Se 196.026†	16.9	0.3	0.5139 µg/L	0.5139 ppb	17:34:22
2	SiO2†	1231.1	-75.1	-16.163 µg/L	-16.163 ppb	17:34:01
2	Si 251.611†	308.3	-18.6	-1.5330 µg/L	-1.5330 ppb	17:34:22
2	Sn 189.927†	-2.5	-1.5	-0.6783 µg/L	-0.6783 ppb	17:34:22
2	Ti 334.940†	155.7	32.5	0.0749 µg/L	0.0749 ppb	17:34:01
2	Tl 190.801†	-24.6	0.8	1.0677 µg/L	1.0677 ppb	17:34:22
2	U 409.014†	-70.7	-13.8	-1.2553 µg/L	-1.2553 ppb	17:34:01
2	V 292.402†	13.1	56.7	0.6099 µg/L	0.6099 ppb	17:34:01
2	Zn 213.857†	482.3	-15.3	-0.3800 µg/L	-0.3800 ppb	17:34:22
3	Sc RADIAL	57391.7	57391.7	105 %		17:32:53
3	Al 396.153Radial†	-24.1	-12.7	-9.5161 µg/L	-9.5161 ppb	17:32:53
3	Ca 317.933Radial†	189.2	0.7	0.6854 µg/L	0.6854 ppb	17:33:13
3	Fe 238.204 Radial†	14.2	-1.0	-8.3318 µg/L	-8.3318 ppb	17:33:13
3	K 766.490 Radial†	170.0	33.2	23.601 µg/L	23.601 ppb	17:32:53
3	Mg 279.077 IEC†	13.6	1.6	15.113 µg/L	15.113 ppb	17:33:13
3	Na 589.592 Radial†	706.7	130.1	42.833 µg/L	42.833 ppb	17:32:53
3	Sr 421.552†	21.4	-19.2	-0.1993 µg/L	-0.1993 ppb	17:32:53
3	Sc 361.383	2035877.5	2035877.5	106.60 %		17:34:28
3	Y 371.029	1396783.1	1396783.1	106.63 %		17:34:28
3	Ag 328.068†	-558.0	41.1	0.3273 µg/L	0.3273 ppb	17:34:33
3	As 188.979†	-5.7	-6.5	-12.714 µg/L	-12.714 ppb	17:34:54
3	B 249.677†	310.2	-40.5	-1.7628 µg/L	-1.7628 ppb	17:34:54
3	Ba 233.527†	-23.8	3.7	0.0975 µg/L	0.0975 ppb	17:34:54
3	Be 313.107†	-3295.5	348.9	0.2278 µg/L	0.2278 ppb	17:34:33
3	Cd 226.502†	-134.4	16.1	0.4439 µg/L	0.4439 ppb	17:34:54
3	Co 228.616†	-16.8	-6.9	-0.3385 µg/L	-0.3385 ppb	17:34:54
3	Cr 267.716†	-31.9	22.4	0.4933 µg/L	0.4933 ppb	17:34:33
3	Cu 324.752†	2431.1	-205.5	-1.4364 µg/L	-1.4364 ppb	17:34:33
3	Mn 257.610†	-224.1	33.9	0.1156 µg/L	0.1156 ppb	17:34:54
3	Mo 202.031†	2.2	9.6	1.0266 µg/L	1.0266 ppb	17:34:54
3	Ni 231.604†	311.7	-9.8	-0.5337 µg/L	-0.5337 ppb	17:34:54
3	P 214.914†	26.4	-2.8	-5.9346 µg/L	-5.9346 ppb	17:34:54
3	Pb 220.353†	98.3	-5.0	-1.3370 µg/L	-1.3370 ppb	17:34:54
3	S 181.975 Axial†	14.7	-1.0	-4.4979 µg/L	-4.4979 ppb	17:34:54
3	Sb 206.836†	25.7	-2.9	-2.8125 µg/L	-2.8125 ppb	17:34:54
3	Se 196.026†	12.1	-4.5	-6.8217 µg/L	-6.8217 ppb	17:34:54
3	SiO2†	1207.8	-117.0	-25.202 µg/L	-25.202 ppb	17:34:33
3	Si 251.611†	320.7	-12.0	-0.9854 µg/L	-0.9854 ppb	17:34:54
3	Sn 189.927†	3.6	4.2	1.9540 µg/L	1.9540 ppb	17:34:54
3	Ti 334.940†	152.2	26.6	0.0629 µg/L	0.0629 ppb	17:34:33
3	Tl 190.801†	-31.1	-4.8	-6.7573 µg/L	-6.7573 ppb	17:34:54
3	U 409.014†	18.4	70.9	6.4223 µg/L	6.4223 ppb	17:34:33
3	V 292.402†	-21.9	23.7	0.2672 µg/L	0.2672 ppb	17:34:33
3	Zn 213.857†	481.8	-23.6	-0.5847 µg/L	-0.5847 ppb	17:34:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2019407.5	105.74 %	0.915			0.87%
Sc RADIAL	57233.0	105 %	0.3			0.29%
Y 371.029	1384789.1	105.72 %	0.942			0.89%
Ag 328.068†	41.4	0.3305 µg/L	0.03757	0.3305 ppb	0.03757	11.37%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.3	-3.1863 µg/L	8.13450	-3.1863 ppb	8.13450	255.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.1	-8.0447 µg/L	4.66908	-8.0447 ppb	4.66908	58.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-28.9	-1.2656 µg/L	0.44348	-1.2656 ppb	0.44348	35.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.6	0.1973 µg/L	0.17977	0.1973 ppb	0.17977	91.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	175.0	0.1143 µg/L	0.09874	0.1143 ppb	0.09874	86.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.8	-0.7353 µg/L	1.25585	-0.7353 ppb	1.25585	170.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.8	0.4074 µg/L	0.03216	0.4074 ppb	0.03216	7.89%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.4	-0.1157 µg/L	0.20732	-0.1157 ppb	0.20732	179.23%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	15.8	0.3480 µg/L	0.13629	0.3480 ppb
			0.13629	39.17%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	-175.8	-1.2276 µg/L	0.22068	-1.2276 ppb
			0.22068	17.98%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	0.5	4.5012 µg/L	11.48343	4.5012 ppb
			11.48343	255.12%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	41.6	29.571 µg/L	16.4438	29.571 ppb
			16.4438	55.61%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	2.0	18.703 µg/L	21.0870	18.703 ppb
			21.0870	112.74%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	29.0	0.1004 µg/L	0.01570	0.1004 ppb
			0.01570	15.64%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	3.9	0.4208 µg/L	0.69318	0.4208 ppb
			0.69318	164.72%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	139.6	45.952 µg/L	3.4354	45.952 ppb
			3.4354	7.48%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	-14.3	-0.7820 µg/L	0.34199	-0.7820 ppb
			0.34199	43.73%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	-0.9	-1.7335 µg/L	3.67082	-1.7335 ppb
			3.67082	211.76%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	-4.9	-1.3084 µg/L	1.17784	-1.3084 ppb
			1.17784	90.02%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	1.3	5.5955 µg/L	10.26528	5.5955 ppb
			10.26528	183.46%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	-3.5	-3.4143 µg/L	3.18555	-3.4143 ppb
			3.18555	93.30%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	-1.3	-1.9164 µg/L	4.24816	-1.9164 ppb
			4.24816	221.68%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	-84.6	-18.217 µg/L	6.2180	-18.217 ppb
			6.2180	34.13%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	-15.2	-1.2511 µg/L	0.27411	-1.2511 ppb
			0.27411	21.91%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	1.0	0.4544 µg/L	1.35398	0.4544 ppb
			1.35398	297.95%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	-19.2	-0.1993 µg/L	0.25463	-0.1993 ppb
			0.25463	127.74%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	12.3	0.0282 µg/L	0.07081	0.0282 ppb
			0.07081	251.28%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	-1.2	-1.6042 µg/L	4.46370	-1.6042 ppb
			4.46370	278.25%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	36.0	3.2592 µg/L	4.01326	3.2592 ppb
			4.01326	123.13%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	28.2	0.3089 µg/L	0.28245	0.3089 ppb
			0.28245	91.44%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	-20.6	-0.5110 µg/L	0.11370	-0.5110 ppb
			0.11370	22.25%

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:03:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57726.1	57726.1	106 %		18:04:22
1	Al 396.153Radial†	6766.7	6407.4	4765.2 µg/L	4765.2 ppb	18:04:22
1	Ca 317.933Radial†	5597.5	5112.8	4814.0 µg/L	4814.0 ppb	18:04:43
1	Fe 238.204 Radial†	618.0	569.7	4839.6 µg/L	4839.6 ppb	18:04:43
1	K 766.490 Radial†	7228.2	6705.1	4766.0 µg/L	4766.0 ppb	18:04:22
1	Mg 279.077 IEC†	567.3	525.0	4889.6 µg/L	4889.6 ppb	18:04:43
1	Na 589.592 Radial†	31079.1	28840.4	9494.4 µg/L	9494.4 ppb	18:04:22
1	Sr 421.552†	47930.5	45274.1	469.32 µg/L	469.32 ppb	18:04:22
1	Sc 361.383	1995865.2	1995865.2	104.50 %		18:05:46
1	Y 371.029	1362757.5	1362757.5	104.03 %		18:05:46
1	Ag 328.068†	63483.9	61312.1	490.10 µg/L	490.10 ppb	18:05:52
1	As 188.979†	273.1	260.2	507.53 µg/L	507.53 ppb	18:06:12
1	B 249.677†	12082.3	11230.0	489.06 µg/L	489.06 ppb	18:05:52
1	Ba 233.527†	19988.9	19153.3	499.62 µg/L	499.62 ppb	18:05:52
1	Be 313.107†	781981.3	751717.1	490.73 µg/L	490.73 ppb	18:05:46
1	Cd 226.502†	18909.7	18236.8	503.08 µg/L	503.08 ppb	18:05:52
1	Co 228.616†	10693.9	10241.8	503.48 µg/L	503.48 ppb	18:05:52
1	Cr 267.716†	23838.7	22863.6	503.22 µg/L	503.22 ppb	18:05:52
1	Cu 324.752†	76544.4	70759.2	494.94 µg/L	494.94 ppb	18:05:52
1	Mn 257.610†	150825.0	144568.3	501.07 µg/L	501.07 ppb	18:05:46
1	Mo 202.031†	4977.2	4770.3	509.27 µg/L	509.27 ppb	18:06:12
1	Ni 231.604†	9935.5	9205.0	502.75 µg/L	502.75 ppb	18:05:52
1	P 214.914†	1265.8	1183.6	2494.1 µg/L	2494.1 ppb	18:06:12
1	Pb 220.353†	2092.9	1905.5	508.60 µg/L	508.60 ppb	18:06:12
1	S 181.975 Axial†	254.0	228.2	999.80 µg/L	999.80 ppb	18:06:12
1	Sb 206.836†	555.5	504.6	498.91 µg/L	498.91 ppb	18:06:12
1	Se 196.026†	366.1	334.5	517.42 µg/L	517.42 ppb	18:06:12
1	SiO2†	26867.3	24459.3	5267.4 µg/L	5267.4 ppb	18:05:52
1	Si 251.611†	31625.0	29949.0	2462.0 µg/L	2462.0 ppb	18:05:52
1	Sn 189.927†	1151.3	1102.5	507.11 µg/L	507.11 ppb	18:06:12
1	Ti 334.940†	210462.3	201274.9	483.84 µg/L	483.84 ppb	18:05:46
1	Tl 190.801†	351.8	360.9	509.62 µg/L	509.62 ppb	18:06:12
1	U 409.014†	5780.2	5584.7	504.65 µg/L	504.65 ppb	18:05:52
1	V 292.402†	48773.6	46715.6	504.04 µg/L	504.04 ppb	18:05:52
1	Zn 213.857†	21610.6	20203.6	500.98 µg/L	500.98 ppb	18:05:52
2	Sc RADIAL	58137.3	58137.3	107 %		18:04:48
2	Al 396.153Radial†	6794.0	6387.8	4750.7 µg/L	4750.7 ppb	18:04:48
2	Ca 317.933Radial†	5592.3	5070.5	4774.2 µg/L	4774.2 ppb	18:05:09
2	Fe 238.204 Radial†	618.1	565.7	4805.7 µg/L	4805.7 ppb	18:05:09
2	K 766.490 Radial†	7287.3	6712.3	4771.1 µg/L	4771.1 ppb	18:04:48
2	Mg 279.077 IEC†	568.2	522.1	4862.2 µg/L	4862.2 ppb	18:05:09
2	Na 589.592 Radial†	31238.6	28782.3	9475.2 µg/L	9475.2 ppb	18:04:48
2	Sr 421.552†	48291.3	45292.3	469.51 µg/L	469.51 ppb	18:04:48
2	Sc 361.383	2007163.9	2007163.9	105.10 %		18:06:19
2	Y 371.029	1370434.0	1370434.0	104.62 %		18:06:19
2	Ag 328.068†	63627.6	61107.0	488.46 µg/L	488.46 ppb	18:06:25
2	As 188.979†	273.7	259.2	505.75 µg/L	505.75 ppb	18:06:46
2	B 249.677†	12114.9	11196.0	487.59 µg/L	487.59 ppb	18:06:25
2	Ba 233.527†	19979.9	19037.1	496.59 µg/L	496.59 ppb	18:06:25
2	Be 313.107†	784264.0	749676.9	489.40 µg/L	489.40 ppb	18:06:19
2	Cd 226.502†	18871.7	18098.7	499.27 µg/L	499.27 ppb	18:06:25
2	Co 228.616†	10694.5	10184.8	500.67 µg/L	500.67 ppb	18:06:25
2	Cr 267.716†	23892.4	22786.3	501.52 µg/L	501.52 ppb	18:06:25
2	Cu 324.752†	76884.7	70670.6	494.32 µg/L	494.32 ppb	18:06:25
2	Mn 257.610†	151108.1	144025.3	499.18 µg/L	499.18 ppb	18:06:19
2	Mo 202.031†	4921.9	4690.8	500.79 µg/L	500.79 ppb	18:06:46
2	Ni 231.604†	9959.3	9174.2	501.07 µg/L	501.07 ppb	18:06:25
2	P 214.914†	1267.5	1178.4	2483.0 µg/L	2483.0 ppb	18:06:46
2	Pb 220.353†	2074.4	1876.6	500.89 µg/L	500.89 ppb	18:06:46

2	S 181.975 Axial†	247.1	220.3	965.20 µg/L	965.20 ppb	18:06:46
2	Sb 206.836†	553.1	499.3	493.56 µg/L	493.56 ppb	18:06:46
2	Se 196.026†	362.2	328.8	508.76 µg/L	508.76 ppb	18:06:46
2	SiO2†	26954.0	24397.1	5254.0 µg/L	5254.0 ppb	18:06:25
2	Si 251.611†	31693.0	29843.4	2453.3 µg/L	2453.3 ppb	18:06:25
2	Sn 189.927†	1148.2	1093.4	502.92 µg/L	502.92 ppb	18:06:46
2	Ti 334.940†	211069.7	200719.2	482.51 µg/L	482.51 ppb	18:06:19
2	Tl 190.801†	350.2	357.5	504.86 µg/L	504.86 ppb	18:06:46
2	U 409.014†	5713.5	5490.1	496.10 µg/L	496.10 ppb	18:06:25
2	V 292.402†	48839.6	46515.7	501.83 µg/L	501.83 ppb	18:06:25
2	Zn 213.857†	21586.8	20064.5	497.52 µg/L	497.52 ppb	18:06:25
3	Sc RADIAL	57420.7	57420.7	105 %		18:05:14
3	Al 396.153Radial†	6887.1	6555.8	4877.6 µg/L	4877.6 ppb	18:05:14
3	Ca 317.933Radial†	5594.0	5137.6	4837.4 µg/L	4837.4 ppb	18:05:34
3	Fe 238.204 Radial†	619.5	574.3	4877.2 µg/L	4877.2 ppb	18:05:34
3	K 766.490 Radial†	7272.3	6783.4	4821.6 µg/L	4821.6 ppb	18:05:14
3	Mg 279.077 IEC†	569.6	530.1	4935.2 µg/L	4935.2 ppb	18:05:34
3	Na 589.592 Radial†	31447.7	29346.9	9661.1 µg/L	9661.1 ppb	18:05:14
3	Sr 421.552†	48895.8	46432.5	481.33 µg/L	481.33 ppb	18:05:14
3	Sc 361.383	2010251.9	2010251.9	105.26 %		18:06:53
3	Y 371.029	1371909.0	1371909.0	104.73 %		18:06:53
3	Ag 328.068†	59865.9	57440.1	459.05 µg/L	459.05 ppb	18:06:58
3	As 188.979†	229.2	216.7	422.67 µg/L	422.67 ppb	18:07:19
3	B 249.677†	11370.0	10470.6	455.76 µg/L	455.76 ppb	18:06:58
3	Ba 233.527†	18395.6	17502.7	456.55 µg/L	456.55 ppb	18:06:58
3	Be 313.107†	741644.3	708039.7	462.22 µg/L	462.22 ppb	18:06:53
3	Cd 226.502†	17275.3	16554.5	456.62 µg/L	456.62 ppb	18:06:58
3	Co 228.616†	9741.1	9263.3	455.31 µg/L	455.31 ppb	18:06:58
3	Cr 267.716†	21256.7	20247.3	445.64 µg/L	445.64 ppb	18:06:58
3	Cu 324.752†	70381.9	64380.2	450.39 µg/L	450.39 ppb	18:06:58
3	Mn 257.610†	143060.5	136158.7	471.95 µg/L	471.95 ppb	18:06:53
3	Mo 202.031†	4127.0	3928.4	419.43 µg/L	419.43 ppb	18:07:19
3	Ni 231.604†	9089.8	8333.5	455.16 µg/L	455.16 ppb	18:06:58
3	P 214.914†	1084.0	1002.2	2108.1 µg/L	2108.1 ppb	18:07:19
3	Pb 220.353†	1818.2	1630.2	435.03 µg/L	435.03 ppb	18:07:19
3	S 181.975 Axial†	224.4	198.4	869.26 µg/L	869.26 ppb	18:07:19
3	Sb 206.836†	480.4	429.5	424.14 µg/L	424.14 ppb	18:07:19
3	Se 196.026†	313.7	282.2	437.85 µg/L	437.85 ppb	18:07:19
3	SiO2†	25019.5	22519.8	4849.8 µg/L	4849.8 ppb	18:06:58
3	Si 251.611†	29405.8	27624.1	2270.8 µg/L	2270.8 ppb	18:06:58
3	Sn 189.927†	955.0	908.2	417.73 µg/L	417.73 ppb	18:07:19
3	Ti 334.940†	198942.9	188889.6	454.05 µg/L	454.05 ppb	18:06:53
3	Tl 190.801†	316.9	325.4	459.73 µg/L	459.73 ppb	18:07:19
3	U 409.014†	5179.0	4973.9	449.35 µg/L	449.35 ppb	18:06:58
3	V 292.402†	44254.0	42087.7	453.84 µg/L	453.84 ppb	18:06:58
3	Zn 213.857†	19673.0	18214.8	451.59 µg/L	451.59 ppb	18:06:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004427.0	104.95 %	0.397			0.38%
Sc RADIAL	57761.4	106 %	0.7			0.62%
Y 371.029	1368366.8	104.46 %	0.375			0.36%
Ag 328.068†	59953.1	479.20 µg/L	17.470	479.20 ppb	17.470	3.65%
QC value within limits for Ag 328.068 Recovery = 95.84%						
Al 396.153Radial†	6450.3	4797.9 µg/L	69.48	4797.9 ppb	69.48	1.45%
QC value within limits for Al 396.153Radial Recovery = 95.96%						
As 188.979†	245.3	478.65 µg/L	48.486	478.65 ppb	48.486	10.13%
QC value within limits for As 188.979 Recovery = 95.73%						
B 249.677†	10965.6	477.47 µg/L	18.814	477.47 ppb	18.814	3.94%
QC value within limits for B 249.677 Recovery = 95.49%						
Ba 233.527†	18564.4	484.26 µg/L	24.039	484.26 ppb	24.039	4.96%
QC value within limits for Ba 233.527 Recovery = 96.85%						
Be 313.107†	736477.9	480.78 µg/L	16.091	480.78 ppb	16.091	3.35%
QC value within limits for Be 313.107 Recovery = 96.16%						
Ca 317.933Radial†	5106.9	4808.5 µg/L	31.95	4808.5 ppb	31.95	0.66%
QC value within limits for Ca 317.933Radial Recovery = 96.17%						
Cd 226.502†	17630.0	486.32 µg/L	25.796	486.32 ppb	25.796	5.30%
QC value within limits for Cd 226.502 Recovery = 97.26%						
Co 228.616†	9896.7	486.49 µg/L	27.038	486.49 ppb	27.038	5.56%

QC value within limits for Co 228.616	Recovery = 97.30%			
Cr 267.716†	21965.7	483.46 µg/L	32.763	6.78%
QC value within limits for Cr 267.716	Recovery = 96.69%			
Cu 324.752†	68603.3	479.88 µg/L	25.545	5.32%
QC value within limits for Cu 324.752	Recovery = 95.98%			
Fe 238.204 Radial†	569.9	4840.8 µg/L	35.77	0.74%
QC value within limits for Fe 238.204 Radial	Recovery = 96.82%			
K 766.490 Radial†	6733.6	4786.2 µg/L	30.77	0.64%
QC value within limits for K 766.490 Radial	Recovery = 95.72%			
Mg 279.077 IEC†	525.8	4895.7 µg/L	36.85	0.75%
QC value within limits for Mg 279.077 IEC	Recovery = 97.91%			
Mn 257.610†	141584.1	490.73 µg/L	16.295	3.32%
QC value within limits for Mn 257.610	Recovery = 98.15%			
Mo 202.031†	4463.2	476.50 µg/L	49.601	10.41%
QC value within limits for Mo 202.031	Recovery = 95.30%			
Na 589.592 Radial†	28989.9	9543.6 µg/L	102.24	1.07%
QC value within limits for Na 589.592 Radial	Recovery = 95.44%			
Ni 231.604†	8904.3	486.32 µg/L	27.004	5.55%
QC value within limits for Ni 231.604	Recovery = 97.26%			
P 214.914†	1121.4	2361.7 µg/L	219.74	9.30%
QC value within limits for P 214.914	Recovery = 94.47%			
Pb 220.353†	1804.1	481.51 µg/L	40.435	8.40%
QC value within limits for Pb 220.353	Recovery = 96.30%			
S 181.975 Axial†	215.6	944.76 µg/L	67.630	7.16%
QC value within limits for S 181.975 Axial	Recovery = 94.48%			
Sb 206.836†	477.8	472.20 µg/L	41.713	8.83%
QC value within limits for Sb 206.836	Recovery = 94.44%			
Se 196.026†	315.2	488.01 µg/L	43.651	8.94%
QC value within limits for Se 196.026	Recovery = 97.60%			
SiO2†	23792.0	5123.7 µg/L	237.37	4.63%
QC value within limits for SiO2	Recovery = 95.82%			
Si 251.611†	29138.9	2395.4 µg/L	107.92	4.51%
QC value within limits for Si 251.611	Recovery = 95.81%			
Sn 189.927†	1034.7	475.92 µg/L	50.437	10.60%
QC value within limits for Sn 189.927	Recovery = 95.18%			
Sr 421.552†	45666.3	473.38 µg/L	6.879	1.45%
QC value within limits for Sr 421.552	Recovery = 94.68%			
Ti 334.940†	196961.2	473.47 µg/L	16.830	3.55%
QC value within limits for Ti 334.940	Recovery = 94.69%			
Tl 190.801†	348.0	491.40 µg/L	27.532	5.60%
QC value within limits for Tl 190.801	Recovery = 98.28%			
U 409.014†	5349.6	483.37 µg/L	29.770	6.16%
QC value within limits for U 409.014	Recovery = 96.67%			
V 292.402†	45106.3	486.57 µg/L	28.365	5.83%
QC value within limits for V 292.402	Recovery = 97.31%			
Zn 213.857†	19494.3	483.36 µg/L	27.567	5.70%
QC value within limits for Zn 213.857	Recovery = 96.67%			

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:07:29

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	56532.0	56532.0	104 %		18:08:03
1	Al 396.153Radial†	-15.4	-4.8	-3.5570 µg/L	-3.5570 ppb	18:08:03
1	Ca 317.933Radial†	184.3	-1.2	-1.1516 µg/L	-1.1516 ppb	18:08:24
1	Fe 238.204 Radial†	15.7	0.7	5.7821 µg/L	5.7821 ppb	18:08:24
1	K 766.490 Radial†	164.9	30.8	21.873 µg/L	21.873 ppb	18:08:03
1	Mg 279.077 IEC†	16.1	4.2	39.497 µg/L	39.497 ppb	18:08:24
1	Na 589.592 Radial†	629.4	65.8	21.647 µg/L	21.647 ppb	18:08:03
1	Sr 421.552†	25.1	-15.3	-0.1589 µg/L	-0.1589 ppb	18:08:03
1	Sc 361.383	1970116.9	1970116.9	103.16 %		18:09:26
1	Y 371.029	1351478.3	1351478.3	103.17 %		18:09:26
1	Ag 328.068†	-586.1	-3.7	-0.0267 µg/L	-0.0267 ppb	18:09:32
1	As 188.979†	0.4	-0.7	-1.4081 µg/L	-1.4081 ppb	18:09:52
1	B 249.677†	319.9	-21.4	-0.9375 µg/L	-0.9375 ppb	18:09:52
1	Ba 233.527†	-23.6	3.1	0.0818 µg/L	0.0818 ppb	18:09:52
1	Be 313.107†	-3504.0	43.7	0.0286 µg/L	0.0286 ppb	18:09:32
1	Cd 226.502†	-151.5	-4.7	-0.1322 µg/L	-0.1322 ppb	18:09:52
1	Co 228.616†	-11.0	-1.8	-0.0886 µg/L	-0.0886 ppb	18:09:52
1	Cr 267.716†	-63.6	-9.3	-0.2036 µg/L	-0.2036 ppb	18:09:32
1	Cu 324.752†	2393.3	-166.0	-1.1590 µg/L	-1.1590 ppb	18:09:32
1	Mn 257.610†	-254.5	-2.6	-0.0100 µg/L	-0.0100 ppb	18:09:52
1	Mo 202.031†	-8.7	-0.9	-0.0948 µg/L	-0.0948 ppb	18:09:52
1	Ni 231.604†	290.0	-21.0	-1.1506 µg/L	-1.1506 ppb	18:09:52
1	P 214.914†	32.8	4.2	9.1562 µg/L	9.1562 ppb	18:09:52
1	Pb 220.353†	95.7	-4.4	-1.1812 µg/L	-1.1812 ppb	18:09:52
1	S 181.975 Axial†	14.0	-1.2	-5.3162 µg/L	-5.3162 ppb	18:09:52
1	Sb 206.836†	31.3	3.4	3.3775 µg/L	3.3775 ppb	18:09:52
1	Se 196.026†	11.2	-4.9	-7.5535 µg/L	-7.5535 ppb	18:09:52
1	SiO2†	1234.7	-53.1	-11.434 µg/L	-11.434 ppb	18:09:32
1	Si 251.611†	295.0	-26.9	-2.2136 µg/L	-2.2136 ppb	18:09:52
1	Sn 189.927†	1.4	2.3	1.0452 µg/L	1.0452 ppb	18:09:52
1	Ti 334.940†	70.3	-48.0	-0.1186 µg/L	-0.1186 ppb	18:09:32
1	Tl 190.801†	-29.3	-4.1	-5.6836 µg/L	-5.6836 ppb	18:09:52
1	U 409.014†	-64.3	-8.7	-0.7862 µg/L	-0.7862 ppb	18:09:32
1	V 292.402†	-16.1	28.6	0.3039 µg/L	0.3039 ppb	18:09:32
1	Zn 213.857†	475.3	-14.8	-0.3645 µg/L	-0.3645 ppb	18:09:52
2	Sc RADIAL	55658.7	55658.7	102 %		18:08:29
2	Al 396.153Radial†	8.4	18.4	13.722 µg/L	13.722 ppb	18:08:29
2	Ca 317.933Radial†	182.4	-0.3	-0.2942 µg/L	-0.2942 ppb	18:08:50
2	Fe 238.204 Radial†	17.1	2.3	19.276 µg/L	19.276 ppb	18:08:50
2	K 766.490 Radial†	186.5	54.5	38.722 µg/L	38.722 ppb	18:08:29
2	Mg 279.077 IEC†	15.0	3.4	31.500 µg/L	31.500 ppb	18:08:50
2	Na 589.592 Radial†	680.0	124.9	41.106 µg/L	41.106 ppb	18:08:29
2	Sr 421.552†	30.6	-9.6	-0.0993 µg/L	-0.0993 ppb	18:08:29
2	Sc 361.383	2007038.7	2007038.7	105.09 %		18:09:58
2	Y 371.029	1377314.4	1377314.4	105.15 %		18:09:58
2	Ag 328.068†	-493.3	95.1	0.7576 µg/L	0.7576 ppb	18:10:04
2	As 188.979†	-1.7	-2.7	-5.3378 µg/L	-5.3378 ppb	18:10:25
2	B 249.677†	329.1	-18.3	-0.8077 µg/L	-0.8077 ppb	18:10:25
2	Ba 233.527†	-25.2	2.0	0.0533 µg/L	0.0533 ppb	18:10:25
2	Be 313.107†	-3351.2	251.6	0.1643 µg/L	0.1643 ppb	18:10:04
2	Cd 226.502†	-144.2	4.9	0.1335 µg/L	0.1335 ppb	18:10:25
2	Co 228.616†	-14.3	-4.7	-0.2334 µg/L	-0.2334 ppb	18:10:25
2	Cr 267.716†	-47.8	6.9	0.1524 µg/L	0.1524 ppb	18:10:04
2	Cu 324.752†	2466.3	-139.3	-0.9702 µg/L	-0.9702 ppb	18:10:04
2	Mn 257.610†	-245.5	10.5	0.0378 µg/L	0.0378 ppb	18:10:25
2	Mo 202.031†	-7.5	0.4	0.0445 µg/L	0.0445 ppb	18:10:25
2	Ni 231.604†	299.7	-17.0	-0.9313 µg/L	-0.9313 ppb	18:10:25
2	P 214.914†	31.3	2.2	4.7306 µg/L	4.7306 ppb	18:10:25
2	Pb 220.353†	108.5	6.1	1.6290 µg/L	1.6290 ppb	18:10:25

2	S 181.975 Axial†	16.7	1.1	4.8755 µg/L	4.8755 ppb	18:10:25
2	Sb 206.836†	20.8	-7.2	-7.0445 µg/L	-7.0445 ppb	18:10:25
2	Se 196.026†	16.5	-0.1	-0.1477 µg/L	-0.1477 ppb	18:10:25
2	SiO2†	1217.3	-91.6	-19.736 µg/L	-19.736 ppb	18:10:04
2	Si 251.611†	298.1	-29.3	-2.4046 µg/L	-2.4046 ppb	18:10:25
2	Sn 189.927†	0.2	1.0	0.4758 µg/L	0.4758 ppb	18:10:25
2	Ti 334.940†	145.5	22.4	0.0513 µg/L	0.0513 ppb	18:10:04
2	Tl 190.801†	-26.0	-0.5	-0.6548 µg/L	-0.6548 ppb	18:10:25
2	U 409.014†	-106.1	-47.3	-4.2862 µg/L	-4.2862 ppb	18:10:04
2	V 292.402†	-24.2	21.2	0.2243 µg/L	0.2243 ppb	18:10:04
2	Zn 213.857†	472.5	-25.9	-0.6440 µg/L	-0.6440 ppb	18:10:25
3	Sc RADIAL	55952.9	55952.9	103 %		18:08:56
3	Al 396.153Radial†	-23.9	-13.2	-9.8258 µg/L	-9.8258 ppb	18:08:56
3	Ca 317.933Radial†	192.5	8.6	8.1332 µg/L	8.1332 ppb	18:09:16
3	Fe 238.204 Radial†	17.2	2.3	19.451 µg/L	19.451 ppb	18:09:16
3	K 766.490 Radial†	199.1	65.8	46.778 µg/L	46.778 ppb	18:08:56
3	Mg 279.077 IEC†	13.0	1.4	13.321 µg/L	13.321 ppb	18:09:16
3	Na 589.592 Radial†	622.9	65.7	21.628 µg/L	21.628 ppb	18:08:56
3	Sr 421.552†	22.5	-17.6	-0.1825 µg/L	-0.1825 ppb	18:08:56
3	Sc 361.383	1969215.9	1969215.9	103.11 %		18:10:31
3	Y 371.029	1350905.5	1350905.5	103.13 %		18:10:31
3	Ag 328.068†	-575.5	6.4	0.0513 µg/L	0.0513 ppb	18:10:36
3	As 188.979†	-0.8	-1.9	-3.6705 µg/L	-3.6705 ppb	18:10:57
3	B 249.677†	315.0	-25.9	-1.1434 µg/L	-1.1434 ppb	18:10:57
3	Ba 233.527†	-24.5	2.2	0.0583 µg/L	0.0583 ppb	18:10:57
3	Be 313.107†	-3286.5	253.0	0.1652 µg/L	0.1652 ppb	18:10:36
3	Cd 226.502†	-133.6	12.5	0.3430 µg/L	0.3430 ppb	18:10:57
3	Co 228.616†	-14.1	-4.9	-0.2403 µg/L	-0.2403 ppb	18:10:57
3	Cr 267.716†	-66.1	-11.7	-0.2584 µg/L	-0.2584 ppb	18:10:36
3	Cu 324.752†	2477.5	-83.3	-0.5792 µg/L	-0.5792 ppb	18:10:36
3	Mn 257.610†	-225.9	25.1	0.0888 µg/L	0.0888 ppb	18:10:57
3	Mo 202.031†	-9.8	-2.0	-0.2112 µg/L	-0.2112 ppb	18:10:57
3	Ni 231.604†	298.6	-12.6	-0.6902 µg/L	-0.6902 ppb	18:10:57
3	P 214.914†	27.1	-1.4	-2.9216 µg/L	-2.9216 ppb	18:10:57
3	Pb 220.353†	95.5	-4.6	-1.2298 µg/L	-1.2298 ppb	18:10:57
3	S 181.975 Axial†	18.9	3.5	15.355 µg/L	15.355 ppb	18:10:57
3	Sb 206.836†	19.3	-8.3	-8.1417 µg/L	-8.1417 ppb	18:10:57
3	Se 196.026†	11.7	-4.5	-6.8172 µg/L	-6.8172 ppb	18:10:57
3	SiO2†	1221.9	-65.0	-13.993 µg/L	-13.993 ppb	18:10:36
3	Si 251.611†	305.8	-16.3	-1.3398 µg/L	-1.3398 ppb	18:10:57
3	Sn 189.927†	-1.0	-0.1	-0.0571 µg/L	-0.0571 ppb	18:10:57
3	Ti 334.940†	185.2	63.5	0.1517 µg/L	0.1517 ppb	18:10:36
3	Tl 190.801†	-28.1	-3.0	-4.1975 µg/L	-4.1975 ppb	18:10:57
3	U 409.014†	-9.8	44.1	3.9892 µg/L	3.9892 ppb	18:10:36
3	V 292.402†	-52.5	-6.8	-0.0677 µg/L	-0.0677 ppb	18:10:36
3	Zn 213.857†	470.6	-19.2	-0.4765 µg/L	-0.4765 ppb	18:10:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1982123.8	103.78 %		1.130			1.09%
Sc RADIAL	56047.9	103 %		0.8			0.79%
Y 371.029	1359899.4	103.82 %		1.152			1.11%
Ag 328.068†	32.6	0.2608 µg/L		0.43206	0.2608 ppb	0.43206	165.69%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.1	0.1130 µg/L		12.19532	0.1130 ppb	12.19532	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.8	-3.4721 µg/L		1.97235	-3.4721 ppb	1.97235	56.80%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-21.9	-0.9628 µg/L		0.16927	-0.9628 ppb	0.16927	17.58%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	2.5	0.0645 µg/L		0.01519	0.0645 ppb	0.01519	23.57%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	182.7	0.1193 µg/L		0.07861	0.1193 ppb	0.07861	65.88%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	2.4	2.2291 µg/L		5.13097	2.2291 ppb	5.13097	230.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	4.3	0.1147 µg/L		0.23817	0.1147 ppb	0.23817	207.57%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-3.8	-0.1875 µg/L		0.08565	-0.1875 ppb	0.08565	45.69%

Cr	267.716†	QC value within limits for Co 228.616 Recovery = Not calculated	-4.7	-0.1032 µg/L	0.22302	-0.1032 ppb	0.22302	216.06%
		QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	QC value within limits for Cu 324.752 Recovery = Not calculated	-129.5	-0.9028 µg/L	0.29572	-0.9028 ppb	0.29572	32.76%
		QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	QC value within limits for Fe 238.204 Radial Recovery = Not calculated	1.8	14.837 µg/L	7.8419	14.837 ppb	7.8419	52.86%
		QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	QC value within limits for K 766.490 Radial Recovery = Not calculated	50.4	35.791 µg/L	12.7089	35.791 ppb	12.7089	35.51%
		QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	QC value within limits for Mg 279.077 IEC Recovery = Not calculated	3.0	28.106 µg/L	13.4141	28.106 ppb	13.4141	47.73%
		QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	QC value within limits for Mn 257.610 Recovery = Not calculated	11.0	0.0389 µg/L	0.04940	0.0389 ppb	0.04940	127.06%
		QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	QC value within limits for Mo 202.031 Recovery = Not calculated	-0.8	-0.0872 µg/L	0.12800	-0.0872 ppb	0.12800	146.84%
		QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	QC value within limits for Na 589.592 Radial Recovery = Not calculated	85.4	28.127 µg/L	11.2402	28.127 ppb	11.2402	39.96%
		QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	QC value within limits for Ni 231.604 Recovery = Not calculated	-16.9	-0.9240 µg/L	0.23026	-0.9240 ppb	0.23026	24.92%
		QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	QC value within limits for P 214.914 Recovery = Not calculated	1.7	3.6551 µg/L	6.11031	3.6551 ppb	6.11031	167.17%
		QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	QC value within limits for Pb 220.353 Recovery = Not calculated	-1.0	-0.2607 µg/L	1.63670	-0.2607 ppb	1.63670	627.82%
		QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	QC value within limits for S 181.975 Axial Recovery = Not calculated	1.1	4.9715 µg/L	10.33607	4.9715 ppb	10.33607	207.91%
		QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	QC value within limits for Sb 206.836 Recovery = Not calculated	-4.0	-3.9362 µg/L	6.35757	-3.9362 ppb	6.35757	161.51%
		QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	QC value within limits for Se 196.026 Recovery = Not calculated	-3.2	-4.8394 µg/L	4.07986	-4.8394 ppb	4.07986	84.30%
		QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†		QC value within limits for SiO2 Recovery = Not calculated	-69.9	-15.054 µg/L	4.2514	-15.054 ppb	4.2514	28.24%
		QC value within limits for SiO2 Recovery = Not calculated						
Si	251.611†	QC value within limits for Si 251.611 Recovery = Not calculated	-24.2	-1.9860 µg/L	0.56769	-1.9860 ppb	0.56769	28.58%
		QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	QC value within limits for Sn 189.927 Recovery = Not calculated	1.1	0.4880 µg/L	0.55125	0.4880 ppb	0.55125	112.97%
		QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	QC value within limits for Sr 421.552 Recovery = Not calculated	-14.2	-0.1469 µg/L	0.04288	-0.1469 ppb	0.04288	29.20%
		QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	QC value within limits for Ti 334.940 Recovery = Not calculated	12.6	0.0281 µg/L	0.13664	0.0281 ppb	0.13664	485.55%
		QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	QC value within limits for Tl 190.801 Recovery = Not calculated	-2.5	-3.5120 µg/L	2.58356	-3.5120 ppb	2.58356	73.56%
		QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	QC value within limits for U 409.014 Recovery = Not calculated	-4.0	-0.3611 µg/L	4.15405	-0.3611 ppb	4.15405	>999.9%
		QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	QC value within limits for V 292.402 Recovery = Not calculated	14.4	0.1535 µg/L	0.19568	0.1535 ppb	0.19568	127.50%
		QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	QC value within limits for Zn 213.857 Recovery = Not calculated	-20.0	-0.4950 µg/L	0.14064	-0.4950 ppb	0.14064	28.41%
		QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:32:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55441.9	55441.9	102 %		18:33:25
1	Al 396.153Radial†	6917.9	6819.8	5072.2 µg/L	5072.2 ppb	18:33:25
1	Ca 317.933Radial†	5691.9	5423.7	5106.8 µg/L	5106.8 ppb	18:33:45
1	Fe 238.204 Radial†	625.4	601.1	5105.5 µg/L	5105.5 ppb	18:33:45
1	K 766.490 Radial†	7360.4	7116.9	5058.6 µg/L	5058.6 ppb	18:33:25
1	Mg 279.077 IEC†	579.1	558.7	5203.2 µg/L	5203.2 ppb	18:33:45
1	Na 589.592 Radial†	31674.9	30637.4	10086 µg/L	10086 ppb	18:33:25
1	Sr 421.552†	48916.5	48111.6	498.73 µg/L	498.73 ppb	18:33:25
1	Sc 361.383	1949198.7	1949198.7	102.06 %		18:34:49
1	Y 371.029	1332613.7	1332613.7	101.73 %		18:34:49
1	Ag 328.068†	63737.9	63015.4	503.72 µg/L	503.72 ppb	18:34:54
1	As 188.979†	273.4	266.7	520.31 µg/L	520.31 ppb	18:35:15
1	B 249.677†	12085.6	11510.1	501.18 µg/L	501.18 ppb	18:34:54
1	Ba 233.527†	19929.9	19553.5	510.07 µg/L	510.07 ppb	18:34:54
1	Be 313.107†	791453.2	778912.4	508.48 µg/L	508.48 ppb	18:34:49
1	Cd 226.502†	18764.5	18527.7	511.09 µg/L	511.09 ppb	18:34:54
1	Co 228.616†	10683.8	10476.9	515.03 µg/L	515.03 ppb	18:34:54
1	Cr 267.716†	23886.3	23456.4	516.27 µg/L	516.27 ppb	18:34:54
1	Cu 324.752†	77115.4	73072.1	511.13 µg/L	511.13 ppb	18:34:54
1	Mn 257.610†	152507.4	149672.0	518.76 µg/L	518.76 ppb	18:34:49
1	Mo 202.031†	5014.5	4920.8	525.34 µg/L	525.34 ppb	18:35:15
1	Ni 231.604†	9902.4	9400.2	513.41 µg/L	513.41 ppb	18:34:54
1	P 214.914†	1289.3	1235.7	2604.5 µg/L	2604.5 ppb	18:35:15
1	Pb 220.353†	2098.8	1959.2	522.95 µg/L	522.95 ppb	18:35:15
1	S 181.975 Axial†	252.9	233.0	1020.8 µg/L	1020.8 ppb	18:35:15
1	Sb 206.836†	562.5	524.2	518.28 µg/L	518.28 ppb	18:35:15
1	Se 196.026†	361.5	338.4	523.78 µg/L	523.78 ppb	18:35:15
1	SiO2†	26807.5	25016.2	5387.4 µg/L	5387.4 ppb	18:34:54
1	Si 251.611†	31683.4	30730.8	2526.2 µg/L	2526.2 ppb	18:34:54
1	Sn 189.927†	1171.2	1148.4	528.25 µg/L	528.25 ppb	18:35:15
1	Ti 334.940†	213415.9	208990.5	502.38 µg/L	502.38 ppb	18:34:49
1	Tl 190.801†	344.1	361.4	510.53 µg/L	510.53 ppb	18:35:15
1	U 409.014†	5808.1	5744.4	519.06 µg/L	519.06 ppb	18:34:54
1	V 292.402†	48900.4	47957.2	517.47 µg/L	517.47 ppb	18:34:54
1	Zn 213.857†	21532.1	20621.7	511.32 µg/L	511.32 ppb	18:34:54
2	Sc RADIAL	56230.3	56230.3	103 %		18:33:51
2	Al 396.153Radial†	6941.0	6746.8	5018.0 µg/L	5018.0 ppb	18:33:51
2	Ca 317.933Radial†	5664.7	5318.7	5007.9 µg/L	5007.9 ppb	18:34:11
2	Fe 238.204 Radial†	623.7	590.8	5018.6 µg/L	5018.6 ppb	18:34:11
2	K 766.490 Radial†	7345.4	7000.7	4976.0 µg/L	4976.0 ppb	18:33:51
2	Mg 279.077 IEC†	581.5	553.1	5150.5 µg/L	5150.5 ppb	18:34:11
2	Na 589.592 Radial†	31761.7	30284.4	9969.7 µg/L	9969.7 ppb	18:33:51
2	Sr 421.552†	49439.7	47944.2	497.00 µg/L	497.00 ppb	18:33:51
2	Sc 361.383	1968654.4	1968654.4	103.08 %		18:35:22
2	Y 371.029	1345275.7	1345275.7	102.70 %		18:35:22
2	Ag 328.068†	64265.9	62910.5	502.88 µg/L	502.88 ppb	18:35:28
2	As 188.979†	279.7	270.2	527.15 µg/L	527.15 ppb	18:35:48
2	B 249.677†	12199.0	11503.1	500.92 µg/L	500.92 ppb	18:35:28
2	Ba 233.527†	20118.0	19543.0	509.79 µg/L	509.79 ppb	18:35:28
2	Be 313.107†	797156.7	776781.8	507.09 µg/L	507.09 ppb	18:35:22
2	Cd 226.502†	19012.6	18586.7	512.73 µg/L	512.73 ppb	18:35:28
2	Co 228.616†	10795.4	10481.7	515.26 µg/L	515.26 ppb	18:35:28
2	Cr 267.716†	24075.5	23408.6	515.22 µg/L	515.22 ppb	18:35:28
2	Cu 324.752†	77661.1	72854.9	509.61 µg/L	509.61 ppb	18:35:28
2	Mn 257.610†	153284.1	148948.8	516.25 µg/L	516.25 ppb	18:35:22
2	Mo 202.031†	4982.7	4841.3	516.86 µg/L	516.86 ppb	18:35:48
2	Ni 231.604†	10038.8	9436.7	515.40 µg/L	515.40 ppb	18:35:28
2	P 214.914†	1275.2	1209.5	2548.3 µg/L	2548.3 ppb	18:35:48
2	Pb 220.353†	2089.9	1930.2	515.20 µg/L	515.20 ppb	18:35:48

2	S 181.975 Axial†	253.9	231.5	1014.3 µg/L	1014.3 ppb	18:35:48
2	Sb 206.836†	566.6	522.7	516.68 µg/L	516.68 ppb	18:35:48
2	Se 196.026†	362.7	336.1	520.05 µg/L	520.05 ppb	18:35:48
2	SiO2†	27183.9	25121.8	5410.1 µg/L	5410.1 ppb	18:35:28
2	Si 251.611†	31985.4	30716.9	2525.1 µg/L	2525.1 ppb	18:35:28
2	Sn 189.927†	1162.1	1128.3	518.97 µg/L	518.97 ppb	18:35:48
2	Ti 334.940†	214911.2	208374.5	500.90 µg/L	500.90 ppb	18:35:22
2	Tl 190.801†	347.2	361.1	510.11 µg/L	510.11 ppb	18:35:48
2	U 409.014†	5833.8	5713.1	516.25 µg/L	516.25 ppb	18:35:28
2	V 292.402†	49382.2	47951.1	517.33 µg/L	517.33 ppb	18:35:28
2	Zn 213.857†	21765.8	20640.0	511.77 µg/L	511.77 ppb	18:35:28
3	Sc RADIAL	56202.6	56202.6	103 %		18:34:17
3	Al 396.153Radial†	7002.2	6809.5	5066.3 µg/L	5066.3 ppb	18:34:17
3	Ca 317.933Radial†	5645.9	5303.2	4993.3 µg/L	4993.3 ppb	18:34:37
3	Fe 238.204 Radial†	622.2	589.7	5007.8 µg/L	5007.8 ppb	18:34:37
3	K 766.490 Radial†	7390.9	7048.4	5010.0 µg/L	5010.0 ppb	18:34:17
3	Mg 279.077 IEC†	576.6	548.6	5107.8 µg/L	5107.8 ppb	18:34:37
3	Na 589.592 Radial†	31993.1	30524.4	10049 µg/L	10049 ppb	18:34:17
3	Sr 421.552†	49671.5	48193.0	499.58 µg/L	499.58 ppb	18:34:17
3	Sc 361.383	1949854.5	1949854.5	102.10 %		18:35:55
3	Y 371.029	1332440.6	1332440.6	101.72 %		18:35:55
3	Ag 328.068†	60532.1	59854.4	478.35 µg/L	478.35 ppb	18:36:01
3	As 188.979†	230.7	224.8	438.55 µg/L	438.55 ppb	18:36:21
3	B 249.677†	11478.3	10911.2	474.98 µg/L	474.98 ppb	18:36:01
3	Ba 233.527†	18573.8	18218.6	475.23 µg/L	475.23 ppb	18:36:01
3	Be 313.107†	747182.5	735289.5	480.01 µg/L	480.01 ppb	18:35:55
3	Cd 226.502†	17437.8	17222.1	475.04 µg/L	475.04 ppb	18:36:01
3	Co 228.616†	9818.6	9625.9	473.13 µg/L	473.13 ppb	18:36:01
3	Cr 267.716†	21497.4	21108.6	464.60 µg/L	464.60 ppb	18:36:01
3	Cu 324.752†	71198.9	67251.7	470.46 µg/L	470.46 ppb	18:36:01
3	Mn 257.610†	144456.6	141736.2	491.27 µg/L	491.27 ppb	18:35:55
3	Mo 202.031†	4165.5	4087.6	436.42 µg/L	436.42 ppb	18:36:21
3	Ni 231.604†	9187.6	8696.9	475.00 µg/L	475.00 ppb	18:36:01
3	P 214.914†	1084.2	1034.3	2175.1 µg/L	2175.1 ppb	18:36:21
3	Pb 220.353†	1818.3	1683.8	449.34 µg/L	449.34 ppb	18:36:21
3	S 181.975 Axial†	223.4	204.0	893.71 µg/L	893.71 ppb	18:36:21
3	Sb 206.836†	482.5	445.7	440.11 µg/L	440.11 ppb	18:36:21
3	Se 196.026†	316.7	294.4	456.49 µg/L	456.49 ppb	18:36:21
3	SiO2†	25304.0	23534.7	5068.3 µg/L	5068.3 ppb	18:36:01
3	Si 251.611†	29685.2	28763.1	2364.5 µg/L	2364.5 ppb	18:36:01
3	Sn 189.927†	961.6	942.7	433.62 µg/L	433.62 ppb	18:36:21
3	Ti 334.940†	200490.3	196259.8	471.76 µg/L	471.76 ppb	18:35:55
3	Tl 190.801†	316.1	333.9	471.83 µg/L	471.83 ppb	18:36:21
3	U 409.014†	5179.3	5126.6	463.15 µg/L	463.15 ppb	18:36:01
3	V 292.402†	44764.1	43889.7	473.25 µg/L	473.25 ppb	18:36:01
3	Zn 213.857†	19900.8	19016.9	471.49 µg/L	471.49 ppb	18:36:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1955902.5	102.41 %	0.578			0.56%
Sc RADIAL	55958.3	103 %	0.8			0.80%
Y 371.029	1336776.6	102.05 %	0.562			0.55%
Ag 328.068†	61926.8	494.98 µg/L	14.414	494.98 ppb	14.414	2.91%
QC value within limits for Ag 328.068 Recovery = 99.00%						
Al 396.153Radial†	6792.0	5052.2 µg/L	29.77	5052.2 ppb	29.77	0.59%
QC value within limits for Al 396.153Radial Recovery = 101.04%						
As 188.979†	253.9	495.34 µg/L	49.299	495.34 ppb	49.299	9.95%
QC value within limits for As 188.979 Recovery = 99.07%						
B 249.677†	11308.1	492.36 µg/L	15.053	492.36 ppb	15.053	3.06%
QC value within limits for B 249.677 Recovery = 98.47%						
Ba 233.527†	19105.0	498.36 µg/L	20.034	498.36 ppb	20.034	4.02%
QC value within limits for Ba 233.527 Recovery = 99.67%						
Be 313.107†	763661.2	498.53 µg/L	16.055	498.53 ppb	16.055	3.22%
QC value within limits for Be 313.107 Recovery = 99.71%						
Ca 317.933Radial†	5348.5	5036.0 µg/L	61.72	5036.0 ppb	61.72	1.23%
QC value within limits for Ca 317.933Radial Recovery = 100.72%						
Cd 226.502†	18112.2	499.62 µg/L	21.301	499.62 ppb	21.301	4.26%
QC value within limits for Cd 226.502 Recovery = 99.92%						
Co 228.616†	10194.8	501.14 µg/L	24.256	501.14 ppb	24.256	4.84%

Cr	267.716†	22657.9	498.70 µg/L	29.533	498.70 ppb	29.533	5.92%
QC value within limits for Cr 267.716 Recovery = 99.74%							
Cu	324.752†	71059.6	497.07 µg/L	23.052	497.07 ppb	23.052	4.64%
QC value within limits for Cu 324.752 Recovery = 99.41%							
Fe	238.204 Radial†	593.9	5044.0 µg/L	53.59	5044.0 ppb	53.59	1.06%
QC value within limits for Fe 238.204 Radial Recovery = 100.88%							
K	766.490 Radial†	7055.3	5014.9 µg/L	41.51	5014.9 ppb	41.51	0.83%
QC value within limits for K 766.490 Radial Recovery = 100.30%							
Mg	279.077 IEC†	553.5	5153.8 µg/L	47.82	5153.8 ppb	47.82	0.93%
QC value within limits for Mg 279.077 IEC Recovery = 103.08%							
Mn	257.610†	146785.7	508.76 µg/L	15.198	508.76 ppb	15.198	2.99%
QC value within limits for Mn 257.610 Recovery = 101.75%							
Mo	202.031†	4616.6	492.88 µg/L	49.074	492.88 ppb	49.074	9.96%
QC value within limits for Mo 202.031 Recovery = 98.58%							
Na	589.592 Radial†	30482.1	10035 µg/L	59.3	10035 ppb	59.3	0.59%
QC value within limits for Na 589.592 Radial Recovery = 100.35%							
Ni	231.604†	9177.9	501.27 µg/L	22.771	501.27 ppb	22.771	4.54%
QC value within limits for Ni 231.604 Recovery = 100.25%							
P	214.914†	1159.8	2442.6 µg/L	233.37	2442.6 ppb	233.37	9.55%
QC value within limits for P 214.914 Recovery = 97.71%							
Pb	220.353†	1857.7	495.83 µg/L	40.446	495.83 ppb	40.446	8.16%
QC value within limits for Pb 220.353 Recovery = 99.17%							
S	181.975 Axial†	222.8	976.27 µg/L	71.572	976.27 ppb	71.572	7.33%
QC value within limits for S 181.975 Axial Recovery = 97.63%							
Sb	206.836†	497.5	491.69 µg/L	44.681	491.69 ppb	44.681	9.09%
QC value within limits for Sb 206.836 Recovery = 98.34%							
Se	196.026†	322.9	500.11 µg/L	37.818	500.11 ppb	37.818	7.56%
QC value within limits for Se 196.026 Recovery = 100.02%							
SiO2†		24557.5	5288.6 µg/L	191.11	5288.6 ppb	191.11	3.61%
QC value within limits for SiO2 Recovery = 98.90%							
Si	251.611†	30070.3	2471.9 µg/L	93.06	2471.9 ppb	93.06	3.76%
QC value within limits for Si 251.611 Recovery = 98.88%							
Sn	189.927†	1073.1	493.61 µg/L	52.162	493.61 ppb	52.162	10.57%
QC value within limits for Sn 189.927 Recovery = 98.72%							
Sr	421.552†	48082.9	498.44 µg/L	1.315	498.44 ppb	1.315	0.26%
QC value within limits for Sr 421.552 Recovery = 99.69%							
Ti	334.940†	204541.6	491.68 µg/L	17.266	491.68 ppb	17.266	3.51%
QC value within limits for Ti 334.940 Recovery = 98.34%							
Tl	190.801†	352.2	497.49 µg/L	22.222	497.49 ppb	22.222	4.47%
QC value within limits for Tl 190.801 Recovery = 99.50%							
U	409.014†	5528.1	499.49 µg/L	31.500	499.49 ppb	31.500	6.31%
QC value within limits for U 409.014 Recovery = 99.90%							
V	292.402†	46599.3	502.68 µg/L	25.490	502.68 ppb	25.490	5.07%
QC value within limits for V 292.402 Recovery = 100.54%							
Zn	213.857†	20092.9	498.19 µg/L	23.129	498.19 ppb	23.129	4.64%
QC value within limits for Zn 213.857 Recovery = 99.64%							

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:36:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56577.3	56577.3	104 %		18:37:06
1	Al 396.153Radial†	-31.7	-20.5	-15.254 µg/L	-15.254 ppb	18:37:06
1	Ca 317.933Radial†	178.1	-7.3	-6.9019 µg/L	-6.9019 ppb	18:37:27
1	Fe 238.204 Radial†	15.3	0.2	1.9399 µg/L	1.9399 ppb	18:37:27
1	K 766.490 Radial†	151.5	17.7	12.611 µg/L	12.611 ppb	18:37:06
1	Mg 279.077 IEC†	8.3	-3.3	-30.287 µg/L	-30.287 ppb	18:37:27
1	Na 589.592 Radial†	633.9	69.6	22.897 µg/L	22.897 ppb	18:37:06
1	Sr 421.552†	44.5	3.3	0.0346 µg/L	0.0346 ppb	18:37:06
1	Sc 361.383	1997175.6	1997175.6	104.57 %		18:38:28
1	Y 371.029	1371834.1	1371834.1	104.73 %		18:38:28
1	Ag 328.068†	-518.3	68.9	0.5460 µg/L	0.5460 ppb	18:38:34
1	As 188.979†	-0.7	-1.8	-3.4701 µg/L	-3.4701 ppb	18:38:54
1	B 249.677†	333.0	-13.0	-0.5696 µg/L	-0.5696 ppb	18:38:54
1	Ba 233.527†	-20.3	6.6	0.1716 µg/L	0.1716 ppb	18:38:54
1	Be 313.107†	-3492.3	100.9	0.0658 µg/L	0.0658 ppb	18:38:34
1	Cd 226.502†	-135.3	12.8	0.3518 µg/L	0.3518 ppb	18:38:54
1	Co 228.616†	-16.0	-6.4	-0.3169 µg/L	-0.3169 ppb	18:38:54
1	Cr 267.716†	-59.9	-4.9	-0.1071 µg/L	-0.1071 ppb	18:38:34
1	Cu 324.752†	2440.0	-152.8	-1.0669 µg/L	-1.0669 ppb	18:38:34
1	Mn 257.610†	-253.9	1.3	0.0061 µg/L	0.0061 ppb	18:38:54
1	Mo 202.031†	-12.2	-4.2	-0.4445 µg/L	-0.4445 ppb	18:38:54
1	Ni 231.604†	302.8	-12.6	-0.6910 µg/L	-0.6910 ppb	18:38:54
1	P 214.914†	25.9	-2.9	-6.0063 µg/L	-6.0063 ppb	18:38:54
1	Pb 220.353†	96.6	-4.8	-1.2749 µg/L	-1.2749 ppb	18:38:54
1	S 181.975 Axial†	16.8	1.3	5.5555 µg/L	5.5555 ppb	18:38:54
1	Sb 206.836†	26.1	-2.0	-1.9561 µg/L	-1.9561 ppb	18:38:54
1	Se 196.026†	17.3	0.7	1.1140 µg/L	1.1140 ppb	18:38:54
1	SiO2†	1249.6	-55.1	-11.856 µg/L	-11.856 ppb	18:38:34
1	Si 251.611†	302.7	-23.4	-1.9253 µg/L	-1.9253 ppb	18:38:54
1	Sn 189.927†	1.0	1.9	0.8554 µg/L	0.8554 ppb	18:38:54
1	Ti 334.940†	152.6	29.8	0.0741 µg/L	0.0741 ppb	18:38:34
1	Tl 190.801†	-22.3	3.0	4.1717 µg/L	4.1717 ppb	18:38:54
1	U 409.014†	-116.8	-58.1	-5.2596 µg/L	-5.2596 ppb	18:38:34
1	V 292.402†	-54.7	-8.1	-0.0953 µg/L	-0.0953 ppb	18:38:34
1	Zn 213.857†	472.6	-23.6	-0.5840 µg/L	-0.5840 ppb	18:38:54
2	Sc RADIAL	55383.9	55383.9	101 %		18:37:32
2	Al 396.153Radial†	-17.3	-7.0	-5.1964 µg/L	-5.1964 ppb	18:37:32
2	Ca 317.933Radial†	188.8	6.9	6.4546 µg/L	6.4546 ppb	18:37:52
2	Fe 238.204 Radial†	14.1	-0.6	-4.8767 µg/L	-4.8767 ppb	18:37:52
2	K 766.490 Radial†	126.5	-3.8	-2.6779 µg/L	-2.6779 ppb	18:37:32
2	Mg 279.077 IEC†	12.6	1.1	10.292 µg/L	10.292 ppb	18:37:52
2	Na 589.592 Radial†	623.8	72.8	23.955 µg/L	23.955 ppb	18:37:32
2	Sr 421.552†	31.5	-8.5	-0.0883 µg/L	-0.0883 ppb	18:37:32
2	Sc 361.383	2013350.1	2013350.1	105.42 %		18:39:00
2	Y 371.029	1381993.5	1381993.5	105.50 %		18:39:00
2	Ag 328.068†	-537.9	54.3	0.4351 µg/L	0.4351 ppb	18:39:06
2	As 188.979†	2.2	1.0	1.8812 µg/L	1.8812 ppb	18:39:26
2	B 249.677†	318.3	-29.5	-1.2874 µg/L	-1.2874 ppb	18:39:26
2	Ba 233.527†	-25.9	1.4	0.0380 µg/L	0.0380 ppb	18:39:26
2	Be 313.107†	-3437.1	180.0	0.1176 µg/L	0.1176 ppb	18:39:06
2	Cd 226.502†	-146.1	3.5	0.0976 µg/L	0.0976 ppb	18:39:26
2	Co 228.616†	-6.0	3.1	0.1553 µg/L	0.1553 ppb	18:39:26
2	Cr 267.716†	-56.6	-1.3	-0.0276 µg/L	-0.0276 ppb	18:39:06
2	Cu 324.752†	2488.4	-125.7	-0.8785 µg/L	-0.8785 ppb	18:39:06
2	Mn 257.610†	-244.3	12.4	0.0419 µg/L	0.0419 ppb	18:39:26
2	Mo 202.031†	-1.5	6.1	0.6511 µg/L	0.6511 ppb	18:39:26
2	Ni 231.604†	301.7	-16.0	-0.8752 µg/L	-0.8752 ppb	18:39:26
2	P 214.914†	26.3	-2.6	-5.5596 µg/L	-5.5596 ppb	18:39:26
2	Pb 220.353†	100.7	-1.7	-0.4405 µg/L	-0.4405 ppb	18:39:26

2	S 181.975 Axial†	19.5	3.7	16.100 µg/L	16.100 ppb	18:39:26
2	Sb 206.836†	25.7	-2.6	-2.5687 µg/L	-2.5687 ppb	18:39:26
2	Se 196.026†	18.4	1.6	2.4087 µg/L	2.4087 ppb	18:39:26
2	SiO2†	1290.6	-25.8	-5.5589 µg/L	-5.5589 ppb	18:39:06
2	Si 251.611†	298.6	-29.7	-2.4388 µg/L	-2.4388 ppb	18:39:26
2	Sn 189.927†	1.6	2.4	1.0965 µg/L	1.0965 ppb	18:39:26
2	Ti 334.940†	143.9	20.4	0.0483 µg/L	0.0483 ppb	18:39:06
2	Tl 190.801†	-19.4	5.9	8.2322 µg/L	8.2322 ppb	18:39:26
2	U 409.014†	-143.2	-82.3	-7.4471 µg/L	-7.4471 ppb	18:39:06
2	V 292.402†	19.9	63.0	0.6686 µg/L	0.6686 ppb	18:39:06
2	Zn 213.857†	478.6	-21.5	-0.5326 µg/L	-0.5326 ppb	18:39:26
3	Sc RADIAL	56905.3	56905.3	104 %		18:37:58
3	Al 396.153Radial†	-1.7	8.5	6.3212 µg/L	6.3212 ppb	18:37:58
3	Ca 317.933Radial†	181.4	-5.2	-4.9145 µg/L	-4.9145 ppb	18:38:18
3	Fe 238.204 Radial†	13.2	-1.8	-15.607 µg/L	-15.607 ppb	18:38:18
3	K 766.490 Radial†	186.8	50.7	36.048 µg/L	36.048 ppb	18:37:58
3	Mg 279.077 IEC†	11.5	-0.3	-2.5813 µg/L	-2.5813 ppb	18:38:18
3	Na 589.592 Radial†	645.3	77.0	25.346 µg/L	25.346 ppb	18:37:58
3	Sr 421.552†	17.2	-23.1	-0.2393 µg/L	-0.2393 ppb	18:37:58
3	Sc 361.383	1996384.7	1996384.7	104.53 %		18:39:32
3	Y 371.029	1369220.3	1369220.3	104.53 %		18:39:32
3	Ag 328.068†	-541.0	47.0	0.3741 µg/L	0.3741 ppb	18:39:38
3	As 188.979†	-1.0	-2.1	-4.0939 µg/L	-4.0939 ppb	18:39:59
3	B 249.677†	333.0	-12.9	-0.5555 µg/L	-0.5555 ppb	18:39:59
3	Ba 233.527†	-17.3	9.5	0.2478 µg/L	0.2478 ppb	18:39:59
3	Be 313.107†	-3308.4	275.5	0.1799 µg/L	0.1799 ppb	18:39:38
3	Cd 226.502†	-144.0	4.4	0.1228 µg/L	0.1228 ppb	18:39:59
3	Co 228.616†	-11.0	-1.7	-0.0836 µg/L	-0.0836 ppb	18:39:59
3	Cr 267.716†	-55.8	-1.0	-0.0220 µg/L	-0.0220 ppb	18:39:38
3	Cu 324.752†	2440.9	-151.0	-1.0572 µg/L	-1.0572 ppb	18:39:38
3	Mn 257.610†	-222.1	31.7	0.1077 µg/L	0.1077 ppb	18:39:59
3	Mo 202.031†	-3.2	4.5	0.4771 µg/L	0.4771 ppb	18:39:59
3	Ni 231.604†	303.2	-12.1	-0.6637 µg/L	-0.6637 ppb	18:39:59
3	P 214.914†	30.5	1.6	3.5034 µg/L	3.5034 ppb	18:39:59
3	Pb 220.353†	89.5	-11.6	-3.0790 µg/L	-3.0790 ppb	18:39:59
3	S 181.975 Axial†	17.8	2.2	9.6185 µg/L	9.6185 ppb	18:39:59
3	Sb 206.836†	27.7	-0.5	-0.4700 µg/L	-0.4700 ppb	18:39:59
3	Se 196.026†	15.0	-1.5	-2.2806 µg/L	-2.2806 ppb	18:39:59
3	SiO2†	1247.6	-56.5	-12.175 µg/L	-12.175 ppb	18:39:38
3	Si 251.611†	300.0	-25.8	-2.1244 µg/L	-2.1244 ppb	18:39:59
3	Sn 189.927†	3.2	3.9	1.8070 µg/L	1.8070 ppb	18:39:59
3	Ti 334.940†	156.9	34.0	0.0818 µg/L	0.0818 ppb	18:39:38
3	Tl 190.801†	-23.6	1.7	2.3286 µg/L	2.3286 ppb	18:39:59
3	U 409.014†	-48.9	6.8	0.6203 µg/L	0.6203 ppb	18:39:38
3	V 292.402†	-14.3	30.6	0.3283 µg/L	0.3283 ppb	18:39:38
3	Zn 213.857†	478.7	-17.6	-0.4352 µg/L	-0.4352 ppb	18:39:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2002303.4	104.84 %	0.501			0.48%
Sc RADIAL	56288.9	103 %	1.5			1.42%
Y 371.029	1374349.3	104.92 %	0.515			0.49%
Ag 328.068†	56.7	0.4517 µg/L	0.08717	0.4517 ppb	0.08717	19.30%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.3	-4.7097 µg/L	10.79578	-4.7097 ppb	10.79578	229.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.8943 µg/L	3.28450	-1.8943 ppb	3.28450	173.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-18.5	-0.8042 µg/L	0.41854	-0.8042 ppb	0.41854	52.05%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.8	0.1525 µg/L	0.10621	0.1525 ppb	0.10621	69.66%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	185.5	0.1211 µg/L	0.05710	0.1211 ppb	0.05710	47.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.9	-1.7872 µg/L	7.20651	-1.7872 ppb	7.20651	403.22%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1907 µg/L	0.14008	0.1907 ppb	0.14008	73.44%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.7	-0.0817 µg/L	0.23614	-0.0817 ppb	0.23614	288.95%

Cr	267.716†	-2.4	-0.0522 µg/L	0.04756	-0.0522 ppb	0.04756	91.05%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-143.2	-1.0009 µg/L	0.10608	-1.0009 ppb	0.10608	10.60%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.7	-6.1811 µg/L	8.84567	-6.1811 ppb	8.84567	143.11%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	21.6	15.327 µg/L	19.5055	15.327 ppb	19.5055	127.26%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.8	-7.5253 µg/L	20.73608	-7.5253 ppb	20.73608	275.55%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	15.1	0.0519 µg/L	0.05154	0.0519 ppb	0.05154	99.29%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	2.1	0.2279 µg/L	0.58875	0.2279 ppb	0.58875	258.32%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	73.1	24.066 µg/L	1.2283	24.066 ppb	1.2283	5.10%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-13.6	-0.7433 µg/L	0.11501	-0.7433 ppb	0.11501	15.47%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-1.3	-2.6875 µg/L	5.36613	-2.6875 ppb	5.36613	199.67%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-6.0	-1.5981 µg/L	1.34866	-1.5981 ppb	1.34866	84.39%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.4	10.425 µg/L	5.3180	10.425 ppb	5.3180	51.01%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-1.7	-1.6649 µg/L	1.07918	-1.6649 ppb	1.07918	64.82%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	0.3	0.4141 µg/L	2.42173	0.4141 ppb	2.42173	584.88%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-45.8	-9.8634 µg/L	3.73124	-9.8634 ppb	3.73124	37.83%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-26.3	-2.1628 µg/L	0.25893	-2.1628 ppb	0.25893	11.97%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.7	1.2530 µg/L	0.49474	1.2530 ppb	0.49474	39.49%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-9.4	-0.0977 µg/L	0.13720	-0.0977 ppb	0.13720	140.50%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	28.1	0.0681 µg/L	0.01753	0.0681 ppb	0.01753	25.76%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	3.5	4.9108 µg/L	3.02042	4.9108 ppb	3.02042	61.51%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-44.5	-4.0288 µg/L	4.17218	-4.0288 ppb	4.17218	103.56%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	28.5	0.3005 µg/L	0.38270	0.3005 ppb	0.38270	127.35%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-20.9	-0.5173 µg/L	0.07558	-0.5173 ppb	0.07558	14.61%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 38

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 19:12:25

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	55671.1	55671.1	102 %		19:13:03
1	Al 396.153Radial†	7032.4	6904.0	5134.7 µg/L	5134.7 ppb	19:13:03
1	Ca 317.933Radial†	5628.4	5338.4	5026.4 µg/L	5026.4 ppb	19:13:23
1	Fe 238.204 Radial†	628.5	601.6	5110.3 µg/L	5110.3 ppb	19:13:23
1	K 766.490 Radial†	7390.7	7116.7	5058.5 µg/L	5058.5 ppb	19:13:03
1	Mg 279.077 IEC†	581.4	558.7	5202.9 µg/L	5202.9 ppb	19:13:23
1	Na 589.592 Radial†	32145.4	30970.2	10196 µg/L	10196 ppb	19:13:03
1	Sr 421.552†	49522.9	48507.7	502.84 µg/L	502.84 ppb	19:13:03
1	Sc 361.383	1951144.3	1951144.3	102.16 %		19:14:27
1	Y 371.029	1335064.4	1335064.4	101.92 %		19:14:27
1	Ag 328.068†	64845.5	64037.3	511.83 µg/L	511.83 ppb	19:14:32
1	As 188.979†	275.5	268.5	523.78 µg/L	523.78 ppb	19:14:53
1	B 249.677†	12049.2	11462.7	499.11 µg/L	499.11 ppb	19:14:32
1	Ba 233.527†	20008.0	19610.4	511.55 µg/L	511.55 ppb	19:14:32
1	Be 313.107†	795598.6	782196.8	510.62 µg/L	510.62 ppb	19:14:27
1	Cd 226.502†	18839.6	18582.9	512.61 µg/L	512.61 ppb	19:14:32
1	Co 228.616†	10676.1	10458.9	514.13 µg/L	514.13 ppb	19:14:32
1	Cr 267.716†	23927.2	23473.1	516.64 µg/L	516.64 ppb	19:14:32
1	Cu 324.752†	77230.7	73109.7	511.40 µg/L	511.40 ppb	19:14:32
1	Mn 257.610†	153022.2	150027.0	519.99 µg/L	519.99 ppb	19:14:27
1	Mo 202.031†	5147.6	5046.1	538.72 µg/L	538.72 ppb	19:14:53
1	Ni 231.604†	9909.1	9397.1	513.24 µg/L	513.24 ppb	19:14:32
1	P 214.914†	1284.0	1229.2	2590.7 µg/L	2590.7 ppb	19:14:53
1	Pb 220.353†	2100.1	1958.5	522.80 µg/L	522.80 ppb	19:14:53
1	S 181.975 Axial†	260.7	240.4	1053.2 µg/L	1053.2 ppb	19:14:53
1	Sb 206.836†	579.1	539.9	533.92 µg/L	533.92 ppb	19:14:53
1	Se 196.026†	368.4	344.8	533.59 µg/L	533.59 ppb	19:14:53
1	SiO2†	27092.9	25269.3	5441.9 µg/L	5441.9 ppb	19:14:32
1	Si 251.611†	31889.8	30901.8	2540.3 µg/L	2540.3 ppb	19:14:32
1	Sn 189.927†	1200.9	1176.4	541.09 µg/L	541.09 ppb	19:14:53
1	Ti 334.940†	218380.7	213641.7	513.57 µg/L	513.57 ppb	19:14:27
1	Tl 190.801†	350.6	367.5	519.14 µg/L	519.14 ppb	19:14:53
1	U 409.014†	5814.6	5745.1	519.13 µg/L	519.13 ppb	19:14:32
1	V 292.402†	48982.0	47989.3	517.92 µg/L	517.92 ppb	19:14:32
1	Zn 213.857†	21483.0	20552.7	509.59 µg/L	509.59 ppb	19:14:32
2	Sc RADIAL	56100.7	56100.7	103 %		19:13:29
2	Al 396.153Radial†	6945.6	6766.8	5032.6 µg/L	5032.6 ppb	19:13:29
2	Ca 317.933Radial†	5631.2	5298.9	4989.2 µg/L	4989.2 ppb	19:13:49
2	Fe 238.204 Radial†	627.7	596.1	5063.7 µg/L	5063.7 ppb	19:13:49
2	K 766.490 Radial†	7341.2	7013.0	4984.8 µg/L	4984.8 ppb	19:13:29
2	Mg 279.077 IEC†	586.0	558.8	5203.5 µg/L	5203.5 ppb	19:13:49
2	Na 589.592 Radial†	31976.7	30564.8	10062 µg/L	10062 ppb	19:13:29
2	Sr 421.552†	49170.9	47793.6	495.44 µg/L	495.44 ppb	19:13:29
2	Sc 361.383	1954250.3	1954250.3	102.33 %		19:15:00
2	Y 371.029	1335611.5	1335611.5	101.96 %		19:15:00
2	Ag 328.068†	65212.5	64295.1	513.88 µg/L	513.88 ppb	19:15:06
2	As 188.979†	274.4	267.0	520.94 µg/L	520.94 ppb	19:15:26
2	B 249.677†	12164.5	11556.6	503.24 µg/L	503.24 ppb	19:15:06
2	Ba 233.527†	20057.8	19628.0	512.01 µg/L	512.01 ppb	19:15:06
2	Be 313.107†	786582.3	772147.7	504.06 µg/L	504.06 ppb	19:15:00
2	Cd 226.502†	18912.0	18624.4	513.76 µg/L	513.76 ppb	19:15:06
2	Co 228.616†	10732.8	10497.7	516.05 µg/L	516.05 ppb	19:15:06
2	Cr 267.716†	24011.5	23518.2	517.63 µg/L	517.63 ppb	19:15:06
2	Cu 324.752†	77632.9	73382.6	513.30 µg/L	513.30 ppb	19:15:06
2	Mn 257.610†	151747.3	148542.9	514.85 µg/L	514.85 ppb	19:15:00
2	Mo 202.031†	5096.3	4988.0	532.52 µg/L	532.52 ppb	19:15:26
2	Ni 231.604†	9986.9	9457.7	516.55 µg/L	516.55 ppb	19:15:06
2	P 214.914†	1269.9	1213.4	2556.6 µg/L	2556.6 ppb	19:15:26
2	Pb 220.353†	2103.2	1958.2	522.70 µg/L	522.70 ppb	19:15:26

2	S 181.975 Axial†	261.6	240.8	1055.1 µg/L	1055.1 ppb	19:15:26
2	Sb 206.836†	583.1	542.9	536.77 µg/L	536.77 ppb	19:15:26
2	Se 196.026†	358.4	334.4	517.63 µg/L	517.63 ppb	19:15:26
2	SiO2†	27219.9	25351.3	5459.5 µg/L	5459.5 ppb	19:15:06
2	Si 251.611†	32020.8	30980.3	2546.7 µg/L	2546.7 ppb	19:15:06
2	Sn 189.927†	1194.0	1167.7	537.13 µg/L	537.13 ppb	19:15:26
2	Ti 334.940†	216182.4	211153.6	507.58 µg/L	507.58 ppb	19:15:00
2	Tl 190.801†	351.8	368.1	519.85 µg/L	519.85 ppb	19:15:26
2	U 409.014†	5813.7	5735.2	518.24 µg/L	518.24 ppb	19:15:06
2	V 292.402†	49127.5	48055.3	518.57 µg/L	518.57 ppb	19:15:06
2	Zn 213.857†	21549.0	20583.8	510.35 µg/L	510.35 ppb	19:15:06
3	Sc RADIAL	56646.4	56646.4	104 %		19:13:55
3	Al 396.153Radial†	6990.5	6744.9	5018.4 µg/L	5018.4 ppb	19:13:55
3	Ca 317.933Radial†	5597.5	5213.6	4908.9 µg/L	4908.9 ppb	19:14:15
3	Fe 238.204 Radial†	629.8	592.2	5029.2 µg/L	5029.2 ppb	19:14:15
3	K 766.490 Radial†	7441.3	7040.7	5004.5 µg/L	5004.5 ppb	19:13:55
3	Mg 279.077 IEC†	585.3	552.6	5144.3 µg/L	5144.3 ppb	19:14:15
3	Na 589.592 Radial†	32200.7	30481.0	10034 µg/L	10034 ppb	19:13:55
3	Sr 421.552†	49653.3	47797.6	495.48 µg/L	495.48 ppb	19:13:55
3	Sc 361.383	1989206.7	1989206.7	104.16 %		19:15:33
3	Y 371.029	1360871.5	1360871.5	103.89 %		19:15:33
3	Ag 328.068†	60452.0	58604.6	468.29 µg/L	468.29 ppb	19:15:39
3	As 188.979†	231.4	221.0	431.16 µg/L	431.16 ppb	19:15:59
3	B 249.677†	11200.8	10422.4	453.57 µg/L	453.57 ppb	19:15:39
3	Ba 233.527†	18155.6	17457.3	455.37 µg/L	455.37 ppb	19:15:39
3	Be 313.107†	746723.2	720370.4	470.26 µg/L	470.26 ppb	19:15:33
3	Cd 226.502†	17034.9	16497.4	455.02 µg/L	455.02 ppb	19:15:39
3	Co 228.616†	9575.0	9201.8	452.26 µg/L	452.26 ppb	19:15:39
3	Cr 267.716†	20898.9	20117.4	442.78 µg/L	442.78 ppb	19:15:39
3	Cu 324.752†	69759.8	64490.4	451.18 µg/L	451.18 ppb	19:15:39
3	Mn 257.610†	144303.8	138790.3	481.07 µg/L	481.07 ppb	19:15:33
3	Mo 202.031†	4187.5	4027.9	430.06 µg/L	430.06 ppb	19:15:59
3	Ni 231.604†	8969.1	8309.0	453.82 µg/L	453.82 ppb	19:15:39
3	P 214.914†	1074.2	1003.7	2111.2 µg/L	2111.2 ppb	19:15:59
3	Pb 220.353†	1799.2	1630.2	435.08 µg/L	435.08 ppb	19:15:59
3	S 181.975 Axial†	224.9	201.1	880.92 µg/L	880.92 ppb	19:15:59
3	Sb 206.836†	494.9	448.2	442.71 µg/L	442.71 ppb	19:15:59
3	Se 196.026†	304.8	276.8	429.75 µg/L	429.75 ppb	19:15:59
3	SiO2†	24880.7	22637.9	4875.2 µg/L	4875.2 ppb	19:15:39
3	Si 251.611†	29305.2	27823.1	2287.2 µg/L	2287.2 ppb	19:15:39
3	Sn 189.927†	959.0	921.6	423.93 µg/L	423.93 ppb	19:15:59
3	Ti 334.940†	203896.7	195645.3	470.28 µg/L	470.28 ppb	19:15:33
3	Tl 190.801†	305.5	317.6	449.03 µg/L	449.03 ppb	19:15:59
3	U 409.014†	5068.3	4919.7	444.42 µg/L	444.42 ppb	19:15:39
3	V 292.402†	43582.6	41887.9	451.80 µg/L	451.80 ppb	19:15:39
3	Zn 213.857†	19376.0	18127.3	449.39 µg/L	449.39 ppb	19:15:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1964867.1	102.88 %	1.107			1.08%
Sc RADIAL	56139.4	103 %	0.9			0.87%
Y 371.029	1343849.1	102.59 %	1.126			1.10%
Ag 328.068†	62312.3	498.00 µg/L	25.750	498.00 ppb	25.750	5.17%
QC value within limits for Ag 328.068 Recovery = 99.60%						
Al 396.153Radial†	6805.2	5061.9 µg/L	63.45	5061.9 ppb	63.45	1.25%
QC value within limits for Al 396.153Radial Recovery = 101.24%						
As 188.979†	252.2	491.96 µg/L	52.673	491.96 ppb	52.673	10.71%
QC value within limits for As 188.979 Recovery = 98.39%						
B 249.677†	11147.2	485.30 µg/L	27.561	485.30 ppb	27.561	5.68%
QC value within limits for B 249.677 Recovery = 97.06%						
Ba 233.527†	18898.6	492.97 µg/L	32.570	492.97 ppb	32.570	6.61%
QC value within limits for Ba 233.527 Recovery = 98.59%						
Be 313.107†	758238.3	494.98 µg/L	21.658	494.98 ppb	21.658	4.38%
QC value within limits for Be 313.107 Recovery = 99.00%						
Ca 317.933Radial†	5283.6	4974.8 µg/L	60.06	4974.8 ppb	60.06	1.21%
QC value within limits for Ca 317.933Radial Recovery = 99.50%						
Cd 226.502†	17901.6	493.80 µg/L	33.585	493.80 ppb	33.585	6.80%
QC value within limits for Cd 226.502 Recovery = 98.76%						
Co 228.616†	10052.8	494.14 µg/L	36.289	494.14 ppb	36.289	7.34%

QC value within limits for Co 228.616 Recovery = 98.83%							
Cr 267.716†	22369.6	492.35 µg/L	42.929	492.35 ppb	42.929	8.72%	
QC value within limits for Cr 267.716 Recovery = 98.47%							
Cu 324.752†	70327.6	491.96 µg/L	35.329	491.96 ppb	35.329	7.18%	
QC value within limits for Cu 324.752 Recovery = 98.39%							
Fe 238.204 Radial†	596.7	5067.7 µg/L	40.70	5067.7 ppb	40.70	0.80%	
QC value within limits for Fe 238.204 Radial Recovery = 101.35%							
K 766.490 Radial†	7056.8	5015.9 µg/L	38.15	5015.9 ppb	38.15	0.76%	
QC value within limits for K 766.490 Radial Recovery = 100.32%							
Mg 279.077 IEC†	556.7	5183.6 µg/L	33.98	5183.6 ppb	33.98	0.66%	
QC value within limits for Mg 279.077 IEC Recovery = 103.67%							
Mn 257.610†	145786.8	505.31 µg/L	21.142	505.31 ppb	21.142	4.18%	
QC value within limits for Mn 257.610 Recovery = 101.06%							
Mo 202.031†	4687.4	500.43 µg/L	61.026	500.43 ppb	61.026	12.19%	
QC value within limits for Mo 202.031 Recovery = 100.09%							
Na 589.592 Radial†	30672.0	10097 µg/L	86.1	10097 ppb	86.1	0.85%	
QC value within limits for Na 589.592 Radial Recovery = 100.97%							
Ni 231.604†	9054.6	494.54 µg/L	35.300	494.54 ppb	35.300	7.14%	
QC value within limits for Ni 231.604 Recovery = 98.91%							
P 214.914†	1148.8	2419.5 µg/L	267.56	2419.5 ppb	267.56	11.06%	
QC value within limits for P 214.914 Recovery = 96.78%							
Pb 220.353†	1849.0	493.53 µg/L	50.614	493.53 ppb	50.614	10.26%	
QC value within limits for Pb 220.353 Recovery = 98.71%							
S 181.975 Axial†	227.4	996.40 µg/L	100.008	996.40 ppb	100.008	10.04%	
QC value within limits for S 181.975 Axial Recovery = 99.64%							
Sb 206.836†	510.3	504.47 µg/L	53.501	504.47 ppb	53.501	10.61%	
QC value within limits for Sb 206.836 Recovery = 100.89%							
Se 196.026†	318.7	493.66 µg/L	55.921	493.66 ppb	55.921	11.33%	
QC value within limits for Se 196.026 Recovery = 98.73%							
SiO2†	24419.5	5258.9 µg/L	332.39	5258.9 ppb	332.39	6.32%	
QC value within limits for SiO2 Recovery = 98.34%							
Si 251.611†	29901.8	2458.1 µg/L	148.02	2458.1 ppb	148.02	6.02%	
QC value within limits for Si 251.611 Recovery = 98.32%							
Sn 189.927†	1088.6	500.71 µg/L	66.525	500.71 ppb	66.525	13.29%	
QC value within limits for Sn 189.927 Recovery = 100.14%							
Sr 421.552†	48033.0	497.92 µg/L	4.262	497.92 ppb	4.262	0.86%	
QC value within limits for Sr 421.552 Recovery = 99.58%							
Ti 334.940†	206813.5	497.14 µg/L	23.455	497.14 ppb	23.455	4.72%	
QC value within limits for Ti 334.940 Recovery = 99.43%							
Tl 190.801†	351.1	496.01 µg/L	40.687	496.01 ppb	40.687	8.20%	
QC value within limits for Tl 190.801 Recovery = 99.20%							
U 409.014†	5466.7	493.93 µg/L	42.881	493.93 ppb	42.881	8.68%	
QC value within limits for U 409.014 Recovery = 98.79%							
V 292.402†	45977.5	496.10 µg/L	38.364	496.10 ppb	38.364	7.73%	
QC value within limits for V 292.402 Recovery = 99.22%							
Zn 213.857†	19754.6	489.78 µg/L	34.976	489.78 ppb	34.976	7.14%	
QC value within limits for Zn 213.857 Recovery = 97.96%							

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 19:16:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55600.7	55600.7	102 %		19:16:41
1	Al 396.153Radial†	-4.5	5.7	4.2256 µg/L	4.2256 ppb	19:16:41
1	Ca 317.933Radial†	176.7	-5.7	-5.4036 µg/L	-5.4036 ppb	19:17:01
1	Fe 238.204 Radial†	16.9	2.1	17.440 µg/L	17.440 ppb	19:17:01
1	K 766.490 Radial†	120.8	-9.9	-7.0161 µg/L	-7.0161 ppb	19:16:41
1	Mg 279.077 IEC†	10.9	-0.6	-5.3345 µg/L	-5.3345 ppb	19:17:01
1	Na 589.592 Radial†	652.7	98.7	32.500 µg/L	32.500 ppb	19:16:41
1	Sr 421.552†	22.7	-17.3	-0.1790 µg/L	-0.1790 ppb	19:16:41
1	Sc 361.383	1934829.6	1934829.6	101.31 %		19:18:03
1	Y 371.029	1327190.7	1327190.7	101.32 %		19:18:03
1	Ag 328.068†	-516.6	54.6	0.4388 µg/L	0.4388 ppb	19:18:09
1	As 188.979†	1.2	0.0	0.0845 µg/L	0.0845 ppb	19:18:29
1	B 249.677†	321.4	-14.2	-0.6284 µg/L	-0.6284 ppb	19:18:29
1	Ba 233.527†	-23.7	2.6	0.0683 µg/L	0.0683 ppb	19:18:29
1	Be 313.107†	-3408.1	76.3	0.0498 µg/L	0.0498 ppb	19:18:09
1	Cd 226.502†	-144.3	-0.3	-0.0100 µg/L	-0.0100 ppb	19:18:29
1	Co 228.616†	-6.0	2.9	0.1456 µg/L	0.1456 ppb	19:18:29
1	Cr 267.716†	-15.9	36.7	0.8069 µg/L	0.8069 ppb	19:18:09
1	Cu 324.752†	2442.5	-75.1	-0.5222 µg/L	-0.5222 ppb	19:18:09
1	Mn 257.610†	-225.9	21.1	0.0756 µg/L	0.0756 ppb	19:18:29
1	Mo 202.031†	-2.6	4.9	0.5275 µg/L	0.5275 ppb	19:18:29
1	Ni 231.604†	310.8	4.6	0.2529 µg/L	0.2529 ppb	19:18:29
1	P 214.914†	22.3	-5.6	-12.052 µg/L	-12.052 ppb	19:18:29
1	Pb 220.353†	97.2	-1.3	-0.3391 µg/L	-0.3391 ppb	19:18:29
1	S 181.975 Axial†	15.8	0.7	3.2436 µg/L	3.2436 ppb	19:18:29
1	Sb 206.836†	30.1	2.8	2.7305 µg/L	2.7305 ppb	19:18:29
1	Se 196.026†	14.9	-1.1	-1.6720 µg/L	-1.6720 ppb	19:18:29
1	SiO2†	1241.8	-24.3	-5.2260 µg/L	-5.2260 ppb	19:18:09
1	Si 251.611†	314.2	-2.7	-0.2249 µg/L	-0.2249 ppb	19:18:29
1	Sn 189.927†	3.0	3.9	1.7687 µg/L	1.7687 ppb	19:18:29
1	Ti 334.940†	129.2	11.4	0.0278 µg/L	0.0278 ppb	19:18:09
1	Tl 190.801†	-22.4	2.2	3.0821 µg/L	3.0821 ppb	19:18:29
1	U 409.014†	-44.2	10.0	0.9045 µg/L	0.9045 ppb	19:18:09
1	V 292.402†	22.3	66.2	0.7146 µg/L	0.7146 ppb	19:18:09
1	Zn 213.857†	480.2	-1.5	-0.0391 µg/L	-0.0391 ppb	19:18:29
2	Sc RADIAL	55841.1	55841.1	102 %		19:17:07
2	Al 396.153Radial†	-0.2	10.0	7.4245 µg/L	7.4245 ppb	19:17:07
2	Ca 317.933Radial†	185.5	2.1	1.9861 µg/L	1.9861 ppb	19:17:27
2	Fe 238.204 Radial†	13.8	-1.1	-8.9579 µg/L	-8.9579 ppb	19:17:27
2	K 766.490 Radial†	118.8	-12.3	-8.7251 µg/L	-8.7251 ppb	19:17:07
2	Mg 279.077 IEC†	12.4	0.9	8.1129 µg/L	8.1129 ppb	19:17:27
2	Na 589.592 Radial†	684.6	127.2	41.869 µg/L	41.869 ppb	19:17:07
2	Sr 421.552†	48.5	7.8	0.0810 µg/L	0.0810 ppb	19:17:07
2	Sc 361.383	1955516.9	1955516.9	102.39 %		19:18:35
2	Y 371.029	1342161.2	1342161.2	102.46 %		19:18:35
2	Ag 328.068†	-513.3	63.2	0.5022 µg/L	0.5022 ppb	19:18:41
2	As 188.979†	-5.0	-6.0	-11.703 µg/L	-11.703 ppb	19:19:01
2	B 249.677†	317.0	-21.8	-0.9495 µg/L	-0.9495 ppb	19:19:01
2	Ba 233.527†	-19.8	6.7	0.1743 µg/L	0.1743 ppb	19:19:01
2	Be 313.107†	-3409.1	110.9	0.0724 µg/L	0.0724 ppb	19:18:41
2	Cd 226.502†	-125.7	19.4	0.5362 µg/L	0.5362 ppb	19:19:01
2	Co 228.616†	-4.9	4.1	0.1998 µg/L	0.1998 ppb	19:19:01
2	Cr 267.716†	-35.7	17.5	0.3848 µg/L	0.3848 ppb	19:18:41
2	Cu 324.752†	2432.5	-110.5	-0.7728 µg/L	-0.7728 ppb	19:18:41
2	Mn 257.610†	-217.1	32.1	0.1097 µg/L	0.1097 ppb	19:19:01
2	Mo 202.031†	-0.2	7.4	0.7857 µg/L	0.7857 ppb	19:19:01
2	Ni 231.604†	307.3	-2.1	-0.1144 µg/L	-0.1144 ppb	19:19:01
2	P 214.914†	26.8	-1.4	-2.9443 µg/L	-2.9443 ppb	19:19:01
2	Pb 220.353†	98.0	-1.5	-0.3841 µg/L	-0.3841 ppb	19:19:01

2	S 181.975 Axial†	16.0	0.8	3.5945 µg/L	3.5945 ppb	19:19:01
2	Sb 206.836†	19.9	-7.6	-7.4359 µg/L	-7.4359 ppb	19:19:01
2	Se 196.026†	24.3	7.9	11.982 µg/L	11.982 ppb	19:19:01
2	SiO2†	1252.6	-26.7	-5.7496 µg/L	-5.7496 ppb	19:18:41
2	Si 251.611†	335.5	14.8	1.2146 µg/L	1.2146 ppb	19:19:01
2	Sn 189.927†	0.8	1.7	0.7658 µg/L	0.7658 ppb	19:19:01
2	Ti 334.940†	159.2	39.3	0.0940 µg/L	0.0940 ppb	19:18:41
2	Tl 190.801†	-19.6	5.1	7.1712 µg/L	7.1712 ppb	19:19:01
2	U 409.014†	-39.3	15.2	1.3764 µg/L	1.3764 ppb	19:18:41
2	V 292.402†	-32.1	12.8	0.1441 µg/L	0.1441 ppb	19:18:41
2	Zn 213.857†	480.1	-6.6	-0.1635 µg/L	-0.1635 ppb	19:19:01
3	Sc RADIAL	54991.0	54991.0	101 %		19:17:32
3	Al 396.153Radial†	-25.8	-15.4	-11.501 µg/L	-11.501 ppb	19:17:32
3	Ca 317.933Radial†	179.1	-1.4	-1.2826 µg/L	-1.2826 ppb	19:17:53
3	Fe 238.204 Radial†	16.1	1.5	12.918 µg/L	12.918 ppb	19:17:53
3	K 766.490 Radial†	157.4	27.8	19.781 µg/L	19.781 ppb	19:17:32
3	Mg 279.077 IEC†	9.1	-2.2	-20.551 µg/L	-20.551 ppb	19:17:53
3	Na 589.592 Radial†	624.4	77.8	25.618 µg/L	25.618 ppb	19:17:32
3	Sr 421.552†	39.8	-0.1	-0.0009 µg/L	-0.0009 ppb	19:17:32
3	Sc 361.383	1967438.1	1967438.1	103.02 %		19:19:07
3	Y 371.029	1348776.4	1348776.4	102.97 %		19:19:07
3	Ag 328.068†	-543.2	37.2	0.2976 µg/L	0.2976 ppb	19:19:13
3	As 188.979†	-2.4	-3.5	-6.8853 µg/L	-6.8853 ppb	19:19:33
3	B 249.677†	305.4	-35.0	-1.5334 µg/L	-1.5334 ppb	19:19:33
3	Ba 233.527†	-26.9	-0.1	-0.0009 µg/L	-0.0009 ppb	19:19:33
3	Be 313.107†	-3287.9	248.8	0.1624 µg/L	0.1624 ppb	19:19:13
3	Cd 226.502†	-133.1	12.9	0.3539 µg/L	0.3539 ppb	19:19:33
3	Co 228.616†	-14.2	-5.0	-0.2450 µg/L	-0.2450 ppb	19:19:33
3	Cr 267.716†	-20.7	32.3	0.7108 µg/L	0.7108 ppb	19:19:13
3	Cu 324.752†	2481.8	-76.9	-0.5355 µg/L	-0.5355 ppb	19:19:13
3	Mn 257.610†	-209.8	40.5	0.1427 µg/L	0.1427 ppb	19:19:33
3	Mo 202.031†	-10.0	-2.2	-0.2320 µg/L	-0.2320 ppb	19:19:33
3	Ni 231.604†	301.2	-9.8	-0.5340 µg/L	-0.5340 ppb	19:19:33
3	P 214.914†	26.0	-2.4	-5.0576 µg/L	-5.0576 ppb	19:19:33
3	Pb 220.353†	96.7	-3.3	-0.8887 µg/L	-0.8887 ppb	19:19:33
3	S 181.975 Axial†	14.9	-0.4	-1.5487 µg/L	-1.5487 ppb	19:19:33
3	Sb 206.836†	32.3	4.4	4.3137 µg/L	4.3137 ppb	19:19:33
3	Se 196.026†	14.2	-2.1	-3.1442 µg/L	-3.1442 ppb	19:19:33
3	SiO2†	1256.2	-30.6	-6.5854 µg/L	-6.5854 ppb	19:19:13
3	Si 251.611†	309.4	-12.5	-1.0288 µg/L	-1.0288 ppb	19:19:33
3	Sn 189.927†	-1.0	-0.1	-0.0403 µg/L	-0.0403 ppb	19:19:33
3	Ti 334.940†	153.9	33.3	0.0816 µg/L	0.0816 ppb	19:19:13
3	Tl 190.801†	-21.2	3.7	5.1463 µg/L	5.1463 ppb	19:19:33
3	U 409.014†	-6.3	47.5	4.3005 µg/L	4.3005 ppb	19:19:13
3	V 292.402†	-20.0	24.8	0.2699 µg/L	0.2699 ppb	19:19:13
3	Zn 213.857†	479.8	-9.8	-0.2409 µg/L	-0.2409 ppb	19:19:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1952594.9	102.24 %	0.864			0.84%
Sc RADIAL	55477.6	102 %	0.8			0.79%
Y 371.029	1339376.1	102.25 %	0.844			0.83%
Ag 328.068†	51.7	0.4129 µg/L	0.10471	0.4129 ppb	0.10471	25.36%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.1	0.0498 µg/L	10.13010	0.0498 ppb	10.13010	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.2	-6.1678 µg/L	5.92624	-6.1678 ppb	5.92624	96.08%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-23.7	-1.0371 µg/L	0.45878	-1.0371 ppb	0.45878	44.24%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.1	0.0805 µg/L	0.08826	0.0805 ppb	0.08826	109.58%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	145.3	0.0949 µg/L	0.05957	0.0949 ppb	0.05957	62.77%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.7	-1.5667 µg/L	3.70306	-1.5667 ppb	3.70306	236.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.7	0.2934 µg/L	0.27809	0.2934 ppb	0.27809	94.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.7	0.0335 µg/L	0.24267	0.0335 ppb	0.24267	724.80%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated				
	28.8	0.6341 µg/L	0.22120	0.6341 ppb	0.22120	34.88%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated				
	-87.5	-0.6102 µg/L	0.14102	-0.6102 ppb	0.14102	23.11%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated				
	0.8	7.1335 µg/L	14.11778	7.1335 ppb	14.11778	197.91%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated				
	1.9	1.3465 µg/L	15.98731	1.3465 ppb	15.98731	>999.9%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated				
	-0.6	-5.9243 µg/L	14.34120	-5.9243 ppb	14.34120	242.07%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated				
	31.2	0.1094 µg/L	0.03354	0.1094 ppb	0.03354	30.67%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated				
	3.4	0.3604 µg/L	0.52901	0.3604 ppb	0.52901	146.78%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated				
	101.2	33.329 µg/L	8.1571	33.329 ppb	8.1571	24.47%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated				
	-2.4	-0.1318 µg/L	0.39372	-0.1318 ppb	0.39372	298.69%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated				
	-3.1	-6.6846 µg/L	4.76680	-6.6846 ppb	4.76680	71.31%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated				
	-2.0	-0.5373 µg/L	0.30511	-0.5373 ppb	0.30511	56.78%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated				
	0.4	1.7632 µg/L	2.87351	1.7632 ppb	2.87351	162.97%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated				
	-0.1	-0.1306 µg/L	6.37594	-0.1306 ppb	6.37594	>999.9%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated				
	1.6	2.3884 µg/L	8.34041	2.3884 ppb	8.34041	349.20%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated				
	-27.2	-5.8537 µg/L	0.68563	-5.8537 ppb	0.68563	11.71%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated				
	-0.2	-0.0130 µg/L	1.13664	-0.0130 ppb	1.13664	>999.9%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated				
	1.8	0.8314 µg/L	0.90630	0.8314 ppb	0.90630	109.01%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated				
	-3.2	-0.0330 µg/L	0.13293	-0.0330 ppb	0.13293	403.15%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated				
	28.0	0.0678 µg/L	0.03518	0.0678 ppb	0.03518	51.88%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated				
	3.7	5.1332 µg/L	2.04457	5.1332 ppb	2.04457	39.83%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated				
	24.2	2.1938 µg/L	1.83966	2.1938 ppb	1.83966	83.86%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated				
	34.6	0.3762 µg/L	0.29972	0.3762 ppb	0.29972	79.67%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated				
	-6.0	-0.1478 µg/L	0.10182	-0.1478 ppb	0.10182	68.87%
	QC value within limits for Zn 213.857	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 40

Sample ID: 1202032557|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 330

Date Collected: 2/11/2010 19:19:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032557|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56162.6	56162.6	103 %		19:20:21
1	Al 396.153Radial†	-0.9	9.2	6.8694 µg/L	6.8694 ppb	19:20:21
1	Ca 317.933Radial†	193.4	8.8	8.2949 µg/L	8.2949 ppb	19:20:41
1	Fe 238.204 Radial†	17.5	2.5	21.049 µg/L	21.049 ppb	19:20:41
1	K 766.490 Radial†	140.5	8.2	5.7964 µg/L	5.7964 ppb	19:20:21
1	Mg 279.077 IEC†	14.7	3.0	27.583 µg/L	27.583 ppb	19:20:41
1	Na 589.592 Radial†	619.9	60.5	19.922 µg/L	19.922 ppb	19:20:21
1	Sr 421.552†	24.9	-15.4	-0.1597 µg/L	-0.1597 ppb	19:20:21
1	Sc 361.383	1969009.3	1969009.3	103.10 %		19:21:43
1	Y 371.029	1347307.8	1347307.8	102.85 %		19:21:43
1	Ag 328.068†	-572.7	9.0	0.0759 µg/L	0.0759 ppb	19:21:49
1	As 188.979†	4.3	3.1	5.9676 µg/L	5.9676 ppb	19:22:09
1	B 249.677†	319.3	-21.8	-0.9629 µg/L	-0.9629 ppb	19:22:09
1	Ba 233.527†	-16.2	10.3	0.2702 µg/L	0.2702 ppb	19:22:09
1	Be 313.107†	-3531.0	15.6	0.0101 µg/L	0.0101 ppb	19:21:49
1	Cd 226.502†	-147.1	-0.5	-0.0161 µg/L	-0.0161 ppb	19:22:09
1	Co 228.616†	-17.1	-7.8	-0.3825 µg/L	-0.3825 ppb	19:22:09
1	Cr 267.716†	-24.9	28.2	0.6201 µg/L	0.6201 ppb	19:22:09
1	Cu 324.752†	2344.0	-212.5	-1.4815 µg/L	-1.4815 ppb	19:21:49
1	Mn 257.610†	-173.7	75.6	0.2635 µg/L	0.2635 ppb	19:22:09
1	Mo 202.031†	-7.4	0.3	0.0356 µg/L	0.0356 ppb	19:22:09
1	Ni 231.604†	312.9	1.3	0.0735 µg/L	0.0735 ppb	19:22:09
1	P 214.914†	30.5	2.0	4.4454 µg/L	4.4454 ppb	19:22:09
1	Pb 220.353†	103.9	3.6	0.9614 µg/L	0.9614 ppb	19:22:09
1	S 181.975 Axial†	17.6	2.3	9.8847 µg/L	9.8847 ppb	19:22:09
1	Sb 206.836†	28.0	0.2	0.2152 µg/L	0.2152 ppb	19:22:09
1	Se 196.026†	17.5	1.2	1.8091 µg/L	1.8091 ppb	19:22:09
1	SiO2†	1345.3	54.8	11.812 µg/L	11.812 ppb	19:21:49
1	Si 251.611†	418.6	93.2	7.6584 µg/L	7.6584 ppb	19:22:09
1	Sn 189.927†	-0.5	0.4	0.1929 µg/L	0.1929 ppb	19:22:09
1	Ti 334.940†	191.4	69.5	0.1652 µg/L	0.1652 ppb	19:21:49
1	Tl 190.801†	-19.7	5.2	7.2052 µg/L	7.2052 ppb	19:22:09
1	U 409.014†	-22.0	32.3	2.9184 µg/L	2.9184 ppb	19:21:49
1	V 292.402†	-1.5	42.8	0.4631 µg/L	0.4631 ppb	19:21:49
1	Zn 213.857†	523.7	32.4	0.8081 µg/L	0.8081 ppb	19:22:09
2	Sc RADIAL	57033.0	57033.0	105 %		19:20:47
2	Al 396.153Radial†	-29.2	-17.8	-13.303 µg/L	-13.303 ppb	19:20:47
2	Ca 317.933Radial†	198.1	10.4	9.7767 µg/L	9.7767 ppb	19:21:07
2	Fe 238.204 Radial†	15.7	0.5	4.2922 µg/L	4.2922 ppb	19:21:07
2	K 766.490 Radial†	163.1	27.6	19.636 µg/L	19.636 ppb	19:20:47
2	Mg 279.077 IEC†	8.2	-3.5	-32.175 µg/L	-32.175 ppb	19:21:07
2	Na 589.592 Radial†	627.1	58.2	19.145 µg/L	19.145 ppb	19:20:47
2	Sr 421.552†	15.7	-24.5	-0.2542 µg/L	-0.2542 ppb	19:20:47
2	Sc 361.383	1951926.6	1951926.6	102.20 %		19:22:15
2	Y 371.029	1336400.0	1336400.0	102.02 %		19:22:15
2	Ag 328.068†	-524.4	51.4	0.4117 µg/L	0.4117 ppb	19:22:21
2	As 188.979†	-1.8	-2.9	-5.6797 µg/L	-5.6797 ppb	19:22:41
2	B 249.677†	313.0	-25.2	-1.1037 µg/L	-1.1037 ppb	19:22:41
2	Ba 233.527†	-15.7	10.7	0.2791 µg/L	0.2791 ppb	19:22:41
2	Be 313.107†	-3486.1	29.5	0.0193 µg/L	0.0193 ppb	19:22:21
2	Cd 226.502†	-132.0	13.0	0.3577 µg/L	0.3577 ppb	19:22:41
2	Co 228.616†	-14.0	-4.8	-0.2372 µg/L	-0.2372 ppb	19:22:41
2	Cr 267.716†	-26.4	26.5	0.5835 µg/L	0.5835 ppb	19:22:41
2	Cu 324.752†	2384.5	-153.0	-1.0685 µg/L	-1.0685 ppb	19:22:21
2	Mn 257.610†	-179.0	69.0	0.2407 µg/L	0.2407 ppb	19:22:41
2	Mo 202.031†	-5.7	1.9	0.2054 µg/L	0.2054 ppb	19:22:41
2	Ni 231.604†	320.7	11.6	0.6340 µg/L	0.6340 ppb	19:22:41
2	P 214.914†	24.8	-3.3	-7.0323 µg/L	-7.0323 ppb	19:22:41
2	Pb 220.353†	91.9	-7.2	-1.9278 µg/L	-1.9278 ppb	19:22:41

2	S 181.975 Axial†	19.7	4.5	19.528 µg/L	19.528 ppb	19:22:41
2	Sb 206.836†	24.0	-3.5	-3.4566 µg/L	-3.4566 ppb	19:22:41
2	Se 196.026†	13.6	-2.5	-3.7596 µg/L	-3.7596 ppb	19:22:41
2	SiO2†	1333.2	54.4	11.718 µg/L	11.718 ppb	19:22:21
2	Si 251.611†	413.0	91.2	7.4996 µg/L	7.4996 ppb	19:22:41
2	Sn 189.927†	0.9	1.7	0.7999 µg/L	0.7999 ppb	19:22:41
2	Ti 334.940†	113.7	-4.8	-0.0089 µg/L	-0.0089 ppb	19:22:21
2	Tl 190.801†	-24.7	0.1	0.1231 µg/L	0.1231 ppb	19:22:41
2	U 409.014†	-59.8	-4.9	-0.4425 µg/L	-0.4425 ppb	19:22:21
2	V 292.402†	4.4	48.6	0.5204 µg/L	0.5204 ppb	19:22:21
2	Zn 213.857†	510.3	23.7	0.5934 µg/L	0.5934 ppb	19:22:41
3	Sc RADIAL	55968.5	55968.5	103 %		19:21:13
3	Al 396.153Radial†	-7.1	3.2	2.3751 µg/L	2.3751 ppb	19:21:13
3	Ca 317.933Radial†	199.5	15.4	14.455 µg/L	14.455 ppb	19:21:33
3	Fe 238.204 Radial†	15.7	0.8	6.8156 µg/L	6.8156 ppb	19:21:33
3	K 766.490 Radial†	147.8	15.7	11.190 µg/L	11.190 ppb	19:21:13
3	Mg 279.077 IEC†	15.9	4.2	39.435 µg/L	39.435 ppb	19:21:33
3	Na 589.592 Radial†	631.7	74.1	24.401 µg/L	24.401 ppb	19:21:13
3	Sr 421.552†	49.4	8.6	0.0895 µg/L	0.0895 ppb	19:21:13
3	Sc 361.383	1933204.1	1933204.1	101.22 %		19:22:47
3	Y 371.029	1323935.5	1323935.5	101.07 %		19:22:47
3	Ag 328.068†	-593.9	-22.2	-0.1725 µg/L	-0.1725 ppb	19:22:53
3	As 188.979†	2.3	1.1	2.1309 µg/L	2.1309 ppb	19:23:13
3	B 249.677†	321.0	-14.3	-0.6295 µg/L	-0.6295 ppb	19:23:13
3	Ba 233.527†	-21.8	4.5	0.1184 µg/L	0.1184 ppb	19:23:13
3	Be 313.107†	-3438.4	43.6	0.0285 µg/L	0.0285 ppb	19:22:53
3	Cd 226.502†	-140.8	3.0	0.0822 µg/L	0.0822 ppb	19:23:13
3	Co 228.616†	-13.8	-4.8	-0.2340 µg/L	-0.2340 ppb	19:23:13
3	Cr 267.716†	-34.4	18.4	0.4049 µg/L	0.4049 ppb	19:23:13
3	Cu 324.752†	2432.8	-82.7	-0.5764 µg/L	-0.5764 ppb	19:22:53
3	Mn 257.610†	-182.3	64.0	0.2209 µg/L	0.2209 ppb	19:23:13
3	Mo 202.031†	-4.6	3.0	0.3226 µg/L	0.3226 ppb	19:23:13
3	Ni 231.604†	307.3	1.4	0.0745 µg/L	0.0745 ppb	19:23:13
3	P 214.914†	29.5	1.5	3.2678 µg/L	3.2678 ppb	19:23:13
3	Pb 220.353†	88.5	-9.8	-2.6006 µg/L	-2.6006 ppb	19:23:13
3	S 181.975 Axial†	15.9	0.9	3.7746 µg/L	3.7746 ppb	19:23:13
3	Sb 206.836†	23.1	-4.2	-4.0869 µg/L	-4.0869 ppb	19:23:13
3	Se 196.026†	8.2	-7.7	-11.834 µg/L	-11.834 ppb	19:23:13
3	SiO2†	1331.0	64.9	13.967 µg/L	13.967 ppb	19:22:53
3	Si 251.611†	405.4	87.6	7.2021 µg/L	7.2021 ppb	19:23:13
3	Sn 189.927†	-4.0	-3.1	-1.4085 µg/L	-1.4085 ppb	19:23:13
3	Ti 334.940†	115.8	-1.7	-0.0070 µg/L	-0.0070 ppb	19:22:53
3	Tl 190.801†	-23.4	1.2	1.6907 µg/L	1.6907 ppb	19:23:13
3	U 409.014†	-46.8	7.4	0.6668 µg/L	0.6668 ppb	19:22:53
3	V 292.402†	-2.1	42.2	0.4542 µg/L	0.4542 ppb	19:22:53
3	Zn 213.857†	517.2	35.4	0.8820 µg/L	0.8820 ppb	19:23:13

Mean Data: 1202032557|948737|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1951380.0	102.18 %	%	0.938			0.92%
Sc RADIAL	56388.0	103 %	%	1.0			1.01%
Y 371.029	1335881.1	101.98 %	%	0.893			0.88%
Ag 328.068†	12.8	0.1050 µg/L	µg/L	0.29320	0.1050 ppb	0.29320	279.21%
Al 396.153Radial†	-1.8	-1.3527 µg/L	µg/L	10.59010	-1.3527 ppb	10.59010	782.87%
As 188.979†	0.4	0.8062 µg/L	µg/L	5.93558	0.8062 ppb	5.93558	736.20%
B 249.677†	-20.5	-0.8987 µg/L	µg/L	0.24350	-0.8987 ppb	0.24350	27.09%
Ba 233.527†	8.5	0.2226 µg/L	µg/L	0.09033	0.2226 ppb	0.09033	40.59%
Be 313.107†	29.6	0.0193 µg/L	µg/L	0.00919	0.0193 ppb	0.00919	47.63%
Ca 317.933Radial†	11.5	10.842 µg/L	µg/L	3.2155	10.842 ppb	3.2155	29.66%
Cd 226.502†	5.2	0.1413 µg/L	µg/L	0.19380	0.1413 ppb	0.19380	137.20%
Co 228.616†	-5.8	-0.2846 µg/L	µg/L	0.08480	-0.2846 ppb	0.08480	29.80%
Cr 267.716†	24.4	0.5362 µg/L	µg/L	0.11516	0.5362 ppb	0.11516	21.48%
Cu 324.752†	-149.4	-1.0421 µg/L	µg/L	0.45311	-1.0421 ppb	0.45311	43.48%
Fe 238.204 Radial†	1.3	10.719 µg/L	µg/L	9.0344	10.719 ppb	9.0344	84.29%
K 766.490 Radial†	17.2	12.207 µg/L	µg/L	6.9755	12.207 ppb	6.9755	57.14%
Mg 279.077 IEC†	1.2	11.614 µg/L	µg/L	38.3828	11.614 ppb	38.3828	330.48%
Mn 257.610†	69.5	0.2417 µg/L	µg/L	0.02130	0.2417 ppb	0.02130	8.81%
Mo 202.031†	1.8	0.1879 µg/L	µg/L	0.14430	0.1879 ppb	0.14430	76.81%
Na 589.592 Radial†	64.3	21.156 µg/L	µg/L	2.8374	21.156 ppb	2.8374	13.41%

Ni 231.604†	4.8	0.2607 µg/L	0.32337	0.2607 ppb	0.32337	124.06%
P 214.914†	0.1	0.2270 µg/L	6.31420	0.2270 ppb	6.31420	>999.9%
Pb 220.353†	-4.5	-1.1890 µg/L	1.89244	-1.1890 ppb	1.89244	159.16%
S 181.975 Axial†	2.5	11.063 µg/L	7.9427	11.063 ppb	7.9427	71.80%
Sb 206.836†	-2.5	-2.4428 µg/L	2.32335	-2.4428 ppb	2.32335	95.11%
Se 196.026†	-3.0	-4.5949 µg/L	6.85979	-4.5949 ppb	6.85979	149.29%
SiO2†	58.0	12.499 µg/L	1.2722	12.499 ppb	1.2722	10.18%
Si 251.611†	90.7	7.4534 µg/L	0.23165	7.4534 ppb	0.23165	3.11%
Sn 189.927†	-0.3	-0.1385 µg/L	1.14090	-0.1385 ppb	1.14090	823.53%
Sr 421.552†	-10.4	-0.1081 µg/L	0.17752	-0.1081 ppb	0.17752	164.18%
Ti 334.940†	21.0	0.0497 µg/L	0.09997	0.0497 ppb	0.09997	200.99%
Tl 190.801†	2.2	3.0063 µg/L	3.71983	3.0063 ppb	3.71983	123.73%
U 409.014†	11.6	1.0476 µg/L	1.71251	1.0476 ppb	1.71251	163.48%
V 292.402†	44.5	0.4792 µg/L	0.03595	0.4792 ppb	0.03595	7.50%
Zn 213.857†	30.5	0.7612 µg/L	0.14993	0.7612 ppb	0.14993	19.70%

Sequence No.: 41
 Sample ID: 1202032558|948737|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 331
 Date Collected: 2/11/2010 19:23:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202032558|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55855.2	55855.2	102 %		19:23:56
1	Al 396.153Radial†	6859.1	6711.9	4992.3 µg/L	4992.3 ppb	19:24:17
1	Ca 317.933Radial†	5588.0	5280.7	4972.1 µg/L	4972.1 ppb	19:24:17
1	Fe 238.204 Radial†	622.5	593.7	5042.2 µg/L	5042.2 ppb	19:24:17
1	K 766.490 Radial†	7222.5	6928.5	4924.7 µg/L	4924.7 ppb	19:23:56
1	Mg 279.077 IEC†	568.8	544.5	5070.0 µg/L	5070.0 ppb	19:24:17
1	Na 589.592 Radial†	16067.2	15156.9	4989.7 µg/L	4989.7 ppb	19:23:56
1	Sr 421.552†	48385.5	47236.4	489.66 µg/L	489.66 ppb	19:23:56
1	Sc 361.383	1989589.0	1989589.0	104.18 %		19:25:20
1	Y 371.029	1358828.2	1358828.2	103.73 %		19:25:20
1	Ag 328.068†	62403.6	60466.8	483.35 µg/L	483.35 ppb	19:25:26
1	As 188.979†	266.7	254.9	497.19 µg/L	497.19 ppb	19:25:46
1	B 249.677†	11770.1	10966.8	477.43 µg/L	477.43 ppb	19:25:26
1	Ba 233.527†	19609.2	18849.2	491.69 µg/L	491.69 ppb	19:25:26
1	Be 313.107†	765769.4	738515.5	482.11 µg/L	482.11 ppb	19:25:20
1	Cd 226.502†	18133.6	17548.9	484.07 µg/L	484.07 ppb	19:25:26
1	Co 228.616†	10204.7	9804.5	481.95 µg/L	481.95 ppb	19:25:26
1	Cr 267.716†	23258.1	22378.3	492.54 µg/L	492.54 ppb	19:25:26
1	Cu 324.752†	75730.0	70208.4	491.12 µg/L	491.12 ppb	19:25:26
1	Mn 257.610†	147968.6	142281.7	493.17 µg/L	493.17 ppb	19:25:20
1	Mo 202.031†	4884.5	4696.3	501.38 µg/L	501.38 ppb	19:25:46
1	Ni 231.604†	9732.2	9040.0	493.75 µg/L	493.75 ppb	19:25:26
1	P 214.914†	274.6	235.9	460.07 µg/L	460.07 ppb	19:25:46
1	Pb 220.353†	2040.6	1861.6	496.90 µg/L	496.90 ppb	19:25:46
1	S 181.975 Axial†	1213.5	1150.0	5038.6 µg/L	5038.6 ppb	19:25:46
1	Sb 206.836†	565.3	515.7	509.80 µg/L	509.80 ppb	19:25:46
1	Se 196.026†	348.9	319.1	494.37 µg/L	494.37 ppb	19:25:46
1	SiO2†	50535.9	47260.3	10178 µg/L	10178 ppb	19:25:26
1	Si 251.611†	60336.9	57605.6	4735.5 µg/L	4735.5 ppb	19:25:26
1	Sn 189.927†	1211.5	1163.8	535.30 µg/L	535.30 ppb	19:25:46
1	Ti 334.940†	209639.9	201120.8	483.46 µg/L	483.46 ppb	19:25:20
1	Tl 190.801†	344.0	354.5	500.64 µg/L	500.64 ppb	19:25:46
1	U 409.014†	5812.7	5633.3	509.02 µg/L	509.02 ppb	19:25:26
1	V 292.402†	47804.6	45932.7	495.64 µg/L	495.64 ppb	19:25:26
1	Zn 213.857†	20684.3	19379.7	480.43 µg/L	480.43 ppb	19:25:26
2	Sc RADIAL	56621.3	56621.3	104 %		19:24:22
2	Al 396.153Radial†	6761.1	6526.9	4854.4 µg/L	4854.4 ppb	19:24:42
2	Ca 317.933Radial†	5510.9	5132.5	4832.6 µg/L	4832.6 ppb	19:24:42
2	Fe 238.204 Radial†	611.2	574.6	4880.2 µg/L	4880.2 ppb	19:24:42
2	K 766.490 Radial†	7318.8	6925.8	4922.8 µg/L	4922.8 ppb	19:24:22
2	Mg 279.077 IEC†	555.6	524.2	4881.7 µg/L	4881.7 ppb	19:24:42
2	Na 589.592 Radial†	16134.1	15009.0	4941.0 µg/L	4941.0 ppb	19:24:22
2	Sr 421.552†	48688.4	46888.7	486.06 µg/L	486.06 ppb	19:24:22
2	Sc 361.383	1981021.9	1981021.9	103.73 %		19:25:53
2	Y 371.029	1354467.5	1354467.5	103.40 %		19:25:53
2	Ag 328.068†	62083.9	60417.6	482.95 µg/L	482.95 ppb	19:25:59
2	As 188.979†	268.8	258.0	503.27 µg/L	503.27 ppb	19:26:19
2	B 249.677†	11697.0	10945.2	476.57 µg/L	476.57 ppb	19:25:59
2	Ba 233.527†	19543.5	18867.3	492.16 µg/L	492.16 ppb	19:25:59
2	Be 313.107†	766542.7	742439.8	484.67 µg/L	484.67 ppb	19:25:53
2	Cd 226.502†	18043.5	17537.3	483.77 µg/L	483.77 ppb	19:25:59
2	Co 228.616†	10157.9	9801.8	481.81 µg/L	481.81 ppb	19:25:59
2	Cr 267.716†	23124.1	22345.6	491.82 µg/L	491.82 ppb	19:25:59
2	Cu 324.752†	75467.1	70269.3	491.53 µg/L	491.53 ppb	19:25:59
2	Mn 257.610†	148155.6	143076.2	495.91 µg/L	495.91 ppb	19:25:53
2	Mo 202.031†	4832.3	4666.2	498.17 µg/L	498.17 ppb	19:26:19
2	Ni 231.604†	9667.7	9018.1	492.55 µg/L	492.55 ppb	19:25:59
2	P 214.914†	272.2	234.8	457.67 µg/L	457.67 ppb	19:26:19
2	Pb 220.353†	2044.7	1874.1	500.20 µg/L	500.20 ppb	19:26:19

2	S 181.975 Axial†	1199.8	1141.9	5003.1 µg/L	5003.1 ppb	19:26:19
2	Sb 206.836†	565.3	518.0	512.02 µg/L	512.02 ppb	19:26:19
2	Se 196.026†	343.0	314.9	487.68 µg/L	487.68 ppb	19:26:19
2	SiO2†	50279.9	47223.2	10170 µg/L	10170 ppb	19:25:59
2	Si 251.611†	60047.4	57576.9	4733.1 µg/L	4733.1 ppb	19:25:59
2	Sn 189.927†	1201.8	1159.5	533.31 µg/L	533.31 ppb	19:26:19
2	Ti 334.940†	209553.6	201907.8	485.37 µg/L	485.37 ppb	19:25:53
2	Tl 190.801†	347.4	359.2	507.29 µg/L	507.29 ppb	19:26:19
2	U 409.014†	5749.9	5596.9	505.75 µg/L	505.75 ppb	19:25:59
2	V 292.402†	47601.0	45934.8	495.61 µg/L	495.61 ppb	19:25:59
2	Zn 213.857†	20543.3	19329.6	479.20 µg/L	479.20 ppb	19:25:59
3	Sc RADIAL	56667.3	56667.3	104 %		19:24:48
3	Al 396.153Radial†	6785.5	6545.0	4869.0 µg/L	4869.0 ppb	19:25:08
3	Ca 317.933Radial†	5519.1	5136.1	4836.0 µg/L	4836.0 ppb	19:25:08
3	Fe 238.204 Radial†	610.2	573.1	4867.6 µg/L	4867.6 ppb	19:25:08
3	K 766.490 Radial†	7189.7	6795.7	4830.4 µg/L	4830.4 ppb	19:24:48
3	Mg 279.077 IEC†	562.6	530.6	4940.1 µg/L	4940.1 ppb	19:25:08
3	Na 589.592 Radial†	15967.1	14835.5	4883.9 µg/L	4883.9 ppb	19:24:48
3	Sr 421.552†	48078.7	46263.5	479.58 µg/L	479.58 ppb	19:24:48
3	Sc 361.383	1962516.7	1962516.7	102.76 %		19:26:26
3	Y 371.029	1343125.0	1343125.0	102.53 %		19:26:26
3	Ag 328.068†	60804.7	59737.2	477.42 µg/L	477.42 ppb	19:26:32
3	As 188.979†	243.9	236.2	460.84 µg/L	460.84 ppb	19:26:53
3	B 249.677†	11399.3	10761.9	468.53 µg/L	468.53 ppb	19:26:32
3	Ba 233.527†	18655.7	18181.0	474.25 µg/L	474.25 ppb	19:26:32
3	Be 313.107†	740791.3	724347.9	472.86 µg/L	472.86 ppb	19:26:26
3	Cd 226.502†	17306.9	16984.5	468.50 µg/L	468.50 ppb	19:26:32
3	Co 228.616†	9664.7	9414.2	462.72 µg/L	462.72 ppb	19:26:32
3	Cr 267.716†	21731.9	21201.0	466.63 µg/L	466.63 ppb	19:26:32
3	Cu 324.752†	72256.6	67831.0	474.49 µg/L	474.49 ppb	19:26:32
3	Mn 257.610†	143350.8	139747.2	484.37 µg/L	484.37 ppb	19:26:26
3	Mo 202.031†	4322.8	4214.3	449.94 µg/L	449.94 ppb	19:26:53
3	Ni 231.604†	9237.2	8687.0	474.47 µg/L	474.47 ppb	19:26:32
3	P 214.914†	257.0	222.5	432.24 µg/L	432.24 ppb	19:26:53
3	Pb 220.353†	1875.5	1728.0	461.14 µg/L	461.14 ppb	19:26:53
3	S 181.975 Axial†	1113.0	1068.4	4680.8 µg/L	4680.8 ppb	19:26:53
3	Sb 206.836†	514.5	473.7	467.94 µg/L	467.94 ppb	19:26:53
3	Se 196.026†	322.8	298.3	462.30 µg/L	462.30 ppb	19:26:53
3	SiO2†	48695.4	46138.3	9936.1 µg/L	9936.1 ppb	19:26:32
3	Si 251.611†	58040.6	56169.8	4617.4 µg/L	4617.4 ppb	19:26:32
3	Sn 189.927†	1062.2	1034.6	475.87 µg/L	475.87 ppb	19:26:53
3	Ti 334.940†	202050.2	196510.8	472.38 µg/L	472.38 ppb	19:26:26
3	Tl 190.801†	308.7	324.7	458.96 µg/L	458.96 ppb	19:26:53
3	U 409.014†	5501.6	5407.5	488.61 µg/L	488.61 ppb	19:26:32
3	V 292.402†	45248.4	44078.0	475.38 µg/L	475.38 ppb	19:26:32
3	Zn 213.857†	19651.1	18648.0	462.29 µg/L	462.29 ppb	19:26:32

Mean Data: 1202032558|948737|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1977709.2	103.55 %	0.725			0.70%
Sc RADIAL	56381.3	103 %	0.8			0.81%
Y 371.029	1352140.2	103.22 %	0.619			0.60%
Ag 328.068†	60207.2	481.24 µg/L	3.315	481.24 ppb	3.315	0.69%
Al 396.153Radial†	6594.6	4905.2 µg/L	75.76	4905.2 ppb	75.76	1.54%
As 188.979†	249.7	487.10 µg/L	22.947	487.10 ppb	22.947	4.71%
B 249.677†	10891.3	474.18 µg/L	4.912	474.18 ppb	4.912	1.04%
Ba 233.527†	18632.5	486.03 µg/L	10.205	486.03 ppb	10.205	2.10%
Be 313.107†	735101.0	479.88 µg/L	6.212	479.88 ppb	6.212	1.29%
Ca 317.933Radial†	5183.1	4880.2 µg/L	79.59	4880.2 ppb	79.59	1.63%
Cd 226.502†	17356.9	478.78 µg/L	8.903	478.78 ppb	8.903	1.86%
Co 228.616†	9673.5	475.49 µg/L	11.063	475.49 ppb	11.063	2.33%
Cr 267.716†	21975.0	483.67 µg/L	14.755	483.67 ppb	14.755	3.05%
Cu 324.752†	69436.2	485.71 µg/L	9.720	485.71 ppb	9.720	2.00%
Fe 238.204 Radial†	580.5	4930.0 µg/L	97.39	4930.0 ppb	97.39	1.98%
K 766.490 Radial†	6883.3	4892.6 µg/L	53.94	4892.6 ppb	53.94	1.10%
Mg 279.077 IEC†	533.1	4963.9 µg/L	96.41	4963.9 ppb	96.41	1.94%
Mn 257.610†	141701.7	491.15 µg/L	6.025	491.15 ppb	6.025	1.23%
Mo 202.031†	4525.6	483.16 µg/L	28.817	483.16 ppb	28.817	5.96%
Na 589.592 Radial†	15000.5	4938.2 µg/L	52.96	4938.2 ppb	52.96	1.07%

Ni 231.604†	8915.0	486.93 µg/L	10.800	486.93 ppb	10.800	2.22%
P 214.914†	231.1	450.00 µg/L	15.419	450.00 ppb	15.419	3.43%
Pb 220.353†	1821.2	486.08 µg/L	21.661	486.08 ppb	21.661	4.46%
S 181.975 Axial†	1120.1	4907.5 µg/L	197.13	4907.5 ppb	197.13	4.02%
Sb 206.836†	502.5	496.59 µg/L	24.834	496.59 ppb	24.834	5.00%
Se 196.026†	310.8	481.45 µg/L	16.915	481.45 ppb	16.915	3.51%
SiO2†	46873.9	10095 µg/L	137.3	10095 ppb	137.3	1.36%
Si 251.611†	57117.4	4695.3 µg/L	67.47	4695.3 ppb	67.47	1.44%
Sn 189.927†	1119.3	514.83 µg/L	33.750	514.83 ppb	33.750	6.56%
Sr 421.552†	46796.2	485.10 µg/L	5.111	485.10 ppb	5.111	1.05%
Ti 334.940†	199846.5	480.40 µg/L	7.013	480.40 ppb	7.013	1.46%
Tl 190.801†	346.1	488.96 µg/L	26.193	488.96 ppb	26.193	5.36%
U 409.014†	5545.9	501.13 µg/L	10.961	501.13 ppb	10.961	2.19%
V 292.402†	45315.2	488.88 µg/L	11.691	488.88 ppb	11.691	2.39%
Zn 213.857†	19119.1	473.97 µg/L	10.138	473.97 ppb	10.138	2.14%

Sequence No.: 42

Sample ID: 246000001|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 332

Date Collected: 2/11/2010 19:27:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246000001|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55650.4	55650.4	102 %		19:27:35
1	Al 396.153Radial†	14.3	24.2	17.975 µg/L	17.975 ppb	19:27:35
1	Ca 317.933Radial†	247.5	63.6	59.862 µg/L	59.862 ppb	19:27:55
1	Fe 238.204 Radial†	19.3	4.5	37.740 µg/L	37.740 ppb	19:27:55
1	K 766.490 Radial†	401.6	265.4	188.64 µg/L	188.64 ppb	19:27:35
1	Mg 279.077 IEC†	13.6	2.1	19.565 µg/L	19.565 ppb	19:27:55
1	Na 589.592 Radial†	1195.6	630.6	207.61 µg/L	207.61 ppb	19:27:35
1	Sr 421.552†	72.8	31.8	0.3298 µg/L	0.3298 ppb	19:27:35
1	Sc 361.383	1983846.0	1983846.0	103.87 %		19:28:57
1	Y 371.029	1358055.0	1358055.0	103.67 %		19:28:57
1	Ag 328.068†	-556.5	28.8	0.2361 µg/L	0.2361 ppb	19:29:03
1	As 188.979†	-1.9	-2.9	-5.7574 µg/L	-5.7574 ppb	19:29:23
1	B 249.677†	727.0	368.4	16.081 µg/L	16.081 ppb	19:29:03
1	Ba 233.527†	-8.5	17.9	0.4667 µg/L	0.4667 ppb	19:29:23
1	Be 313.107†	-3354.4	211.2	0.1376 µg/L	0.1376 ppb	19:29:03
1	Cd 226.502†	-133.7	13.4	0.3654 µg/L	0.3654 ppb	19:29:23
1	Co 228.616†	-8.1	1.0	0.0504 µg/L	0.0504 ppb	19:29:23
1	Cr 267.716†	4.5	56.7	1.2479 µg/L	1.2479 ppb	19:29:23
1	Cu 324.752†	2586.1	3.6	0.0301 µg/L	0.0301 ppb	19:29:03
1	Mn 257.610†	-27.3	217.8	0.7586 µg/L	0.7586 ppb	19:29:23
1	Mo 202.031†	8.2	15.5	1.6542 µg/L	1.6542 ppb	19:29:23
1	Ni 231.604†	303.5	-10.0	-0.5451 µg/L	-0.5451 ppb	19:29:23
1	P 214.914†	28.1	-0.6	-1.2440 µg/L	-1.2440 ppb	19:29:23
1	Pb 220.353†	102.8	1.7	0.4588 µg/L	0.4588 ppb	19:29:23
1	S 181.975 Axial†	32.8	16.7	73.240 µg/L	73.240 ppb	19:29:23
1	Sb 206.836†	20.5	-7.3	-7.1410 µg/L	-7.1410 ppb	19:29:23
1	Se 196.026†	7.6	-8.5	-12.927 µg/L	-12.927 ppb	19:29:23
1	SiO2†	14546.8	12754.1	2746.7 µg/L	2746.7 ppb	19:29:03
1	Si 251.611†	16527.0	15597.6	1282.2 µg/L	1282.2 ppb	19:29:03
1	Sn 189.927†	0.6	1.5	0.6664 µg/L	0.6664 ppb	19:29:23
1	Ti 334.940†	450.9	318.0	0.7643 µg/L	0.7643 ppb	19:29:03
1	Tl 190.801†	-24.6	0.6	0.8306 µg/L	0.8306 ppb	19:29:23
1	U 409.014†	16.1	69.1	6.2502 µg/L	6.2502 ppb	19:29:03
1	V 292.402†	35.0	77.9	0.8564 µg/L	0.8564 ppb	19:29:03
1	Zn 213.857†	579.5	82.3	2.0548 µg/L	2.0548 ppb	19:29:23
2	Sc RADIAL	56357.1	56357.1	103 %		19:28:01
2	Al 396.153Radial†	31.0	40.2	29.943 µg/L	29.943 ppb	19:28:01
2	Ca 317.933Radial†	245.8	58.9	55.415 µg/L	55.415 ppb	19:28:21
2	Fe 238.204 Radial†	19.9	4.8	40.296 µg/L	40.296 ppb	19:28:21
2	K 766.490 Radial†	393.7	252.8	179.68 µg/L	179.68 ppb	19:28:01
2	Mg 279.077 IEC†	13.7	1.9	18.071 µg/L	18.071 ppb	19:28:21
2	Na 589.592 Radial†	1174.9	595.8	196.14 µg/L	196.14 ppb	19:28:01
2	Sr 421.552†	53.8	12.6	0.1305 µg/L	0.1305 ppb	19:28:01
2	Sc 361.383	1971554.6	1971554.6	103.23 %		19:29:29
2	Y 371.029	1348064.6	1348064.6	102.91 %		19:29:29
2	Ag 328.068†	-565.2	17.0	0.1383 µg/L	0.1383 ppb	19:29:35
2	As 188.979†	-0.7	-1.8	-3.5576 µg/L	-3.5576 ppb	19:29:56
2	B 249.677†	701.9	348.4	15.208 µg/L	15.208 ppb	19:29:35
2	Ba 233.527†	1.3	27.2	0.7094 µg/L	0.7094 ppb	19:29:56
2	Be 313.107†	-3313.0	231.2	0.1506 µg/L	0.1506 ppb	19:29:35
2	Cd 226.502†	-142.3	4.3	0.1144 µg/L	0.1144 ppb	19:29:56
2	Co 228.616†	-11.9	-2.7	-0.1336 µg/L	-0.1336 ppb	19:29:56
2	Cr 267.716†	13.7	65.6	1.4431 µg/L	1.4431 ppb	19:29:56
2	Cu 324.752†	2557.2	-8.9	-0.0566 µg/L	-0.0566 ppb	19:29:35
2	Mn 257.610†	-11.2	233.3	0.8125 µg/L	0.8125 ppb	19:29:56
2	Mo 202.031†	-4.5	3.2	0.3463 µg/L	0.3463 ppb	19:29:56
2	Ni 231.604†	317.7	5.5	0.3041 µg/L	0.3041 ppb	19:29:56
2	P 214.914†	30.4	1.8	3.8947 µg/L	3.8947 ppb	19:29:56
2	Pb 220.353†	96.8	-3.4	-0.9071 µg/L	-0.9071 ppb	19:29:56

2	S 181.975 Axial†	25.1	9.5	41.481 µg/L	41.481 ppb	19:29:56
2	Sb 206.836†	25.0	-2.8	-2.7386 µg/L	-2.7386 ppb	19:29:56
2	Se 196.026†	16.7	0.4	0.6171 µg/L	0.6171 ppb	19:29:56
2	SiO2†	14575.1	12868.8	2771.4 µg/L	2771.4 ppb	19:29:35
2	Si 251.611†	16575.7	15744.0	1294.2 µg/L	1294.2 ppb	19:29:35
2	Sn 189.927†	1.0	1.8	0.8434 µg/L	0.8434 ppb	19:29:56
2	Ti 334.940†	509.7	377.6	0.9077 µg/L	0.9077 ppb	19:29:35
2	Tl 190.801†	-21.3	3.7	5.1181 µg/L	5.1181 ppb	19:29:56
2	U 409.014†	-78.9	-22.8	-2.0702 µg/L	-2.0702 ppb	19:29:35
2	V 292.402†	-35.1	10.2	0.1175 µg/L	0.1175 ppb	19:29:35
2	Zn 213.857†	574.9	81.4	2.0274 µg/L	2.0274 ppb	19:29:56
3	Sc RADIAL	56074.3	56074.3	103 %		19:28:27
3	Al 396.153Radial†	20.1	29.7	22.096 µg/L	22.096 ppb	19:28:27
3	Ca 317.933Radial†	253.2	67.2	63.315 µg/L	63.315 ppb	19:28:47
3	Fe 238.204 Radial†	18.1	3.1	26.183 µg/L	26.183 ppb	19:28:47
3	K 766.490 Radial†	385.1	246.3	175.10 µg/L	175.10 ppb	19:28:27
3	Mg 279.077 IEC†	14.6	2.9	27.179 µg/L	27.179 ppb	19:28:47
3	Na 589.592 Radial†	1165.6	592.5	195.06 µg/L	195.06 ppb	19:28:27
3	Sr 421.552†	44.1	3.3	0.0346 µg/L	0.0346 ppb	19:28:27
3	Sc 361.383	1961867.7	1961867.7	102.72 %		19:30:02
3	Y 371.029	1342324.7	1342324.7	102.47 %		19:30:02
3	Ag 328.068†	-584.1	-4.1	-0.0331 µg/L	-0.0331 ppb	19:30:07
3	As 188.979†	-1.3	-2.4	-4.6476 µg/L	-4.6476 ppb	19:30:28
3	B 249.677†	683.2	333.6	14.569 µg/L	14.569 ppb	19:30:07
3	Ba 233.527†	7.3	33.1	0.8626 µg/L	0.8626 ppb	19:30:28
3	Be 313.107†	-3134.6	389.0	0.2537 µg/L	0.2537 ppb	19:30:07
3	Cd 226.502†	-130.3	15.3	0.4196 µg/L	0.4196 ppb	19:30:28
3	Co 228.616†	-9.6	-0.5	-0.0268 µg/L	-0.0268 ppb	19:30:28
3	Cr 267.716†	3.8	56.1	1.2333 µg/L	1.2333 ppb	19:30:28
3	Cu 324.752†	2627.0	71.3	0.5016 µg/L	0.5016 ppb	19:30:07
3	Mn 257.610†	25.0	268.4	0.9320 µg/L	0.9320 ppb	19:30:28
3	Mo 202.031†	0.6	8.1	0.8699 µg/L	0.8699 ppb	19:30:28
3	Ni 231.604†	323.2	12.4	0.6809 µg/L	0.6809 ppb	19:30:28
3	P 214.914†	33.1	4.6	9.7521 µg/L	9.7521 ppb	19:30:28
3	Pb 220.353†	99.3	-0.5	-0.1359 µg/L	-0.1359 ppb	19:30:28
3	S 181.975 Axial†	29.3	13.7	59.882 µg/L	59.882 ppb	19:30:28
3	Sb 206.836†	26.8	-0.8	-0.8268 µg/L	-0.8268 ppb	19:30:28
3	Se 196.026†	12.3	-3.9	-5.9001 µg/L	-5.9001 ppb	19:30:28
3	SiO2†	14459.5	12826.1	2762.2 µg/L	2762.2 ppb	19:30:07
3	Si 251.611†	16363.1	15616.3	1283.7 µg/L	1283.7 ppb	19:30:07
3	Sn 189.927†	-3.2	-2.2	-1.0133 µg/L	-1.0133 ppb	19:30:28
3	Ti 334.940†	532.6	402.4	0.9667 µg/L	0.9667 ppb	19:30:07
3	Tl 190.801†	-24.7	0.3	0.3676 µg/L	0.3676 ppb	19:30:28
3	U 409.014†	-63.7	-8.3	-0.7632 µg/L	-0.7632 ppb	19:30:07
3	V 292.402†	-74.7	-28.5	-0.2916 µg/L	-0.2916 ppb	19:30:07
3	Zn 213.857†	575.8	84.9	2.1145 µg/L	2.1145 ppb	19:30:28

Mean Data: 246000001|948737|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1972422.8	103.28 %		0.577				0.56%
Sc RADIAL	56027.3	103 %		0.7				0.63%
Y 371.029	1349481.4	103.02 %		0.608				0.59%
Ag 328.068†	13.9	0.1137 µg/L		0.13628	0.1137 ppb		0.13628	119.82%
Al 396.153Radial†	31.3	23.338 µg/L		6.0799	23.338 ppb		6.0799	26.05%
As 188.979†	-2.4	-4.6542 µg/L		1.09989	-4.6542 ppb		1.09989	23.63%
B 249.677†	350.1	15.286 µg/L		0.7595	15.286 ppb		0.7595	4.97%
Ba 233.527†	26.1	0.6796 µg/L		0.19961	0.6796 ppb		0.19961	29.37%
Be 313.107†	277.1	0.1806 µg/L		0.06356	0.1806 ppb		0.06356	35.19%
Ca 317.933Radial†	63.2	59.530 µg/L		3.9606	59.530 ppb		3.9606	6.65%
Cd 226.502†	11.0	0.2998 µg/L		0.16283	0.2998 ppb		0.16283	54.31%
Co 228.616†	-0.7	-0.0367 µg/L		0.09239	-0.0367 ppb		0.09239	252.02%
Cr 267.716†	59.5	1.3081 µg/L		0.11716	1.3081 ppb		0.11716	8.96%
Cu 324.752†	22.0	0.1583 µg/L		0.30037	0.1583 ppb		0.30037	189.69%
Fe 238.204 Radial†	4.1	34.740 µg/L		7.5199	34.740 ppb		7.5199	21.65%
K 766.490 Radial†	254.8	181.14 µg/L		6.885	181.14 ppb		6.885	3.80%
Mg 279.077 IEC†	2.3	21.605 µg/L		4.8845	21.605 ppb		4.8845	22.61%
Mn 257.610†	239.9	0.8343 µg/L		0.08876	0.8343 ppb		0.08876	10.64%
Mo 202.031†	9.0	0.9568 µg/L		0.65826	0.9568 ppb		0.65826	68.80%
Na 589.592 Radial†	606.3	199.60 µg/L		6.950	199.60 ppb		6.950	3.48%

Ni 231.604†	2.7	0.1466 µg/L	0.62802	0.1466 ppb	0.62802	428.33%
P 214.914†	1.9	4.1343 µg/L	5.50197	4.1343 ppb	5.50197	133.08%
Pb 220.353†	-0.7	-0.1947 µg/L	0.68485	-0.1947 ppb	0.68485	351.68%
S 181.975 Axial†	13.3	58.201 µg/L	15.9464	58.201 ppb	15.9464	27.40%
Sb 206.836†	-3.6	-3.5688 µg/L	3.23794	-3.5688 ppb	3.23794	90.73%
Se 196.026†	-4.0	-6.0699 µg/L	6.77354	-6.0699 ppb	6.77354	111.59%
SiO2†	12816.3	2760.1 µg/L	12.49	2760.1 ppb	12.49	0.45%
Si 251.611†	15652.6	1286.7 µg/L	6.55	1286.7 ppb	6.55	0.51%
Sn 189.927†	0.4	0.1655 µg/L	1.02474	0.1655 ppb	1.02474	619.14%
Sr 421.552†	15.9	0.1650 µg/L	0.15060	0.1650 ppb	0.15060	91.28%
Ti 334.940†	366.0	0.8796 µg/L	0.10409	0.8796 ppb	0.10409	11.83%
Tl 190.801†	1.5	2.1054 µg/L	2.61928	2.1054 ppb	2.61928	124.41%
U 409.014†	12.7	1.1389 µg/L	4.47445	1.1389 ppb	4.47445	392.86%
V 292.402†	19.9	0.2275 µg/L	0.58185	0.2275 ppb	0.58185	255.81%
Zn 213.857†	82.9	2.0655 µg/L	0.04451	2.0655 ppb	0.04451	2.15%

Sequence No.: 43

Sample ID: 1202032559|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 333

Date Collected: 2/11/2010 19:30:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032559|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55369.8	55369.8	101 %		19:31:10
1	Al 396.153Radial†	27.3	37.1	27.641 µg/L	27.641 ppb	19:31:10
1	Ca 317.933Radial†	243.4	60.7	57.167 µg/L	57.167 ppb	19:31:30
1	Fe 238.204 Radial†	16.5	1.8	15.034 µg/L	15.034 ppb	19:31:30
1	K 766.490 Radial†	376.1	242.3	172.24 µg/L	172.24 ppb	19:31:10
1	Mg 279.077 IEC†	13.4	1.9	17.989 µg/L	17.989 ppb	19:31:30
1	Na 589.592 Radial†	1118.3	560.4	184.47 µg/L	184.47 ppb	19:31:10
1	Sr 421.552†	80.8	40.1	0.4152 µg/L	0.4152 ppb	19:31:10
1	Sc 361.383	1957288.3	1957288.3	102.48 %		19:32:32
1	Y 371.029	1341003.8	1341003.8	102.37 %		19:32:32
1	Ag 328.068†	-492.7	83.8	0.6666 µg/L	0.6666 ppb	19:32:37
1	As 188.979†	-0.9	-2.0	-4.0031 µg/L	-4.0031 ppb	19:32:58
1	B 249.677†	719.9	371.0	16.207 µg/L	16.207 ppb	19:32:37
1	Ba 233.527†	-10.5	15.7	0.4102 µg/L	0.4102 ppb	19:32:58
1	Be 313.107†	-3539.8	-13.5	-0.0090 µg/L	-0.0090 ppb	19:32:37
1	Cd 226.502†	-150.2	-4.4	-0.1235 µg/L	-0.1235 ppb	19:32:58
1	Co 228.616†	-12.4	-3.3	-0.1634 µg/L	-0.1634 ppb	19:32:58
1	Cr 267.716†	-22.0	30.9	0.6806 µg/L	0.6806 ppb	19:32:58
1	Cu 324.752†	2532.9	-14.6	-0.0998 µg/L	-0.0998 ppb	19:32:37
1	Mn 257.610†	-105.5	141.2	0.4903 µg/L	0.4903 ppb	19:32:58
1	Mo 202.031†	-9.0	-1.2	-0.1312 µg/L	-0.1312 ppb	19:32:58
1	Ni 231.604†	309.3	-0.4	-0.0191 µg/L	-0.0191 ppb	19:32:58
1	P 214.914†	35.6	7.1	15.341 µg/L	15.341 ppb	19:32:58
1	Pb 220.353†	89.9	-9.5	-2.5338 µg/L	-2.5338 ppb	19:32:58
1	S 181.975 Axial†	30.4	14.9	65.128 µg/L	65.128 ppb	19:32:58
1	Sb 206.836†	22.5	-5.0	-4.9601 µg/L	-4.9601 ppb	19:32:58
1	Se 196.026†	14.9	-1.3	-1.9004 µg/L	-1.9004 ppb	19:32:58
1	SiO2†	14720.0	13113.1	2824.0 µg/L	2824.0 ppb	19:32:37
1	Si 251.611†	16745.8	16026.9	1317.5 µg/L	1317.5 ppb	19:32:37
1	Sn 189.927†	4.4	5.2	2.3867 µg/L	2.3867 ppb	19:32:58
1	Ti 334.940†	342.8	218.3	0.5247 µg/L	0.5247 ppb	19:32:37
1	Tl 190.801†	-18.4	6.4	8.8912 µg/L	8.8912 ppb	19:32:58
1	U 409.014†	-31.7	22.7	2.0510 µg/L	2.0510 ppb	19:32:37
1	V 292.402†	-35.4	9.7	0.1073 µg/L	0.1073 ppb	19:32:37
1	Zn 213.857†	550.1	61.2	1.5266 µg/L	1.5266 ppb	19:32:58
2	Sc RADIAL	56232.0	56232.0	103 %		19:31:36
2	Al 396.153Radial†	20.5	30.0	22.366 µg/L	22.366 ppb	19:31:36
2	Ca 317.933Radial†	234.1	48.1	45.285 µg/L	45.285 ppb	19:31:56
2	Fe 238.204 Radial†	18.9	3.9	32.938 µg/L	32.938 ppb	19:31:56
2	K 766.490 Radial†	401.7	261.4	185.83 µg/L	185.83 ppb	19:31:36
2	Mg 279.077 IEC†	11.2	-0.4	-3.5186 µg/L	-3.5186 ppb	19:31:56
2	Na 589.592 Radial†	1117.4	542.6	178.63 µg/L	178.63 ppb	19:31:36
2	Sr 421.552†	60.4	19.0	0.1974 µg/L	0.1974 ppb	19:31:36
2	Sc 361.383	1985418.5	1985418.5	103.96 %		19:33:04
2	Y 371.029	1359374.4	1359374.4	103.78 %		19:33:04
2	Ag 328.068†	-475.1	107.5	0.8590 µg/L	0.8590 ppb	19:33:09
2	As 188.979†	-4.1	-5.1	-9.9165 µg/L	-9.9165 ppb	19:33:30
2	B 249.677†	718.8	360.0	15.716 µg/L	15.716 ppb	19:33:09
2	Ba 233.527†	-18.1	8.6	0.2255 µg/L	0.2255 ppb	19:33:30
2	Be 313.107†	-3406.7	163.4	0.1065 µg/L	0.1065 ppb	19:33:09
2	Cd 226.502†	-148.4	-0.7	-0.0227 µg/L	-0.0227 ppb	19:33:30
2	Co 228.616†	-10.8	-1.5	-0.0755 µg/L	-0.0755 ppb	19:33:30
2	Cr 267.716†	-16.3	36.7	0.8072 µg/L	0.8072 ppb	19:33:30
2	Cu 324.752†	2453.0	-126.5	-0.8788 µg/L	-0.8788 ppb	19:33:09
2	Mn 257.610†	-109.7	138.6	0.4845 µg/L	0.4845 ppb	19:33:30
2	Mo 202.031†	-6.5	1.3	0.1397 µg/L	0.1397 ppb	19:33:30
2	Ni 231.604†	303.1	-10.6	-0.5795 µg/L	-0.5795 ppb	19:33:30
2	P 214.914†	27.9	-0.8	-1.7271 µg/L	-1.7271 ppb	19:33:30
2	Pb 220.353†	100.2	-0.8	-0.2107 µg/L	-0.2107 ppb	19:33:30

2	S 181.975 Axial†	24.6	8.8	38.629 µg/L	38.629 ppb	19:33:30
2	Sb 206.836†	25.5	-2.4	-2.3573 µg/L	-2.3573 ppb	19:33:30
2	Se 196.026†	13.5	-2.9	-4.3357 µg/L	-4.3357 ppb	19:33:30
2	SiO2†	14565.5	12761.0	2748.2 µg/L	2748.2 ppb	19:33:09
2	Si 251.611†	16534.1	15591.9	1281.7 µg/L	1281.7 ppb	19:33:09
2	Sn 189.927†	-3.4	-2.4	-1.0908 µg/L	-1.0908 ppb	19:33:30
2	Ti 334.940†	415.8	283.9	0.6838 µg/L	0.6838 ppb	19:33:09
2	Tl 190.801†	-24.3	0.9	1.3234 µg/L	1.3234 ppb	19:33:30
2	U 409.014†	-74.6	-18.1	-1.6482 µg/L	-1.6482 ppb	19:33:09
2	V 292.402†	9.6	53.5	0.5749 µg/L	0.5749 ppb	19:33:09
2	Zn 213.857†	541.1	45.0	1.1253 µg/L	1.1253 ppb	19:33:30
3	Sc RADIAL	56023.2	56023.2	103 %		19:32:01
3	Al 396.153Radial†	23.5	33.0	24.583 µg/L	24.583 ppb	19:32:01
3	Ca 317.933Radial†	244.2	58.7	55.281 µg/L	55.281 ppb	19:32:22
3	Fe 238.204 Radial†	14.9	-0.0	-0.0783 µg/L	-0.0783 ppb	19:32:22
3	K 766.490 Radial†	448.8	308.8	219.46 µg/L	219.46 ppb	19:32:01
3	Mg 279.077 IEC†	9.0	-2.5	-23.358 µg/L	-23.358 ppb	19:32:22
3	Na 589.592 Radial†	1105.2	534.7	176.03 µg/L	176.03 ppb	19:32:01
3	Sr 421.552†	62.1	20.9	0.2170 µg/L	0.2170 ppb	19:32:01
3	Sc 361.383	1953368.2	1953368.2	102.28 %		19:33:36
3	Y 371.029	1335404.5	1335404.5	101.95 %		19:33:36
3	Ag 328.068†	-556.7	20.3	0.1596 µg/L	0.1596 ppb	19:33:41
3	As 188.979†	0.2	-0.9	-1.8467 µg/L	-1.8467 ppb	19:34:02
3	B 249.677†	701.7	354.6	15.499 µg/L	15.499 ppb	19:33:41
3	Ba 233.527†	-16.3	10.1	0.2614 µg/L	0.2614 ppb	19:34:02
3	Be 313.107†	-3559.8	-40.0	-0.0263 µg/L	-0.0263 ppb	19:33:41
3	Cd 226.502†	-146.9	-1.5	-0.0404 µg/L	-0.0404 ppb	19:34:02
3	Co 228.616†	-11.4	-2.3	-0.1134 µg/L	-0.1134 ppb	19:34:02
3	Cr 267.716†	-18.4	34.4	0.7558 µg/L	0.7558 ppb	19:34:02
3	Cu 324.752†	2463.5	-77.5	-0.5416 µg/L	-0.5416 ppb	19:33:41
3	Mn 257.610†	-124.1	122.8	0.4261 µg/L	0.4261 ppb	19:34:02
3	Mo 202.031†	-6.9	0.8	0.0892 µg/L	0.0892 ppb	19:34:02
3	Ni 231.604†	309.7	0.6	0.0333 µg/L	0.0333 ppb	19:34:02
3	P 214.914†	32.7	4.3	9.3269 µg/L	9.3269 ppb	19:34:02
3	Pb 220.353†	89.9	-9.3	-2.4747 µg/L	-2.4747 ppb	19:34:02
3	S 181.975 Axial†	20.7	5.5	23.923 µg/L	23.923 ppb	19:34:02
3	Sb 206.836†	18.4	-9.0	-8.8834 µg/L	-8.8834 ppb	19:34:02
3	Se 196.026†	8.1	-8.0	-12.127 µg/L	-12.127 ppb	19:34:02
3	SiO2†	14525.8	12952.1	2789.3 µg/L	2789.3 ppb	19:33:41
3	Si 251.611†	16428.3	15749.4	1294.7 µg/L	1294.7 ppb	19:33:41
3	Sn 189.927†	-0.7	0.2	0.1014 µg/L	0.1014 ppb	19:34:02
3	Ti 334.940†	337.4	213.7	0.5169 µg/L	0.5169 ppb	19:33:41
3	Tl 190.801†	-27.2	-2.3	-3.2110 µg/L	-3.2110 ppb	19:34:02
3	U 409.014†	-73.9	-18.6	-1.6874 µg/L	-1.6874 ppb	19:33:41
3	V 292.402†	-61.9	-16.4	-0.1736 µg/L	-0.1736 ppb	19:33:41
3	Zn 213.857†	546.4	58.6	1.4662 µg/L	1.4662 ppb	19:34:02

Mean Data: 1202032559|948737|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1965358.3	102.91 %	0.915			0.89%
Sc RADIAL	55875.0	102 %	0.8			0.81%
Y 371.029	1345260.9	102.70 %	0.957			0.93%
Ag 328.068†	70.5	0.5618 µg/L	0.36128	0.5618 ppb	0.36128	64.31%
Al 396.153Radial†	33.4	24.863 µg/L	2.6486	24.863 ppb	2.6486	10.65%
As 188.979†	-2.7	-5.2554 µg/L	4.17812	-5.2554 ppb	4.17812	79.50%
B 249.677†	361.9	15.807 µg/L	0.3629	15.807 ppb	0.3629	2.30%
Ba 233.527†	11.5	0.2990 µg/L	0.09794	0.2990 ppb	0.09794	32.75%
Be 313.107†	36.6	0.0237 µg/L	0.07220	0.0237 ppb	0.07220	304.72%
Ca 317.933Radial†	55.8	52.578 µg/L	6.3860	52.578 ppb	6.3860	12.15%
Cd 226.502†	-2.2	-0.0622 µg/L	0.05384	-0.0622 ppb	0.05384	86.58%
Co 228.616†	-2.4	-0.1174 µg/L	0.04408	-0.1174 ppb	0.04408	37.55%
Cr 267.716†	34.0	0.7479 µg/L	0.06369	0.7479 ppb	0.06369	8.52%
Cu 324.752†	-72.9	-0.5067 µg/L	0.39067	-0.5067 ppb	0.39067	77.10%
Fe 238.204 Radial†	1.9	15.964 µg/L	16.5276	15.964 ppb	16.5276	103.53%
K 766.490 Radial†	270.8	192.51 µg/L	24.311	192.51 ppb	24.311	12.63%
Mg 279.077 IEC†	-0.3	-2.9625 µg/L	20.67888	-2.9625 ppb	20.67888	698.02%
Mn 257.610†	134.2	0.4670 µg/L	0.03550	0.4670 ppb	0.03550	7.60%
Mo 202.031†	0.3	0.0326 µg/L	0.14408	0.0326 ppb	0.14408	442.34%
Na 589.592 Radial†	545.9	179.71 µg/L	4.323	179.71 ppb	4.323	2.41%

Ni 231.604†	-3.5	-0.1884 µg/L	0.33968	-0.1884 ppb	0.33968	180.30%
P 214.914†	3.5	7.6469 µg/L	8.65706	7.6469 ppb	8.65706	113.21%
Pb 220.353†	-6.5	-1.7397 µg/L	1.32454	-1.7397 ppb	1.32454	76.13%
S 181.975 Axial†	9.7	42.560 µg/L	20.8819	42.560 ppb	20.8819	49.07%
Sb 206.836†	-5.5	-5.4003 µg/L	3.28526	-5.4003 ppb	3.28526	60.84%
Se 196.026†	-4.0	-6.1210 µg/L	5.34190	-6.1210 ppb	5.34190	87.27%
SiO2†	12942.1	2787.1 µg/L	37.96	2787.1 ppb	37.96	1.36%
Si 251.611†	15789.4	1298.0 µg/L	18.11	1298.0 ppb	18.11	1.40%
Sn 189.927†	1.0	0.4657 µg/L	1.76718	0.4657 ppb	1.76718	379.43%
Sr 421.552†	26.7	0.2766 µg/L	0.12050	0.2766 ppb	0.12050	43.57%
Ti 334.940†	238.7	0.5751 µg/L	0.09422	0.5751 ppb	0.09422	16.38%
Tl 190.801†	1.7	2.3345 µg/L	6.11411	2.3345 ppb	6.11411	261.90%
U 409.014†	-4.7	-0.4282 µg/L	2.14716	-0.4282 ppb	2.14716	501.43%
V 292.402†	15.6	0.1695 µg/L	0.37811	0.1695 ppb	0.37811	223.01%
Zn 213.857†	54.9	1.3727 µg/L	0.21636	1.3727 ppb	0.21636	15.76%

Sequence No.: 44
 Sample ID: 1202032560|948737|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 334
 Date Collected: 2/11/2010 19:34:11
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202032560|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56464.8	56464.8	103 %		19:34:44
1	Al 396.153Radial†	6806.1	6588.3	4900.2 µg/L	4900.2 ppb	19:35:04
1	Ca 317.933Radial†	5506.4	5142.9	4842.4 µg/L	4842.4 ppb	19:35:04
1	Fe 238.204 Radial†	611.9	576.9	4899.7 µg/L	4899.7 ppb	19:35:04
1	K 766.490 Radial†	7333.3	6959.3	4946.6 µg/L	4946.6 ppb	19:34:44
1	Mg 279.077 IEC†	557.7	527.7	4914.4 µg/L	4914.4 ppb	19:35:04
1	Na 589.592 Radial†	16217.5	15132.6	4981.7 µg/L	4981.7 ppb	19:34:44
1	Sr 421.552†	47317.0	45693.3	473.66 µg/L	473.66 ppb	19:34:44
1	Sc 361.383	1969504.1	1969504.1	103.12 %		19:36:08
1	Y 371.029	1344490.8	1344490.8	102.64 %		19:36:08
1	Ag 328.068†	61777.8	60470.9	483.38 µg/L	483.38 ppb	19:36:14
1	As 188.979†	267.3	258.0	503.42 µg/L	503.42 ppb	19:36:34
1	B 249.677†	12031.5	11335.6	493.62 µg/L	493.62 ppb	19:36:14
1	Ba 233.527†	19428.6	18866.0	492.13 µg/L	492.13 ppb	19:36:14
1	Be 313.107†	757639.6	738128.1	481.85 µg/L	481.85 ppb	19:36:08
1	Cd 226.502†	17872.8	17473.5	482.01 µg/L	482.01 ppb	19:36:14
1	Co 228.616†	10159.6	9860.7	484.72 µg/L	484.72 ppb	19:36:14
1	Cr 267.716†	23006.4	22361.8	492.18 µg/L	492.18 ppb	19:36:14
1	Cu 324.752†	75411.0	70640.4	494.12 µg/L	494.12 ppb	19:36:14
1	Mn 257.610†	147190.3	142975.5	495.56 µg/L	495.56 ppb	19:36:08
1	Mo 202.031†	4839.3	4700.2	501.80 µg/L	501.80 ppb	19:36:34
1	Ni 231.604†	9637.5	9043.3	493.93 µg/L	493.93 ppb	19:36:14
1	P 214.914†	274.0	238.0	464.37 µg/L	464.37 ppb	19:36:34
1	Pb 220.353†	2045.5	1886.3	503.48 µg/L	503.48 ppb	19:36:34
1	S 181.975 Axial†	1203.8	1152.6	5049.8 µg/L	5049.8 ppb	19:36:34
1	Sb 206.836†	563.5	519.5	513.56 µg/L	513.56 ppb	19:36:34
1	Se 196.026†	338.7	312.6	484.26 µg/L	484.26 ppb	19:36:34
1	SiO2†	63253.8	60087.6	12940 µg/L	12940 ppb	19:36:14
1	Si 251.611†	75809.8	73200.4	6017.4 µg/L	6017.4 ppb	19:36:14
1	Sn 189.927†	1195.5	1160.1	533.61 µg/L	533.61 ppb	19:36:34
1	Ti 334.940†	208361.9	201933.7	485.43 µg/L	485.43 ppb	19:36:08
1	Tl 190.801†	343.5	357.4	504.78 µg/L	504.78 ppb	19:36:34
1	U 409.014†	5786.5	5664.8	511.90 µg/L	511.90 ppb	19:36:14
1	V 292.402†	47433.2	46040.5	496.78 µg/L	496.78 ppb	19:36:14
1	Zn 213.857†	20405.0	19311.3	478.73 µg/L	478.73 ppb	19:36:14
2	Sc RADIAL	56738.3	56738.3	104 %		19:35:10
2	Al 396.153Radial†	6857.8	6606.4	4913.7 µg/L	4913.7 ppb	19:35:30
2	Ca 317.933Radial†	5550.5	5159.7	4858.2 µg/L	4858.2 ppb	19:35:30
2	Fe 238.204 Radial†	618.4	580.3	4928.8 µg/L	4928.8 ppb	19:35:30
2	K 766.490 Radial†	7512.7	7097.8	5045.0 µg/L	5045.0 ppb	19:35:10
2	Mg 279.077 IEC†	561.6	528.9	4925.0 µg/L	4925.0 ppb	19:35:30
2	Na 589.592 Radial†	16499.1	15328.0	5046.0 µg/L	5046.0 ppb	19:35:10
2	Sr 421.552†	48452.7	46565.3	482.70 µg/L	482.70 ppb	19:35:10
2	Sc 361.383	1963144.1	1963144.1	102.79 %		19:36:41
2	Y 371.029	1340072.9	1340072.9	102.30 %		19:36:41
2	Ag 328.068†	61611.8	60503.4	483.66 µg/L	483.66 ppb	19:36:47
2	As 188.979†	260.2	252.0	491.59 µg/L	491.59 ppb	19:37:07
2	B 249.677†	12050.1	11391.4	496.05 µg/L	496.05 ppb	19:36:47
2	Ba 233.527†	19468.1	18965.5	494.72 µg/L	494.72 ppb	19:36:47
2	Be 313.107†	756552.9	739451.1	482.72 µg/L	482.72 ppb	19:36:41
2	Cd 226.502†	17837.5	17495.3	482.61 µg/L	482.61 ppb	19:36:47
2	Co 228.616†	10063.1	9798.7	481.66 µg/L	481.66 ppb	19:36:47
2	Cr 267.716†	23000.6	22428.5	493.65 µg/L	493.65 ppb	19:36:47
2	Cu 324.752†	75255.1	70725.6	494.72 µg/L	494.72 ppb	19:36:47
2	Mn 257.610†	146664.2	142926.0	495.39 µg/L	495.39 ppb	19:36:41
2	Mo 202.031†	4791.0	4668.4	498.41 µg/L	498.41 ppb	19:37:07
2	Ni 231.604†	9624.9	9061.3	494.92 µg/L	494.92 ppb	19:36:47
2	P 214.914†	259.0	224.3	434.79 µg/L	434.79 ppb	19:37:07
2	Pb 220.353†	2029.3	1877.0	500.98 µg/L	500.98 ppb	19:37:07

2	S 181.975 Axial†	1194.9	1147.6	5028.2 µg/L	5028.2 ppb	19:37:07
2	Sb 206.836†	555.9	513.8	507.88 µg/L	507.88 ppb	19:37:07
2	Se 196.026†	334.4	309.5	479.52 µg/L	479.52 ppb	19:37:07
2	SiO2†	63264.3	60296.5	12985 µg/L	12985 ppb	19:36:47
2	Si 251.611†	75806.3	73435.1	6036.7 µg/L	6036.7 ppb	19:36:47
2	Sn 189.927†	1179.8	1148.7	528.34 µg/L	528.34 ppb	19:37:07
2	Ti 334.940†	208026.1	202261.6	486.21 µg/L	486.21 ppb	19:36:41
2	Tl 190.801†	339.5	354.5	500.78 µg/L	500.78 ppb	19:37:07
2	U 409.014†	5762.6	5659.8	511.44 µg/L	511.44 ppb	19:36:47
2	V 292.402†	47518.7	46272.7	499.23 µg/L	499.23 ppb	19:36:47
2	Zn 213.857†	20383.6	19354.6	479.81 µg/L	479.81 ppb	19:36:47
3	Sc RADIAL	56983.3	56983.3	104 %		19:35:36
3	Al 396.153Radial†	6778.1	6501.7	4836.4 µg/L	4836.4 ppb	19:35:56
3	Ca 317.933Radial†	5483.7	5072.7	4776.3 µg/L	4776.3 ppb	19:35:56
3	Fe 238.204 Radial†	610.2	569.9	4840.0 µg/L	4840.0 ppb	19:35:56
3	K 766.490 Radial†	7476.8	7032.3	4998.5 µg/L	4998.5 ppb	19:35:36
3	Mg 279.077 IEC†	558.6	523.7	4875.9 µg/L	4875.9 ppb	19:35:56
3	Na 589.592 Radial†	16463.0	15225.1	5012.2 µg/L	5012.2 ppb	19:35:36
3	Sr 421.552†	48028.2	45958.3	476.41 µg/L	476.41 ppb	19:35:36
3	Sc 361.383	1953228.5	1953228.5	102.27 %		19:37:14
3	Y 371.029	1334981.2	1334981.2	101.91 %		19:37:14
3	Ag 328.068†	60906.6	60118.1	480.49 µg/L	480.49 ppb	19:37:20
3	As 188.979†	246.6	240.0	468.20 µg/L	468.20 ppb	19:37:41
3	B 249.677†	11806.2	11212.5	488.25 µg/L	488.25 ppb	19:37:20
3	Ba 233.527†	18817.3	18425.3	480.63 µg/L	480.63 ppb	19:37:20
3	Be 313.107†	740878.0	727860.9	475.15 µg/L	475.15 ppb	19:37:14
3	Cd 226.502†	17362.9	17119.4	472.23 µg/L	472.23 ppb	19:37:20
3	Co 228.616†	9771.9	9563.6	470.08 µg/L	470.08 ppb	19:37:20
3	Cr 267.716†	22087.4	21649.1	476.50 µg/L	476.50 ppb	19:37:20
3	Cu 324.752†	72706.1	68604.9	479.89 µg/L	479.89 ppb	19:37:20
3	Mn 257.610†	143804.2	140853.9	488.21 µg/L	488.21 ppb	19:37:14
3	Mo 202.031†	4405.4	4315.1	460.70 µg/L	460.70 ppb	19:37:41
3	Ni 231.604†	9285.9	8777.4	479.41 µg/L	479.41 ppb	19:37:20
3	P 214.914†	254.1	220.8	428.19 µg/L	428.19 ppb	19:37:41
3	Pb 220.353†	1906.4	1766.9	471.52 µg/L	471.52 ppb	19:37:41
3	S 181.975 Axial†	1137.3	1097.2	4807.1 µg/L	4807.1 ppb	19:37:41
3	Sb 206.836†	512.2	473.8	468.13 µg/L	468.13 ppb	19:37:41
3	Se 196.026†	311.2	288.4	447.26 µg/L	447.26 ppb	19:37:41
3	SiO2†	61664.2	59044.4	12716 µg/L	12716 ppb	19:37:20
3	Si 251.611†	73998.6	72042.0	5922.2 µg/L	5922.2 ppb	19:37:20
3	Sn 189.927†	1081.7	1058.6	486.89 µg/L	486.89 ppb	19:37:41
3	Ti 334.940†	203268.0	198636.6	477.50 µg/L	477.50 ppb	19:37:14
3	Tl 190.801†	317.8	335.0	473.39 µg/L	473.39 ppb	19:37:41
3	U 409.014†	5643.9	5572.1	503.52 µg/L	503.52 ppb	19:37:20
3	V 292.402†	45704.3	44733.2	482.48 µg/L	482.48 ppb	19:37:20
3	Zn 213.857†	19736.3	18822.4	466.62 µg/L	466.62 ppb	19:37:20

Mean Data: 1202032560|948737|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1961958.9	102.73 %	0.429			0.42%
Sc RADIAL	56728.8	104 %	0.5			0.46%
Y 371.029	1339848.3	102.28 %	0.363			0.36%
Ag 328.068†	60364.1	482.51 µg/L	1.756	482.51 ppb	1.756	0.36%
Al 396.153Radial†	6565.5	4883.4 µg/L	41.27	4883.4 ppb	41.27	0.85%
As 188.979†	250.0	487.74 µg/L	17.922	487.74 ppb	17.922	3.67%
B 249.677†	11313.1	492.64 µg/L	3.992	492.64 ppb	3.992	0.81%
Ba 233.527†	18752.3	489.16 µg/L	7.501	489.16 ppb	7.501	1.53%
Be 313.107†	735146.7	479.91 µg/L	4.141	479.91 ppb	4.141	0.86%
Ca 317.933Radial†	5125.1	4825.6 µg/L	43.45	4825.6 ppb	43.45	0.90%
Cd 226.502†	17362.7	478.95 µg/L	5.826	478.95 ppb	5.826	1.22%
Co 228.616†	9741.0	478.82 µg/L	7.722	478.82 ppb	7.722	1.61%
Cr 267.716†	22146.5	487.44 µg/L	9.508	487.44 ppb	9.508	1.95%
Cu 324.752†	69990.3	489.58 µg/L	8.392	489.58 ppb	8.392	1.71%
Fe 238.204 Radial†	575.7	4889.5 µg/L	45.26	4889.5 ppb	45.26	0.93%
K 766.490 Radial†	7029.8	4996.7 µg/L	49.22	4996.7 ppb	49.22	0.98%
Mg 279.077 IEC†	526.8	4905.1 µg/L	25.83	4905.1 ppb	25.83	0.53%
Mn 257.610†	142251.8	493.05 µg/L	4.198	493.05 ppb	4.198	0.85%
Mo 202.031†	4561.2	486.97 µg/L	22.812	486.97 ppb	22.812	4.68%
Na 589.592 Radial†	15228.6	5013.3 µg/L	32.17	5013.3 ppb	32.17	0.64%

Ni 231.604†	8960.7	489.42 µg/L	8.683	489.42 ppb	8.683	1.77%
P 214.914†	227.7	442.45 µg/L	19.267	442.45 ppb	19.267	4.35%
Pb 220.353†	1843.4	491.99 µg/L	17.777	491.99 ppb	17.777	3.61%
S 181.975 Axial†	1132.5	4961.7 µg/L	134.32	4961.7 ppb	134.32	2.71%
Sb 206.836†	502.4	496.52 µg/L	24.756	496.52 ppb	24.756	4.99%
Se 196.026†	303.5	470.34 µg/L	20.133	470.34 ppb	20.133	4.28%
SiO2†	59809.5	12880 µg/L	144.5	12880 ppb	144.5	1.12%
Si 251.611†	72892.5	5992.1 µg/L	61.31	5992.1 ppb	61.31	1.02%
Sn 189.927†	1122.5	516.28 µg/L	25.587	516.28 ppb	25.587	4.96%
Sr 421.552†	46072.3	477.59 µg/L	4.634	477.59 ppb	4.634	0.97%
Ti 334.940†	200944.0	483.04 µg/L	4.822	483.04 ppb	4.822	1.00%
Tl 190.801†	349.0	492.98 µg/L	17.083	492.98 ppb	17.083	3.47%
U 409.014†	5632.2	508.95 µg/L	4.711	508.95 ppb	4.711	0.93%
V 292.402†	45682.1	492.83 µg/L	9.049	492.83 ppb	9.049	1.84%
Zn 213.857†	19162.7	475.05 µg/L	7.325	475.05 ppb	7.325	1.54%

Sequence No.: 45

Sample ID: 1202032561|948737|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 335

Date Collected: 2/11/2010 19:37:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032561|948737|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55556.9	55556.9	102 %		19:38:23
1	Al 396.153Radial†	-14.4	-4.0	-3.0016 µg/L	-3.0016 ppb	19:38:23
1	Ca 317.933Radial†	193.6	11.0	10.352 µg/L	10.352 ppb	19:38:43
1	Fe 238.204 Radial†	16.0	1.2	10.568 µg/L	10.568 ppb	19:38:43
1	K 766.490 Radial†	200.3	68.3	48.549 µg/L	48.549 ppb	19:38:23
1	Mg 279.077 IEC†	17.4	5.8	54.431 µg/L	54.431 ppb	19:38:43
1	Na 589.592 Radial†	748.0	192.9	63.499 µg/L	63.499 ppb	19:38:23
1	Sr 421.552†	52.3	11.8	0.1221 µg/L	0.1221 ppb	19:38:23
1	Sc 361.383	1967786.0	1967786.0	103.03 %		19:39:45
1	Y 371.029	1347427.9	1347427.9	102.86 %		19:39:45
1	Ag 328.068†	-513.7	65.9	0.5269 µg/L	0.5269 ppb	19:39:51
1	As 188.979†	0.2	-0.9	-1.7879 µg/L	-1.7879 ppb	19:40:11
1	B 249.677†	392.7	49.7	2.1660 µg/L	2.1660 ppb	19:40:11
1	Ba 233.527†	-17.5	9.0	0.2357 µg/L	0.2357 ppb	19:40:11
1	Be 313.107†	-3261.5	274.9	0.1795 µg/L	0.1795 ppb	19:39:51
1	Cd 226.502†	-143.1	3.3	0.0883 µg/L	0.0883 ppb	19:40:11
1	Co 228.616†	-14.2	-4.9	-0.2416 µg/L	-0.2416 ppb	19:40:11
1	Cr 267.716†	-7.4	45.2	0.9940 µg/L	0.9940 ppb	19:40:11
1	Cu 324.752†	2443.8	-114.2	-0.7963 µg/L	-0.7963 ppb	19:39:51
1	Mn 257.610†	-169.1	79.9	0.2761 µg/L	0.2761 ppb	19:40:11
1	Mo 202.031†	-6.4	1.4	0.1476 µg/L	0.1476 ppb	19:40:11
1	Ni 231.604†	306.2	-5.0	-0.2754 µg/L	-0.2754 ppb	19:40:11
1	P 214.914†	36.4	7.7	16.712 µg/L	16.712 ppb	19:40:11
1	Pb 220.353†	91.5	-8.3	-2.2188 µg/L	-2.2188 ppb	19:40:11
1	S 181.975 Axial†	15.5	0.3	1.1200 µg/L	1.1200 ppb	19:40:11
1	Sb 206.836†	23.6	-4.0	-3.9935 µg/L	-3.9935 ppb	19:40:11
1	Se 196.026†	10.4	-5.8	-8.8371 µg/L	-8.8371 ppb	19:40:11
1	SiO2†	4053.3	2683.9	578.00 µg/L	578.00 ppb	19:39:51
1	Si 251.611†	3735.4	3312.5	272.31 µg/L	272.31 ppb	19:39:51
1	Sn 189.927†	1.4	2.2	1.0392 µg/L	1.0392 ppb	19:40:11
1	Ti 334.940†	209.0	86.7	0.2045 µg/L	0.2045 ppb	19:39:51
1	Tl 190.801†	-28.8	-3.6	-5.0793 µg/L	-5.0793 ppb	19:40:11
1	U 409.014†	-114.0	-57.1	-5.1684 µg/L	-5.1684 ppb	19:39:51
1	V 292.402†	0.4	44.6	0.4745 µg/L	0.4745 ppb	19:39:51
1	Zn 213.857†	490.8	0.8	0.0180 µg/L	0.0180 ppb	19:40:11
2	Sc RADIAL	55453.1	55453.1	102 %		19:38:49
2	Al 396.153Radial†	-1.2	8.9	6.6613 µg/L	6.6613 ppb	19:38:49
2	Ca 317.933Radial†	195.9	13.6	12.817 µg/L	12.817 ppb	19:39:09
2	Fe 238.204 Radial†	14.7	0.0	0.0944 µg/L	0.0944 ppb	19:39:09
2	K 766.490 Radial†	238.4	106.2	75.456 µg/L	75.456 ppb	19:38:49
2	Mg 279.077 IEC†	15.6	4.1	37.981 µg/L	37.981 ppb	19:39:09
2	Na 589.592 Radial†	708.0	154.9	51.000 µg/L	51.000 ppb	19:38:49
2	Sr 421.552†	57.2	16.8	0.1737 µg/L	0.1737 ppb	19:38:49
2	Sc 361.383	1975775.5	1975775.5	103.45 %		19:40:18
2	Y 371.029	1355586.5	1355586.5	103.49 %		19:40:18
2	Ag 328.068†	-512.8	68.9	0.5480 µg/L	0.5480 ppb	19:40:23
2	As 188.979†	-0.8	-1.9	-3.7879 µg/L	-3.7879 ppb	19:40:44
2	B 249.677†	398.7	53.9	2.3572 µg/L	2.3572 ppb	19:40:44
2	Ba 233.527†	-16.5	10.0	0.2613 µg/L	0.2613 ppb	19:40:44
2	Be 313.107†	-3291.3	258.9	0.1690 µg/L	0.1690 ppb	19:40:23
2	Cd 226.502†	-132.6	13.9	0.3835 µg/L	0.3835 ppb	19:40:44
2	Co 228.616†	-7.1	2.0	0.0984 µg/L	0.0984 ppb	19:40:44
2	Cr 267.716†	-22.7	30.4	0.6696 µg/L	0.6696 ppb	19:40:44
2	Cu 324.752†	2469.7	-98.8	-0.6905 µg/L	-0.6905 ppb	19:40:23
2	Mn 257.610†	-143.9	105.0	0.3620 µg/L	0.3620 ppb	19:40:44
2	Mo 202.031†	-4.2	3.5	0.3717 µg/L	0.3717 ppb	19:40:44
2	Ni 231.604†	302.9	-9.4	-0.5143 µg/L	-0.5143 ppb	19:40:44
2	P 214.914†	29.9	1.3	2.7919 µg/L	2.7919 ppb	19:40:44
2	Pb 220.353†	97.3	-3.1	-0.8261 µg/L	-0.8261 ppb	19:40:44

2	S 181.975 Axial†	20.0	4.5	19.710 µg/L	19.710 ppb	19:40:44
2	Sb 206.836†	23.7	-4.1	-4.0300 µg/L	-4.0300 ppb	19:40:44
2	Se 196.026†	9.3	-6.9	-10.492 µg/L	-10.492 ppb	19:40:44
2	SiO2†	4038.7	2653.9	571.53 µg/L	571.53 ppb	19:40:23
2	Si 251.611†	3707.4	3270.8	268.87 µg/L	268.87 ppb	19:40:23
2	Sn 189.927†	2.0	2.8	1.2773 µg/L	1.2773 ppb	19:40:44
2	Ti 334.940†	221.6	98.1	0.2331 µg/L	0.2331 ppb	19:40:23
2	Tl 190.801†	-21.6	3.4	4.7965 µg/L	4.7965 ppb	19:40:44
2	U 409.014†	-59.9	-4.3	-0.3880 µg/L	-0.3880 ppb	19:40:23
2	V 292.402†	-21.0	23.9	0.2589 µg/L	0.2589 ppb	19:40:23
2	Zn 213.857†	511.8	19.2	0.4807 µg/L	0.4807 ppb	19:40:44
3	Sc RADIAL	54997.2	54997.2	101 %		19:39:15
3	Al 396.153Radial†	-9.6	0.6	0.4496 µg/L	0.4496 ppb	19:39:15
3	Ca 317.933Radial†	197.1	16.5	15.498 µg/L	15.498 ppb	19:39:35
3	Fe 238.204 Radial†	17.3	2.6	22.415 µg/L	22.415 ppb	19:39:35
3	K 766.490 Radial†	180.6	50.8	36.115 µg/L	36.115 ppb	19:39:15
3	Mg 279.077 IEC†	14.5	3.2	29.331 µg/L	29.331 ppb	19:39:35
3	Na 589.592 Radial†	763.4	215.7	70.994 µg/L	70.994 ppb	19:39:15
3	Sr 421.552†	65.9	25.9	0.2681 µg/L	0.2681 ppb	19:39:15
3	Sc 361.383	1964922.8	1964922.8	102.88 %		19:40:50
3	Y 371.029	1347749.0	1347749.0	102.89 %		19:40:50
3	Ag 328.068†	-485.9	92.3	0.7322 µg/L	0.7322 ppb	19:40:55
3	As 188.979†	0.6	-0.6	-1.1015 µg/L	-1.1015 ppb	19:41:16
3	B 249.677†	385.4	43.2	1.8762 µg/L	1.8762 ppb	19:41:16
3	Ba 233.527†	-20.3	6.2	0.1623 µg/L	0.1623 ppb	19:41:16
3	Be 313.107†	-3155.8	373.1	0.2435 µg/L	0.2435 ppb	19:40:55
3	Cd 226.502†	-137.1	8.9	0.2432 µg/L	0.2432 ppb	19:41:16
3	Co 228.616†	-0.5	8.4	0.4121 µg/L	0.4121 ppb	19:41:16
3	Cr 267.716†	-8.2	44.4	0.9768 µg/L	0.9768 ppb	19:41:16
3	Cu 324.752†	2483.7	-72.0	-0.4999 µg/L	-0.4999 ppb	19:40:55
3	Mn 257.610†	-138.7	109.3	0.3805 µg/L	0.3805 ppb	19:41:16
3	Mo 202.031†	-5.4	2.3	0.2508 µg/L	0.2508 ppb	19:41:16
3	Ni 231.604†	316.9	5.9	0.3198 µg/L	0.3198 ppb	19:41:16
3	P 214.914†	26.0	-2.4	-5.0548 µg/L	-5.0548 ppb	19:41:16
3	Pb 220.353†	90.0	-9.7	-2.5999 µg/L	-2.5999 ppb	19:41:16
3	S 181.975 Axial†	20.6	5.2	22.743 µg/L	22.743 ppb	19:41:16
3	Sb 206.836†	23.9	-3.7	-3.6360 µg/L	-3.6360 ppb	19:41:16
3	Se 196.026†	14.1	-2.1	-3.2432 µg/L	-3.2432 ppb	19:41:16
3	SiO2†	3923.3	2563.3	552.03 µg/L	552.03 ppb	19:40:55
3	Si 251.611†	3574.4	3161.3	259.88 µg/L	259.88 ppb	19:40:55
3	Sn 189.927†	1.0	1.8	0.8318 µg/L	0.8318 ppb	19:41:16
3	Ti 334.940†	247.5	124.4	0.2972 µg/L	0.2972 ppb	19:40:55
3	Tl 190.801†	-20.5	4.4	6.0916 µg/L	6.0916 ppb	19:41:16
3	U 409.014†	-23.0	31.3	2.8278 µg/L	2.8278 ppb	19:40:55
3	V 292.402†	-67.0	-20.9	-0.2134 µg/L	-0.2134 ppb	19:40:55
3	Zn 213.857†	498.6	9.1	0.2239 µg/L	0.2239 ppb	19:41:16

Mean Data: 1202032561|948737|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1969494.8	103.12 %	0.295			0.29%
Sc RADIAL	55335.7	101 %	0.5			0.54%
Y 371.029	1350254.5	103.08 %	0.353			0.34%
Ag 328.068†	75.7	0.6024 µg/L	0.11293	0.6024 ppb	0.11293	18.75%
Al 396.153Radial†	1.8	1.3697 µg/L	4.89673	1.3697 ppb	4.89673	357.50%
As 188.979†	-1.1	-2.2258 µg/L	1.39574	-2.2258 ppb	1.39574	62.71%
B 249.677†	48.9	2.1331 µg/L	0.24218	2.1331 ppb	0.24218	11.35%
Ba 233.527†	8.4	0.2198 µg/L	0.05138	0.2198 ppb	0.05138	23.38%
Be 313.107†	302.3	0.1973 µg/L	0.04034	0.1973 ppb	0.04034	20.44%
Ca 317.933Radial†	13.7	12.889 µg/L	2.5739	12.889 ppb	2.5739	19.97%
Cd 226.502†	8.7	0.2383 µg/L	0.14769	0.2383 ppb	0.14769	61.96%
Co 228.616†	1.8	0.0896 µg/L	0.32695	0.0896 ppb	0.32695	364.74%
Cr 267.716†	40.0	0.8801 µg/L	0.18253	0.8801 ppb	0.18253	20.74%
Cu 324.752†	-95.0	-0.6622 µg/L	0.15020	-0.6622 ppb	0.15020	22.68%
Fe 238.204 Radial†	1.3	11.026 µg/L	11.1673	11.026 ppb	11.1673	101.28%
K 766.490 Radial†	75.1	53.373 µg/L	20.1092	53.373 ppb	20.1092	37.68%
Mg 279.077 IEC†	4.4	40.581 µg/L	12.7501	40.581 ppb	12.7501	31.42%
Mn 257.610†	98.1	0.3395 µg/L	0.05572	0.3395 ppb	0.05572	16.41%
Mo 202.031†	2.4	0.2567 µg/L	0.11216	0.2567 ppb	0.11216	43.69%
Na 589.592 Radial†	187.8	61.831 µg/L	10.1008	61.831 ppb	10.1008	16.34%

Ni 231.604†	-2.9	-0.1566 µg/L	0.42953	-0.1566 ppb	0.42953	274.22%
P 214.914†	2.2	4.8165 µg/L	11.02392	4.8165 ppb	11.02392	228.88%
Pb 220.353†	-7.1	-1.8816 µg/L	0.93377	-1.8816 ppb	0.93377	49.63%
S 181.975 Axial†	3.3	14.524 µg/L	11.7071	14.524 ppb	11.7071	80.60%
Sb 206.836†	-3.9	-3.8865 µg/L	0.21773	-3.8865 ppb	0.21773	5.60%
Se 196.026†	-4.9	-7.5242 µg/L	3.79864	-7.5242 ppb	3.79864	50.49%
SiO2†	2633.7	567.19 µg/L	13.522	567.19 ppb	13.522	2.38%
Si 251.611†	3248.2	267.02 µg/L	6.418	267.02 ppb	6.418	2.40%
Sn 189.927†	2.3	1.0494 µg/L	0.22288	1.0494 ppb	0.22288	21.24%
Sr 421.552†	18.1	0.1880 µg/L	0.07405	0.1880 ppb	0.07405	39.39%
Ti 334.940†	103.1	0.2449 µg/L	0.04745	0.2449 ppb	0.04745	19.37%
Tl 190.801†	1.4	1.9362 µg/L	6.11008	1.9362 ppb	6.11008	315.56%
U 409.014†	-10.0	-0.9095 µg/L	4.02356	-0.9095 ppb	4.02356	442.37%
V 292.402†	15.9	0.1733 µg/L	0.35183	0.1733 ppb	0.35183	203.00%
Zn 213.857†	9.7	0.2409 µg/L	0.23181	0.2409 ppb	0.23181	96.23%

Sequence No.: 46

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 19:41:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56419.4	56419.4	103 %		19:42:04
1	Al 396.153Radial†	6864.6	6650.3	4946.1 µg/L	4946.1 ppb	19:42:25
1	Ca 317.933Radial†	5559.4	5198.4	4894.6 µg/L	4894.6 ppb	19:42:25
1	Fe 238.204 Radial†	616.6	581.9	4942.5 µg/L	4942.5 ppb	19:42:25
1	K 766.490 Radial†	7352.0	6983.2	4963.6 µg/L	4963.6 ppb	19:42:04
1	Mg 279.077 IEC†	570.1	540.2	5030.2 µg/L	5030.2 ppb	19:42:25
1	Na 589.592 Radial†	31600.6	30025.3	9884.4 µg/L	9884.4 ppb	19:42:04
1	Sr 421.552†	48468.4	46843.8	485.59 µg/L	485.59 ppb	19:42:04
1	Sc 361.383	2003108.1	2003108.1	104.88 %		19:43:28
1	Y 371.029	1370730.2	1370730.2	104.64 %		19:43:28
1	Ag 328.068†	64726.1	62276.9	497.74 µg/L	497.74 ppb	19:43:34
1	As 188.979†	267.5	253.9	495.37 µg/L	495.37 ppb	19:43:54
1	B 249.677†	12041.2	11149.1	485.46 µg/L	485.46 ppb	19:43:34
1	Ba 233.527†	19842.7	18944.8	494.19 µg/L	494.19 ppb	19:43:34
1	Be 313.107†	766666.1	734409.3	479.43 µg/L	479.43 ppb	19:43:28
1	Cd 226.502†	18686.6	17958.6	495.39 µg/L	495.39 ppb	19:43:34
1	Co 228.616†	10595.4	10110.9	497.04 µg/L	497.04 ppb	19:43:34
1	Cr 267.716†	23720.3	22668.2	498.92 µg/L	498.92 ppb	19:43:34
1	Cu 324.752†	76984.9	70914.3	496.04 µg/L	496.04 ppb	19:43:34
1	Mn 257.610†	147751.2	141115.8	489.12 µg/L	489.12 ppb	19:43:28
1	Mo 202.031†	5026.0	4799.5	512.40 µg/L	512.40 ppb	19:43:54
1	Ni 231.604†	9826.5	9066.7	495.20 µg/L	495.20 ppb	19:43:34
1	P 214.914†	1254.6	1168.6	2461.8 µg/L	2461.8 ppb	19:43:54
1	Pb 220.353†	2050.1	1857.4	495.79 µg/L	495.79 ppb	19:43:54
1	S 181.975 Axial†	255.6	228.9	1003.0 µg/L	1003.0 ppb	19:43:54
1	Sb 206.836†	570.4	516.9	511.09 µg/L	511.09 ppb	19:43:54
1	Se 196.026†	360.0	327.4	506.74 µg/L	506.74 ppb	19:43:54
1	SiO2†	26928.3	24424.4	5259.9 µg/L	5259.9 ppb	19:43:34
1	Si 251.611†	31785.6	29992.7	2465.6 µg/L	2465.6 ppb	19:43:34
1	Sn 189.927†	1167.3	1113.9	512.34 µg/L	512.34 ppb	19:43:54
1	Ti 334.940†	210971.9	201032.6	483.25 µg/L	483.25 ppb	19:43:28
1	Tl 190.801†	351.0	358.9	506.83 µg/L	506.83 ppb	19:43:54
1	U 409.014†	5847.6	5628.9	508.64 µg/L	508.64 ppb	19:43:34
1	V 292.402†	48650.0	46429.0	501.02 µg/L	501.02 ppb	19:43:34
1	Zn 213.857†	21378.5	19907.5	493.60 µg/L	493.60 ppb	19:43:34
2	Sc RADIAL	57083.7	57083.7	105 %		19:42:30
2	Al 396.153Radial†	6804.1	6515.2	4845.3 µg/L	4845.3 ppb	19:42:51
2	Ca 317.933Radial†	5545.5	5122.6	4823.3 µg/L	4823.3 ppb	19:42:51
2	Fe 238.204 Radial†	613.4	571.9	4857.7 µg/L	4857.7 ppb	19:42:51
2	K 766.490 Radial†	7292.4	6843.5	4864.3 µg/L	4864.3 ppb	19:42:30
2	Mg 279.077 IEC†	572.7	536.3	4994.3 µg/L	4994.3 ppb	19:42:51
2	Na 589.592 Radial†	31703.2	29767.7	9799.6 µg/L	9799.6 ppb	19:42:30
2	Sr 421.552†	48760.9	46577.9	482.83 µg/L	482.83 ppb	19:42:30
2	Sc 361.383	1956478.6	1956478.6	102.44 %		19:44:02
2	Y 371.029	1338013.6	1338013.6	102.14 %		19:44:02
2	Ag 328.068†	63625.9	62673.7	500.90 µg/L	500.90 ppb	19:44:07
2	As 188.979†	268.7	261.1	509.35 µg/L	509.35 ppb	19:44:28
2	B 249.677†	11834.0	11220.4	488.63 µg/L	488.63 ppb	19:44:07
2	Ba 233.527†	19447.5	19009.9	495.89 µg/L	495.89 ppb	19:44:07
2	Be 313.107†	783080.7	767854.0	501.26 µg/L	501.26 ppb	19:44:02
2	Cd 226.502†	18262.0	17968.8	495.68 µg/L	495.68 ppb	19:44:07
2	Co 228.616†	10399.7	10160.6	499.45 µg/L	499.45 ppb	19:44:07
2	Cr 267.716†	23262.6	22760.4	500.95 µg/L	500.95 ppb	19:44:07
2	Cu 324.752†	75552.4	71265.3	498.48 µg/L	498.48 ppb	19:44:07
2	Mn 257.610†	151080.8	147723.5	511.99 µg/L	511.99 ppb	19:44:02
2	Mo 202.031†	4987.4	4876.0	520.56 µg/L	520.56 ppb	19:44:28
2	Ni 231.604†	9658.6	9126.2	498.44 µg/L	498.44 ppb	19:44:07
2	P 214.914†	1238.9	1181.7	2490.0 µg/L	2490.0 ppb	19:44:28
2	Pb 220.353†	2049.2	1903.2	508.02 µg/L	508.02 ppb	19:44:28

2	S 181.975 Axial†	249.6	228.9	1002.7 µg/L	1002.7 ppb	19:44:28
2	Sb 206.836†	564.1	523.7	517.93 µg/L	517.93 ppb	19:44:28
2	Se 196.026†	358.2	333.9	516.45 µg/L	516.45 ppb	19:44:28
2	SiO2†	26483.3	24601.9	5298.2 µg/L	5298.2 ppb	19:44:07
2	Si 251.611†	31145.7	30090.4	2473.6 µg/L	2473.6 ppb	19:44:07
2	Sn 189.927†	1159.9	1133.1	521.19 µg/L	521.19 ppb	19:44:28
2	Ti 334.940†	215458.6	210206.4	505.32 µg/L	505.32 ppb	19:44:02
2	Tl 190.801†	341.6	357.7	505.37 µg/L	505.37 ppb	19:44:28
2	U 409.014†	5729.0	5646.0	510.20 µg/L	510.20 ppb	19:44:07
2	V 292.402†	47728.9	46635.3	503.28 µg/L	503.28 ppb	19:44:07
2	Zn 213.857†	20977.4	20001.8	495.95 µg/L	495.95 ppb	19:44:07
3	Sc RADIAL	57202.6	57202.6	105 %		19:42:56
3	Al 396.153Radial†	6841.2	6537.0	4863.4 µg/L	4863.4 ppb	19:43:17
3	Ca 317.933Radial†	5579.2	5143.7	4843.1 µg/L	4843.1 ppb	19:43:17
3	Fe 238.204 Radial†	619.6	576.6	4896.7 µg/L	4896.7 ppb	19:43:17
3	K 766.490 Radial†	7296.8	6833.1	4856.9 µg/L	4856.9 ppb	19:42:56
3	Mg 279.077 IEC†	570.0	532.5	4957.7 µg/L	4957.7 ppb	19:43:17
3	Na 589.592 Radial†	31651.4	29655.3	9762.6 µg/L	9762.6 ppb	19:42:56
3	Sr 421.552†	48633.6	46359.5	480.57 µg/L	480.57 ppb	19:42:56
3	Sc 361.383	1968483.8	1968483.8	103.07 %		19:44:35
3	Y 371.029	1347474.9	1347474.9	102.87 %		19:44:35
3	Ag 328.068†	60287.4	59055.9	471.87 µg/L	471.87 ppb	19:44:40
3	As 188.979†	225.2	217.3	423.99 µg/L	423.99 ppb	19:45:01
3	B 249.677†	11150.7	10487.1	456.47 µg/L	456.47 ppb	19:44:40
3	Ba 233.527†	17981.9	17472.2	455.76 µg/L	455.76 ppb	19:44:40
3	Be 313.107†	731612.9	713257.7	465.62 µg/L	465.62 ppb	19:44:35
3	Cd 226.502†	16841.2	16481.6	454.60 µg/L	454.60 ppb	19:44:40
3	Co 228.616†	9509.8	9235.4	453.92 µg/L	453.92 ppb	19:44:40
3	Cr 267.716†	20728.9	20163.7	443.80 µg/L	443.80 ppb	19:44:40
3	Cu 324.752†	69473.8	64918.0	454.15 µg/L	454.15 ppb	19:44:40
3	Mn 257.610†	141487.4	137516.4	476.65 µg/L	476.65 ppb	19:44:35
3	Mo 202.031†	4166.6	4050.0	432.41 µg/L	432.41 ppb	19:45:01
3	Ni 231.604†	8868.9	8302.5	453.46 µg/L	453.46 ppb	19:44:40
3	P 214.914†	1068.6	1009.2	2122.7 µg/L	2122.7 ppb	19:45:01
3	Pb 220.353†	1791.6	1641.0	437.94 µg/L	437.94 ppb	19:45:01
3	S 181.975 Axial†	225.5	204.0	893.82 µg/L	893.82 ppb	19:45:01
3	Sb 206.836†	488.9	447.4	442.01 µg/L	442.01 ppb	19:45:01
3	Se 196.026†	320.0	294.7	456.84 µg/L	456.84 ppb	19:45:01
3	SiO2†	24830.7	22841.0	4918.9 µg/L	4918.9 ppb	19:44:40
3	Si 251.611†	29062.2	27883.6	2292.2 µg/L	2292.2 ppb	19:44:40
3	Sn 189.927†	952.2	924.7	425.35 µg/L	425.35 ppb	19:45:01
3	Ti 334.940†	200541.4	194450.9	467.42 µg/L	467.42 ppb	19:44:35
3	Tl 190.801†	313.2	328.1	463.67 µg/L	463.67 ppb	19:45:01
3	U 409.014†	5147.7	5048.0	456.05 µg/L	456.05 ppb	19:44:40
3	V 292.402†	43287.8	42042.5	453.47 µg/L	453.47 ppb	19:44:40
3	Zn 213.857†	19269.8	18220.2	451.73 µg/L	451.73 ppb	19:44:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1976023.5	103.47 %	1.268			1.23%
Sc RADIAL	56901.9	104 %	0.8			0.74%
Y 371.029	1352072.9	103.22 %	1.285			1.25%
Ag 328.068†	61335.5	490.17 µg/L	15.926	490.17 ppb	15.926	3.25%
QC value within limits for Ag 328.068 Recovery = 98.03%						
Al 396.153Radial†	6567.5	4884.9 µg/L	53.78	4884.9 ppb	53.78	1.10%
QC value within limits for Al 396.153Radial Recovery = 97.70%						
As 188.979†	244.1	476.24 µg/L	45.784	476.24 ppb	45.784	9.61%
QC value within limits for As 188.979 Recovery = 95.25%						
B 249.677†	10952.2	476.85 µg/L	17.725	476.85 ppb	17.725	3.72%
QC value within limits for B 249.677 Recovery = 95.37%						
Ba 233.527†	18475.6	481.94 µg/L	22.693	481.94 ppb	22.693	4.71%
QC value within limits for Ba 233.527 Recovery = 96.39%						
Be 313.107†	738507.0	482.10 µg/L	17.970	482.10 ppb	17.970	3.73%
QC value within limits for Be 313.107 Recovery = 96.42%						
Ca 317.933Radial†	5154.9	4853.7 µg/L	36.83	4853.7 ppb	36.83	0.76%
QC value within limits for Ca 317.933Radial Recovery = 97.07%						
Cd 226.502†	17469.7	481.89 µg/L	23.632	481.89 ppb	23.632	4.90%
QC value within limits for Cd 226.502 Recovery = 96.38%						
Co 228.616†	9835.6	483.47 µg/L	25.623	483.47 ppb	25.623	5.30%

QC value within limits for Co 228.616	Recovery = 96.69%			
Cr 267.716†	21864.1	481.23 µg/L	32.425	6.74%
QC value within limits for Cr 267.716	Recovery = 96.25%			
Cu 324.752†	69032.5	482.89 µg/L	24.920	5.16%
QC value within limits for Cu 324.752	Recovery = 96.58%			
Fe 238.204 Radial†	576.8	4899.0 µg/L	42.44	0.87%
QC value within limits for Fe 238.204 Radial	Recovery = 97.98%			
K 766.490 Radial†	6886.6	4894.9 µg/L	59.56	1.22%
QC value within limits for K 766.490 Radial	Recovery = 97.90%			
Mg 279.077 IEC†	536.3	4994.1 µg/L	36.28	0.73%
QC value within limits for Mg 279.077 IEC	Recovery = 99.88%			
Mn 257.610†	142118.5	492.59 µg/L	17.923	3.64%
QC value within limits for Mn 257.610	Recovery = 98.52%			
Mo 202.031†	4575.2	488.46 µg/L	48.709	9.97%
QC value within limits for Mo 202.031	Recovery = 97.69%			
Na 589.592 Radial†	29816.1	9815.6 µg/L	62.45	0.64%
QC value within limits for Na 589.592 Radial	Recovery = 98.16%			
Ni 231.604†	8831.8	482.37 µg/L	25.085	5.20%
QC value within limits for Ni 231.604	Recovery = 96.47%			
P 214.914†	1119.8	2358.2 µg/L	204.40	8.67%
QC value within limits for P 214.914	Recovery = 94.33%			
Pb 220.353†	1800.5	480.58 µg/L	37.434	7.79%
QC value within limits for Pb 220.353	Recovery = 96.12%			
S 181.975 Axial†	220.6	966.52 µg/L	62.959	6.51%
QC value within limits for S 181.975 Axial	Recovery = 96.65%			
Sb 206.836†	496.0	490.35 µg/L	41.996	8.56%
QC value within limits for Sb 206.836	Recovery = 98.07%			
Se 196.026†	318.6	493.35 µg/L	31.983	6.48%
QC value within limits for Se 196.026	Recovery = 98.67%			
SiO2†	23955.8	5159.0 µg/L	208.79	4.05%
QC value within limits for SiO2	Recovery = 96.48%			
Si 251.611†	29322.2	2410.4 µg/L	102.50	4.25%
QC value within limits for Si 251.611	Recovery = 96.42%			
Sn 189.927†	1057.2	486.29 µg/L	52.962	10.89%
QC value within limits for Sn 189.927	Recovery = 97.26%			
Sr 421.552†	46593.7	483.00 µg/L	2.514	0.52%
QC value within limits for Sr 421.552	Recovery = 96.60%			
Ti 334.940†	201896.6	485.33 µg/L	19.033	3.92%
QC value within limits for Ti 334.940	Recovery = 97.07%			
Tl 190.801†	348.3	491.96 µg/L	24.505	4.98%
QC value within limits for Tl 190.801	Recovery = 98.39%			
U 409.014†	5441.0	491.63 µg/L	30.821	6.27%
QC value within limits for U 409.014	Recovery = 98.33%			
V 292.402†	45035.6	485.92 µg/L	28.129	5.79%
QC value within limits for V 292.402	Recovery = 97.18%			
Zn 213.857†	19376.5	480.43 µg/L	24.881	5.18%
QC value within limits for Zn 213.857	Recovery = 96.09%			

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 19:45:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56376.8	56376.8	103 %		19:45:43
1	Al 396.153Radial†	-19.0	-8.3	-6.1741 µg/L	-6.1741 ppb	19:45:43
1	Ca 317.933Radial†	190.5	5.3	4.9933 µg/L	4.9933 ppb	19:46:03
1	Fe 238.204 Radial†	14.9	-0.1	-0.5495 µg/L	-0.5495 ppb	19:46:03
1	K 766.490 Radial†	145.1	12.1	8.5950 µg/L	8.5950 ppb	19:45:43
1	Mg 279.077 IEC†	10.6	-1.0	-9.5449 µg/L	-9.5449 ppb	19:46:03
1	Na 589.592 Radial†	582.4	21.9	7.2091 µg/L	7.2091 ppb	19:45:43
1	Sr 421.552†	18.5	-21.6	-0.2243 µg/L	-0.2243 ppb	19:45:43
1	Sc 361.383	1992362.0	1992362.0	104.32 %		19:47:05
1	Y 371.029	1368353.4	1368353.4	104.46 %		19:47:05
1	Ag 328.068†	-598.5	-9.1	-0.0730 µg/L	-0.0730 ppb	19:47:10
1	As 188.979†	-0.0	-1.2	-2.2711 µg/L	-2.2711 ppb	19:47:31
1	B 249.677†	346.6	0.7	0.0326 µg/L	0.0326 ppb	19:47:31
1	Ba 233.527†	-24.2	2.9	0.0744 µg/L	0.0744 ppb	19:47:31
1	Be 313.107†	-3339.3	239.4	0.1563 µg/L	0.1563 ppb	19:47:10
1	Cd 226.502†	-124.4	22.9	0.6311 µg/L	0.6311 ppb	19:47:31
1	Co 228.616†	-16.5	-7.0	-0.3445 µg/L	-0.3445 ppb	19:47:31
1	Cr 267.716†	-47.2	7.2	0.1575 µg/L	0.1575 ppb	19:47:31
1	Cu 324.752†	2430.9	-155.9	-1.0892 µg/L	-1.0892 ppb	19:47:10
1	Mn 257.610†	-240.7	13.4	0.0467 µg/L	0.0467 ppb	19:47:31
1	Mo 202.031†	-8.3	-0.4	-0.0415 µg/L	-0.0415 ppb	19:47:31
1	Ni 231.604†	297.2	-17.3	-0.9473 µg/L	-0.9473 ppb	19:47:31
1	P 214.914†	35.0	6.0	12.897 µg/L	12.897 ppb	19:47:31
1	Pb 220.353†	95.0	-6.2	-1.6460 µg/L	-1.6460 ppb	19:47:31
1	S 181.975 Axial†	14.6	-0.8	-3.7140 µg/L	-3.7140 ppb	19:47:31
1	Sb 206.836†	19.5	-8.3	-8.1804 µg/L	-8.1804 ppb	19:47:31
1	Se 196.026†	15.6	-0.9	-1.2950 µg/L	-1.2950 ppb	19:47:31
1	SiO2†	1248.6	-53.2	-11.446 µg/L	-11.446 ppb	19:47:10
1	Si 251.611†	306.0	-19.6	-1.6096 µg/L	-1.6096 ppb	19:47:31
1	Sn 189.927†	-6.1	-5.0	-2.2944 µg/L	-2.2944 ppb	19:47:31
1	Ti 334.940†	214.1	89.1	0.2152 µg/L	0.2152 ppb	19:47:10
1	Tl 190.801†	-21.4	3.7	5.2299 µg/L	5.2299 ppb	19:47:31
1	U 409.014†	10.3	63.5	5.7486 µg/L	5.7486 ppb	19:47:10
1	V 292.402†	-52.5	-6.1	-0.0596 µg/L	-0.0596 ppb	19:47:10
1	Zn 213.857†	478.7	-16.6	-0.4092 µg/L	-0.4092 ppb	19:47:31
2	Sc RADIAL	56044.6	56044.6	103 %		19:46:09
2	Al 396.153Radial†	-6.3	4.0	2.9768 µg/L	2.9768 ppb	19:46:09
2	Ca 317.933Radial†	183.8	-0.2	-0.1847 µg/L	-0.1847 ppb	19:46:29
2	Fe 238.204 Radial†	14.3	-0.6	-4.7213 µg/L	-4.7213 ppb	19:46:29
2	K 766.490 Radial†	167.1	34.3	24.398 µg/L	24.398 ppb	19:46:09
2	Mg 279.077 IEC†	11.1	-0.4	-4.0659 µg/L	-4.0659 ppb	19:46:29
2	Na 589.592 Radial†	618.2	60.1	19.792 µg/L	19.792 ppb	19:46:09
2	Sr 421.552†	69.0	27.6	0.2866 µg/L	0.2866 ppb	19:46:09
2	Sc 361.383	1989518.4	1989518.4	104.17 %		19:47:37
2	Y 371.029	1365606.7	1365606.7	104.25 %		19:47:37
2	Ag 328.068†	-547.2	39.3	0.3111 µg/L	0.3111 ppb	19:47:43
2	As 188.979†	-3.9	-4.9	-9.5988 µg/L	-9.5988 ppb	19:48:03
2	B 249.677†	322.6	-21.8	-0.9478 µg/L	-0.9478 ppb	19:48:03
2	Ba 233.527†	-14.9	11.7	0.3048 µg/L	0.3048 ppb	19:48:03
2	Be 313.107†	-3365.6	209.6	0.1369 µg/L	0.1369 ppb	19:47:43
2	Cd 226.502†	-135.4	12.1	0.3352 µg/L	0.3352 ppb	19:48:03
2	Co 228.616†	-12.8	-3.4	-0.1669 µg/L	-0.1669 ppb	19:48:03
2	Cr 267.716†	-34.1	19.6	0.4310 µg/L	0.4310 ppb	19:48:03
2	Cu 324.752†	2392.5	-189.4	-1.3239 µg/L	-1.3239 ppb	19:47:43
2	Mn 257.610†	-233.6	19.8	0.0682 µg/L	0.0682 ppb	19:48:03
2	Mo 202.031†	1.3	8.8	0.9388 µg/L	0.9388 ppb	19:48:03
2	Ni 231.604†	308.4	-6.2	-0.3371 µg/L	-0.3371 ppb	19:48:03
2	P 214.914†	38.1	8.9	19.315 µg/L	19.315 ppb	19:48:03
2	Pb 220.353†	86.4	-14.2	-3.7968 µg/L	-3.7968 ppb	19:48:03

2	S 181.975 Axial†	18.4	2.9	12.528 µg/L	12.528 ppb	19:48:03
2	Sb 206.836†	29.9	1.8	1.7421 µg/L	1.7421 ppb	19:48:03
2	Se 196.026†	17.4	0.9	1.3573 µg/L	1.3573 ppb	19:48:03
2	SiO2†	1243.9	-56.0	-12.052 µg/L	-12.052 ppb	19:47:43
2	Si 251.611†	297.9	-26.9	-2.2125 µg/L	-2.2125 ppb	19:48:03
2	Sn 189.927†	-3.7	-2.7	-1.2451 µg/L	-1.2451 ppb	19:48:03
2	Ti 334.940†	113.7	-7.0	-0.0165 µg/L	-0.0165 ppb	19:47:43
2	Tl 190.801†	-21.7	3.4	4.7734 µg/L	4.7734 ppb	19:48:03
2	U 409.014†	-37.3	17.8	1.6161 µg/L	1.6161 ppb	19:47:43
2	V 292.402†	-50.7	-4.5	-0.0381 µg/L	-0.0381 ppb	19:47:43
2	Zn 213.857†	476.3	-18.3	-0.4528 µg/L	-0.4528 ppb	19:48:03
3	Sc RADIAL	56131.1	56131.1	103 %		19:46:34
3	Al 396.153Radial†	10.7	20.5	15.284 µg/L	15.284 ppb	19:46:34
3	Ca 317.933Radial†	181.6	-2.5	-2.4004 µg/L	-2.4004 ppb	19:46:55
3	Fe 238.204 Radial†	13.6	-1.3	-10.669 µg/L	-10.669 ppb	19:46:55
3	K 766.490 Radial†	173.8	40.6	28.846 µg/L	28.846 ppb	19:46:34
3	Mg 279.077 IEC†	10.5	-1.0	-9.5132 µg/L	-9.5132 ppb	19:46:55
3	Na 589.592 Radial†	587.6	29.4	9.6947 µg/L	9.6947 ppb	19:46:34
3	Sr 421.552†	41.1	0.4	0.0044 µg/L	0.0044 ppb	19:46:34
3	Sc 361.383	1993278.2	1993278.2	104.37 %		19:48:09
3	Y 371.029	1367625.5	1367625.5	104.41 %		19:48:09
3	Ag 328.068†	-556.8	31.0	0.2472 µg/L	0.2472 ppb	19:48:15
3	As 188.979†	0.5	-0.7	-1.3924 µg/L	-1.3924 ppb	19:48:35
3	B 249.677†	311.8	-32.7	-1.4217 µg/L	-1.4217 ppb	19:48:35
3	Ba 233.527†	-24.9	2.1	0.0565 µg/L	0.0565 ppb	19:48:35
3	Be 313.107†	-3343.9	236.6	0.1544 µg/L	0.1544 ppb	19:48:15
3	Cd 226.502†	-139.6	8.3	0.2308 µg/L	0.2308 ppb	19:48:35
3	Co 228.616†	-13.5	-4.1	-0.2026 µg/L	-0.2026 ppb	19:48:35
3	Cr 267.716†	-29.8	23.8	0.5241 µg/L	0.5241 ppb	19:48:35
3	Cu 324.752†	2398.4	-188.1	-1.3155 µg/L	-1.3155 ppb	19:48:15
3	Mn 257.610†	-235.9	18.1	0.0616 µg/L	0.0616 ppb	19:48:35
3	Mo 202.031†	-7.4	0.5	0.0513 µg/L	0.0513 ppb	19:48:35
3	Ni 231.604†	308.0	-7.0	-0.3852 µg/L	-0.3852 ppb	19:48:35
3	P 214.914†	25.9	-2.8	-5.9057 µg/L	-5.9057 ppb	19:48:35
3	Pb 220.353†	95.4	-5.8	-1.5343 µg/L	-1.5343 ppb	19:48:35
3	S 181.975 Axial†	16.1	0.6	2.8080 µg/L	2.8080 ppb	19:48:35
3	Sb 206.836†	23.7	-4.2	-4.1849 µg/L	-4.1849 ppb	19:48:35
3	Se 196.026†	19.8	3.2	4.8107 µg/L	4.8107 ppb	19:48:35
3	SiO2†	1250.9	-51.4	-11.079 µg/L	-11.079 ppb	19:48:15
3	Si 251.611†	298.1	-27.3	-2.2426 µg/L	-2.2426 ppb	19:48:35
3	Sn 189.927†	2.3	3.1	1.4084 µg/L	1.4084 ppb	19:48:35
3	Ti 334.940†	175.4	51.9	0.1256 µg/L	0.1256 ppb	19:48:15
3	Tl 190.801†	-26.8	-1.4	-1.9510 µg/L	-1.9510 ppb	19:48:35
3	U 409.014†	-48.8	6.9	0.6237 µg/L	0.6237 ppb	19:48:15
3	V 292.402†	-16.2	28.7	0.3071 µg/L	0.3071 ppb	19:48:15
3	Zn 213.857†	476.7	-18.8	-0.4644 µg/L	-0.4644 ppb	19:48:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1991719.6	104.29 %	0.103			0.10%
Sc RADIAL	56184.2	103 %	0.3			0.31%
Y 371.029	1367195.2	104.37 %	0.109			0.10%
Ag 328.068†	20.4	0.1617 µg/L	0.20583	0.1617 ppb	0.20583	127.26%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.4	4.0289 µg/L	10.76761	4.0289 ppb	10.76761	267.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.3	-4.4208 µg/L	4.50578	-4.4208 ppb	4.50578	101.92%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-17.9	-0.7790 µg/L	0.74170	-0.7790 ppb	0.74170	95.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.6	0.1452 µg/L	0.13851	0.1452 ppb	0.13851	95.38%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	228.6	0.1492 µg/L	0.01069	0.1492 ppb	0.01069	7.17%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.9	0.8027 µg/L	3.79444	0.8027 ppb	3.79444	472.69%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.5	0.3990 µg/L	0.20768	0.3990 ppb	0.20768	52.05%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.8	-0.2380 µg/L	0.09392	-0.2380 ppb	0.09392	39.46%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	16.9	0.3709 µg/L	0.19057	0.3709 ppb	0.19057 51.38%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	-177.8	-1.2429 µg/L	0.13310	-1.2429 ppb	0.13310 10.71%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	-0.6	-5.3132 µg/L	5.08561	-5.3132 ppb	5.08561 95.72%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	29.0	20.613 µg/L	10.6427	20.613 ppb	10.6427 51.63%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-0.8	-7.7080 µg/L	3.15418	-7.7080 ppb	3.15418 40.92%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	17.1	0.0589 µg/L	0.01100	0.0589 ppb	0.01100 18.69%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	3.0	0.3162 µg/L	0.54117	0.3162 ppb	0.54117 171.13%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	37.2	12.232 µg/L	6.6641	12.232 ppb	6.6641 54.48%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-10.2	-0.5566 µg/L	0.33928	-0.5566 ppb	0.33928 60.96%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	4.0	8.7689 µg/L	13.10740	8.7689 ppb	13.10740 149.48%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-8.7	-2.3257 µg/L	1.27525	-2.3257 ppb	1.27525 54.83%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	0.9	3.8739 µg/L	8.17318	3.8739 ppb	8.17318 210.98%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	-3.6	-3.5411 µg/L	4.99248	-3.5411 ppb	4.99248 140.99%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	1.1	1.6243 µg/L	3.06159	1.6243 ppb	3.06159 188.48%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	-53.5	-11.526 µg/L	0.4912	-11.526 ppb	0.4912 4.26%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	-24.6	-2.0216 µg/L	0.35706	-2.0216 ppb	0.35706 17.66%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	-1.5	-0.7104 µg/L	1.90848	-0.7104 ppb	1.90848 268.66%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	2.1	0.0222 µg/L	0.25591	0.0222 ppb	0.25591 >999.9%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	44.7	0.1081 µg/L	0.11683	0.1081 ppb	0.11683 108.05%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	1.9	2.6841 µg/L	4.02062	2.6841 ppb	4.02062 149.79%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	29.4	2.6628 µg/L	2.71803	2.6628 ppb	2.71803 102.07%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	6.0	0.0698 µg/L	0.20578	0.0698 ppb	0.20578 294.74%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-17.9	-0.4421 µg/L	0.02911	-0.4421 ppb	0.02911 6.58%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, February 24, 2010 13:58:21

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.583

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		8010.6		8010.646		132.493		1.7
	Mg	24.0		80464.0		80463.987		802.940		1.0
	Co	58.9		170262.1		170262.103		1828.524		1.1
	Rh	102.9		306904.0		306903.996		3738.938		1.2
	In	114.9		394981.4		394981.376		4192.916		1.1
	Pb	208.0		384651.8		384651.804		1928.620		0.5
[>	Ba	137.9		372209.0		372209.012		2646.026		0.7
[	Ba++	69.0		6742.3		0.018		0.000		0.8
[>	Ce	139.9		454620.9		454620.904		3860.277		0.8
[	CeO	155.9		12716.3		0.028		0.000		1.2
	Bkgd	220.0		18.7		18.700		3.546		19.0

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.8	8280.1
Co	59	13	6.3	167068.6
In	115	13	7.0	394570.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	586	2072	0.636
Be	9.0	9.0	2050	2088	0.616
Mg	24.0	24.0	5687	2100	0.608
Mg	25.0	25.0	5927	2100	0.597
Mg	26.0	26.0	6169	2100	0.611
Co	58.9	58.9	14169	2125	0.599
Rh	102.9	102.9	24868	2180	0.588
In	114.9	114.9	27782	2200	0.587
Ce	139.9	139.9	33866	2220	0.600
Pb	206.0	206.0	49948	2305	0.610
Pb	207.0	207.0	50159	2240	0.654
Pb	208.0	208.0	50451	2265	0.722
U	238.1	238.0	57720	2275	0.768

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 00:45:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\Blank.189

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		116	
Be	9		ug/L		27	
B	11		ug/L		596	
Na	23		ug/L		18679	
Mg	24		ug/L		4334	
Al	27		ug/L		7669	
P	31		ug/L		5857	
K	39		ug/L		561175	
Ca	43		ug/L		363	
> Sc	45		ug/L		466836	
Ti	47		ug/L		402	
V	51		ug/L		9348	
Cr	52		ug/L		4541	
Cr	53		ug/L		129660	
Mn	55		ug/L		1656	
Fe	57		ug/L		6902	
Co	59		ug/L		147	
Ni	60		ug/L		140	
Cu	63		ug/L		473	
Cu	65		ug/L		257	
Zn	66		ug/L		698	
Zn	67		ug/L		15316	
Zn	68		ug/L		1656	
> Ge	74		ug/L		572003	
As	75		ug/L		-744	
Se	77		ug/L		8264	
Se	82		ug/L		0	
Kr	83		ug/L		173	
Sr	88		ug/L		291	
Y	89		ug/L		76	
Mo	98		ug/L		141	
Ag	107		ug/L		88	
Cd	111		ug/L		33	
Cd	114		ug/L		69	
> In	115		ug/L		379864	
Sn	120		ug/L		422	
Sb	121		ug/L		582	
Sb	123		ug/L		457	
Ba	135		ug/L		54	
Ba	137		ug/L		91	
Ho	165		ug/L		21	
> Lu	175		ug/L		708476	
Tl	205		ug/L		2105	
Pb	208		ug/L		998	
Bi	209		ug/L		589	
Th	232		ug/L		830	
U	238		ug/L		643	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 00:47:50

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	0.9999
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 00:51:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\Standard 1.190

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.105	26890	0.057
Be	9	10.000	ug/L	4.739	5729	0.012
B	11	20.000	ug/L	0.321	12031	0.024
Na	23	1000.000	ug/L	2.963	4393258	9.347
Mg	24	1000.000	ug/L	10.705	3479543	7.430
Al	27	1000.000	ug/L	4.107	5204106	11.105
P	31	1000.000	ug/L	1.944	293596	0.615
K	39	1000.000	ug/L	4.538	6809758	13.354
Ca	43	1000.000	ug/L	3.254	17644	0.037
> Sc	45		ug/L		468066	468065.824
Ti	47	10.000	ug/L	0.987	9225	0.019
V	51	10.000	ug/L	7.478	106749	0.208
Cr	52	10.000	ug/L	3.903	84753	0.171
Cr	53		ug/L		176266	0.099
Mn	55	10.000	ug/L	2.802	130192	0.275
Fe	57	1000.000	ug/L	3.218	274624	0.572
Co	59	10.000	ug/L	0.895	105959	0.226
Ni	60	10.000	ug/L	0.801	23096	0.049
Cu	63		ug/L		56074	0.119
Cu	65	10.000	ug/L	1.060	27358	0.058
Zn	66	10.000	ug/L	2.012	16798	0.028
Zn	67		ug/L		24399	0.016
Zn	68		ug/L		13648	0.021
> Ge	74		ug/L		567866	567865.985
As	75	10.000	ug/L	1.836	16324	0.030
Se	77		ug/L		12599	0.008
Se	82	10.000	ug/L	1.240	1805	0.003
Kr	83		ug/L		149	-0.000
Sr	88	10.000	ug/L	1.351	227001	0.612
Y	89		ug/L		106	0.000
Mo	98	10.000	ug/L	1.107	53630	0.144
Ag	107	10.000	ug/L	2.532	96282	0.259
Cd	111	10.000	ug/L	1.876	22621	0.061
Cd	114		ug/L		53302	0.144
> In	115		ug/L		370762	370762.000
Sn	120	10.000	ug/L	1.295	97007	0.261
Sb	121	10.000	ug/L	1.532	76721	0.205
Sb	123		ug/L		59935	0.160
Ba	135		ug/L		24863	0.035
Ba	137	10.000	ug/L	1.030	44448	0.063
Ho	165		ug/L		31	0.000
> Lu	175		ug/L		703071	703070.874
Tl	205	10.000	ug/L	1.004	339248	0.480
Pb	208	10.000	ug/L	1.089	600186	0.852
Bi	209		ug/L		399	-0.000
Th	232	10.000	ug/L	1.736	730929	1.038
U	238	10.000	ug/L	0.633	764002	1.086

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 00:53:54

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
[	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 00:53:54

Page 3

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 00:57:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\Standard 2.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	100.000	ug/L	2.449	264489	0.572
|	Be	9	100.013	ug/L	2.463	57085	0.123
|	B	11	200.038	ug/L	4.593	115722	0.249
|	Na	23	10012.267	ug/L	1.503	49330670	106.666
|	Mg	24	9994.280	ug/L	2.912	32487077	70.242
|	Al	27	9977.507	ug/L	5.822	41846838	90.451
|	P	31	9996.741	ug/L	2.033	2758099	5.952
|	K	39	10004.212	ug/L	7.305	65060133	139.467
|	Ca	43	9997.043	ug/L	1.635	166192	0.359
>	Sc	45		ug/L		462373	462373.423
|	Ti	47	99.998	ug/L	0.744	87343	0.188
|	V	51	99.954	ug/L	3.260	929215	1.990
|	Cr	52	99.922	ug/L	0.634	739071	1.589
|	Cr	53		ug/L		234272	0.229
|	Mn	55	99.921	ug/L	1.467	1177738	2.544
|	Fe	57	9998.285	ug/L	1.799	2606334	5.623
|	Co	59	99.889	ug/L	1.148	940185	2.033
|	Ni	60	99.956	ug/L	1.897	217299	0.470
|	Cu	63		ug/L		516746	1.117
|	Cu	65	99.972	ug/L	2.114	260459	0.563
[	Zn	66	100.028	ug/L	2.779	162696	0.292
|	Zn	67		ug/L		45738	0.056
|	Zn	68		ug/L		118988	0.211
>	Ge	74		ug/L		555091	555090.637
|	As	75	100.021	ug/L	0.615	169753	0.307
|	Se	77		ug/L		22553	0.026
|	Se	82	100.000	ug/L	2.418	17642	0.032
|	Kr	83		ug/L		176	0.000
[	Sr	88	99.847	ug/L	2.397	1924500	5.295
|	Y	89		ug/L		300	0.001
|	Mo	98	99.989	ug/L	2.112	518934	1.427
|	Ag	107	99.918	ug/L	1.456	871308	2.397
|	Cd	111	99.998	ug/L	1.800	221055	0.608
|	Cd	114		ug/L		511858	1.408
>	In	115		ug/L		363514	363514.297
|	Sn	120	99.927	ug/L	2.597	881818	2.426
|	Sb	121	99.981	ug/L	1.760	733263	2.016
|	Sb	123		ug/L		577455	1.588
[	Ba	135		ug/L		238428	0.344
|	Ba	137	99.967	ug/L	2.692	423069	0.610
|	Ho	165		ug/L		44	0.000
>	Lu	175		ug/L		693126	693125.998
|	Tl	205	99.819	ug/L	1.206	2810893	4.052
|	Pb	208	99.830	ug/L	3.632	5037257	7.270
|	Bi	209		ug/L		848	0.000
|	Th	232	99.839	ug/L	1.412	6188011	8.928
|	U	238	99.841	ug/L	2.806	6479656	9.351

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 00:59:58

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
|>	Sc	45				
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
|>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
|>	In	115				
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
|>	Lu	175				
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 01:03:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 1.192

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.254	ug/L	1.528	138357	0.293
Be	9	51.212	ug/L	3.907	29827	0.063
B	11	103.919	ug/L	2.684	61625	0.129
Na	23	4509.685	ug/L	8.125	22670943	48.044
Mg	24	5347.344	ug/L	7.877	17720997	37.582
Al	27	5620.619	ug/L	10.095	24041127	50.954
P	31	4774.087	ug/L	1.484	1346497	2.843
K	39	5130.417	ug/L	9.736	34293745	71.522
Ca	43	4924.759	ug/L	1.318	83672	0.177
> Sc	45		ug/L		471629	471628.507
Ti	47	50.265	ug/L	0.852	44987	0.095
V	51	51.480	ug/L	3.069	492659	1.025
Cr	52	52.523	ug/L	2.178	398384	0.835
Cr	53		ug/L		196456	0.139
Mn	55	53.204	ug/L	1.701	640426	1.355
Fe	57	4590.215	ug/L	0.475	1224465	2.582
Co	59	51.968	ug/L	2.609	498978	1.058
Ni	60	51.394	ug/L	1.632	114032	0.241
Cu	63		ug/L		269542	0.571
Cu	65	51.228	ug/L	2.806	136262	0.288
Zn	66	53.041	ug/L	2.954	87537	0.155
Zn	67		ug/L		33730	0.033
Zn	68		ug/L		63866	0.111
> Ge	74		ug/L		561190	561190.119
As	75	48.840	ug/L	3.695	83406	0.150
Se	77		ug/L		16616	0.015
Se	82	51.104	ug/L	2.320	9114	0.016
Kr	83		ug/L		151	-0.000
Sr	88	54.911	ug/L	2.149	1076141	2.912
Y	89		ug/L		145	0.000
Mo	98	49.596	ug/L	0.309	261705	0.708
Ag	107	51.305	ug/L	0.925	454836	1.231
Cd	111	50.703	ug/L	1.377	113953	0.308
Cd	114		ug/L		265227	0.718
> In	115		ug/L		369463	369462.806
Sn	120	51.875	ug/L	1.341	465621	1.259
Sb	121	51.410	ug/L	1.168	383561	1.037
Sb	123		ug/L		300315	0.812
Ba	135		ug/L		122938	0.178
Ba	137	51.554	ug/L	2.548	217508	0.315
Ho	165		ug/L		64	0.000
> Lu	175		ug/L		690737	690736.635
Tl	205	50.995	ug/L	2.545	1431651	2.070
Pb	208	54.050	ug/L	1.463	2719376	3.936
Bi	209		ug/L		944	0.001
Th	232	52.084	ug/L	1.833	3217656	4.658
U	238	53.616	ug/L	0.733	3469103	5.022

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 01:06:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	102.508				
Be	9	102.424				
B	11	103.919				
Na	23	90.194				
Mg	24	106.947				
Al	27	111.299				
P	31	95.482				
K	39	102.608				
Ca	43	98.495				
> Sc	45		101.0			
Ti	47	100.531				
V	51	102.959				
Cr	52	105.046				
Cr	53					
Mn	55	106.409				
Fe	57	91.804				
Co	59	103.937				
Ni	60	102.788				
Cu	63					
Cu	65	102.456				
Zn	66	106.082				
Zn	67					
Zn	68					
> Ge	74		98.1			
As	75	97.681				
Se	77					
Se	82	102.207				
Kr	83					
Sr	88	109.822				
Y	89					
Mo	98	99.192				
Ag	107	102.610				
Cd	111	101.405				
Cd	114					
> In	115		97.3			
Sn	120	103.750				
Sb	121	102.819				
Sb	123					
Ba	135					
Ba	137	103.108				
Ho	165					
> Lu	175		97.5			
Tl	205	101.990				
Pb	208	108.100				
Bi	209					
Th	232	104.169				
U	238	107.231				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Al	27	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 01:09:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 2.193

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.021	ug/L	19.019	172	0.000
Be	9	0.008	ug/L	121.338	32	0.000
B	11	4.097	ug/L	16.405	2984	0.005
Na	23	0.870	ug/L	129.311	23019	0.009
Mg	24	-0.105	ug/L	1050.249	4001	-0.001
Al	27	-0.861	ug/L	96.914	4001	-0.008
P	31	0.980	ug/L	180.971	6126	0.001
K	39	1.158	ug/L	397.345	569148	0.016
Ca	43	-0.503	ug/L	329.039	354	-0.000
> Sc	45		ug/L		467005	467005.242
Ti	47	-0.009	ug/L	325.615	395	-0.000
V	51	-0.308	ug/L	153.633	6437	-0.006
Cr	52	-0.165	ug/L	44.444	3309	-0.003
Cr	53		ug/L		125809	-0.008
Mn	55	-0.010	ug/L	32.542	1539	-0.000
Fe	57	0.291	ug/L	190.434	6980	0.000
Co	59	0.004	ug/L	70.690	182	0.000
Ni	60	0.004	ug/L	50.335	150	0.000
Cu	63		ug/L		487	0.000
Cu	65	-0.004	ug/L	95.984	246	-0.000
Zn	66	0.001	ug/L	1593.283	698	0.000
Zn	67		ug/L		14449	-0.001
Zn	68		ug/L		1604	-0.000
> Ge	74		ug/L		569988	569987.791
As	75	-0.179	ug/L	145.005	-1056	-0.001
Se	77		ug/L		8396	0.000
Se	82	0.091	ug/L	153.517	17	0.000
Kr	83		ug/L		156	-0.000
Sr	88	0.006	ug/L	12.878	419	0.000
Y	89		ug/L		79	0.000
Mo	98	0.027	ug/L	3.432	289	0.000
Ag	107	0.006	ug/L	31.976	141	0.000
Cd	111	0.002	ug/L	466.095	37	0.000
Cd	114		ug/L		108	0.000
> In	115		ug/L		378529	378529.037
Sn	120	0.012	ug/L	32.804	534	0.000
Sb	121	0.437	ug/L	10.437	3917	0.009
Sb	123		ug/L		3199	0.007
Ba	135		ug/L		72	0.000
Ba	137	0.004	ug/L	36.133	109	0.000
Ho	165		ug/L		30	0.000
> Lu	175		ug/L		707983	707982.913
Tl	205	0.158	ug/L	22.647	6640	0.006
Pb	208	0.007	ug/L	21.254	1362	0.001
Bi	209		ug/L		584	-0.000
Th	232	0.024	ug/L	5.204	2323	0.002
U	238	0.008	ug/L	26.689	1170	0.001

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 01:12:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		99.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 01:15:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 3.194

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.006	ug/L	2.281	29478	0.063
Be	9	0.537	ug/L	5.699	336	0.001
B	11	17.326	ug/L	3.791	10659	0.022
Na	23	239.283	ug/L	8.349	1207054	2.549
Mg	24	15.408	ug/L	14.004	54772	0.108
Al	27	41.259	ug/L	6.550	182157	0.374
P	31	65.019	ug/L	7.889	23901	0.039
K	39	308.141	ug/L	13.361	2562845	4.296
Ca	43	218.114	ug/L	5.808	4012	0.008
> Sc	45		ug/L		466658	466658.134
Ti	47	8.651	ug/L	2.543	7993	0.016
V	51	10.208	ug/L	9.674	104042	0.203
Cr	52	11.238	ug/L	4.848	87857	0.179
Cr	53		ug/L		157299	0.060
Mn	55	5.897	ug/L	2.990	71691	0.150
Fe	57	105.485	ug/L	2.669	34574	0.059
Co	59	1.130	ug/L	3.872	10879	0.023
Ni	60	2.182	ug/L	2.802	4924	0.010
Cu	63		ug/L		6465	0.013
Cu	65	1.120	ug/L	3.630	3199	0.006
Zn	66	11.321	ug/L	1.546	18871	0.033
Zn	67		ug/L		20464	0.010
Zn	68		ug/L		14797	0.024
> Ge	74		ug/L		550773	550772.701
As	75	5.563	ug/L	3.738	8690	0.017
Se	77		ug/L		10811	0.005
Se	82	5.873	ug/L	3.974	1028	0.002
Kr	83		ug/L		145	-0.000
Sr	88	12.294	ug/L	0.262	241551	0.652
Y	89		ug/L		69	-0.000
Mo	98	0.527	ug/L	4.885	2922	0.008
Ag	107	1.067	ug/L	2.030	9561	0.026
Cd	111	1.111	ug/L	1.215	2532	0.007
Cd	114		ug/L		5724	0.015
> In	115		ug/L		370061	370060.601
Sn	120	5.583	ug/L	1.724	50556	0.136
Sb	121	3.368	ug/L	1.093	25697	0.068
Sb	123		ug/L		20218	0.053
Ba	135		ug/L		5288	0.007
Ba	137	2.158	ug/L	2.765	9314	0.013
Ho	165		ug/L		27	0.000
> Lu	175		ug/L		700109	700108.585
Tl	205	1.260	ug/L	1.742	37884	0.051
Pb	208	2.501	ug/L	1.391	128493	0.182
Bi	209		ug/L		429	-0.000
Th	232	1.296	ug/L	2.070	81953	0.116
U	238	0.284	ug/L	0.865	19262	0.027

Sample ID: QC Std 3

Report Date/Time: Thursday, February 25, 2010 01:18:16

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	110.055				
Be	9	107.409				
B	11	115.509				
Na	23	95.713				
Mg	24	102.717				
Al	27	137.530				
P	31	130.038				
K	39	102.714				
Ca	43	109.057				
> Sc	45		100.0			
Ti	47	86.512				
V	51	102.076				
Cr	52	112.379				
Cr	53					
Mn	55	117.941				
Fe	57	105.485				
Co	59	113.043				
Ni	60	109.121				
Cu	63					
Cu	65	112.029				
Zn	66	113.212				
Zn	67					
Zn	68					
> Ge	74		96.3			
As	75	111.254				
Se	77					
Se	82	117.453				
Kr	83					
Sr	88	122.942				
Y	89					
Mo	98	105.486				
Ag	107	106.734				
Cd	111	111.062				
Cd	114					
> In	115		97.4			
Sn	120	111.664				
Sb	121	112.266				
Sb	123					
Ba	135					
Ba	137	107.890				
Ho	165					
> Lu	175		98.8			
Tl	205	125.991				
Pb	208	125.060				
Bi	209					
Th	232	129.605				
U	238	142.033				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Al	27	CRDL is out of limits
QC Std 3	P	31	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 01:21:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 4.195

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.081	ug/L	10.445	293	0.000
Be	9	0.069	ug/L	19.825	59	0.000
B	11	1.597	ug/L	19.431	1342	0.002
Na	23	76847.089	ug/L	3.522	336523083	818.695
Mg	24	85091.727	ug/L	8.994	245740237	598.043
Al	27	103851.194	ug/L	11.407	387083249	941.464
P	31	82063.023	ug/L	0.909	20088465	48.862
K	39	91466.419	ug/L	0.853	524596315	1275.113
Ca	43	86955.724	ug/L	1.654	1282259	3.119
> Sc	45		ug/L		411013	411012.564
Ti	47	1517.851	ug/L	0.321	1173570	2.854
V	51	-0.573	ug/L	51.787	3536	-0.011
Cr	52	1.914	ug/L	0.983	16506	0.030
Cr	53		ug/L		118979	0.012
Mn	55	6.009	ug/L	1.140	64334	0.153
Fe	57	94815.587	ug/L	1.958	21921908	53.325
Co	59	0.371	ug/L	5.093	3231	0.008
Ni	60	3.499	ug/L	2.633	6881	0.016
Cu	63		ug/L		11210	0.026
Cu	65	3.194	ug/L	0.963	7617	0.018
Zn	66	4.370	ug/L	5.913	6859	0.013
Zn	67		ug/L		18056	0.010
Zn	68		ug/L		2656	0.003
> Ge	74		ug/L		490891	490890.577
As	75	0.176	ug/L	570.093	-374	0.001
Se	77		ug/L		11647	0.009
Se	82	-1.193	ug/L	6.261	-186	-0.000
Kr	83		ug/L		452	0.001
Sr	88	3.263	ug/L	1.596	57326	0.173
Y	89		ug/L		801	0.002
Mo	98	1814.342	ug/L	1.582	8542173	25.899
Ag	107	0.140	ug/L	4.308	1188	0.003
Cd	111	0.506	ug/L	47.944	1046	0.003
Cd	114		ug/L		14916	0.045
> In	115		ug/L		329854	329854.132
Sn	120	0.262	ug/L	2.872	2462	0.006
Sb	121	0.383	ug/L	21.682	3049	0.008
Sb	123		ug/L		2369	0.006
Ba	135		ug/L		1601	0.002
Ba	137	0.714	ug/L	1.305	2815	0.004
Ho	165		ug/L		13545	0.022
> Lu	175		ug/L		626869	626869.274
Tl	205	0.005	ug/L	69.273	1989	0.000
Pb	208	0.229	ug/L	0.450	11334	0.017
Bi	209		ug/L		8402	0.013
Th	232	0.049	ug/L	38.303	3510	0.004
U	238	-0.006	ug/L	5.247	219	-0.001

Sample ID: QC Std 4

Report Date/Time: Thursday, February 25, 2010 01:24:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate	Rel. % Difference
[	Li	7						
|	Be	9						
|	B	11						
|	Na	23	76.847					
|	Mg	24	85.092					
|	Al	27	103.851					
|	P	31	82.063					
|	K	39	91.466					
|	Ca	43	86.956					
>	Sc	45		88.0				
|	Ti	47	75.893					
|	V	51						
|	Cr	52	58.005					
|	Cr	53						
|	Mn	55	103.602					
|	Fe	57	94.816					
|	Co	59	157.727					
|	Ni	60	105.723					
|	Cu	63						
|	Cu	65	95.623					
|	Zn	66	116.221					
|	Zn	67						
|	Zn	68						
>	Ge	74		85.8				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88	110.235					
|	Y	89						
|	Mo	98	90.717					
|	Ag	107						
|	Cd	111	114.002					
|	Cd	114						
>	In	115		86.8				
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137	89.518					
|	Ho	165						
>	Lu	175		88.5				
|	Tl	205						
|	Pb	208	121.132					
|	Bi	209						
|	Th	232						
|	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Na	23	ICSA is out of limits
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 4
 Report Date/Time: Thursday, February 25, 2010 01:24:23
 Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 01:27:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 5.196

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	18.541	ug/L	1.142	41347	0.106
Be	9	17.910	ug/L	2.065	8621	0.022
B	11	17.544	ug/L	2.456	8996	0.022
Na	23	79986.935	ug/L	2.610	331638859	852.145
Mg	24	87477.193	ug/L	2.329	239206523	614.808
Al	27	104014.873	ug/L	4.416	366730469	942.948
P	31	86226.228	ug/L	1.257	19977908	51.341
K	39	89267.225	ug/L	4.445	484619607	1244.455
Ca	43	89016.291	ug/L	1.517	1242724	3.193
> Sc	45		ug/L		389069	389069.436
Ti	47	1547.426	ug/L	0.509	1132579	2.910
V	51	21.352	ug/L	2.752	173144	0.425
Cr	52	23.295	ug/L	2.523	147846	0.370
Cr	53		ug/L		113519	0.014
Mn	55	28.422	ug/L	0.512	282925	0.724
Fe	57	99769.769	ug/L	2.675	21831986	56.111
Co	59	21.406	ug/L	2.926	169597	0.436
Ni	60	22.852	ug/L	1.826	41883	0.107
Cu	63		ug/L		96563	0.247
Cu	65	22.637	ug/L	2.014	49801	0.127
Zn	66	22.923	ug/L	2.431	33260	0.067
Zn	67		ug/L		18838	0.012
Zn	68		ug/L		21732	0.042
> Ge	74		ug/L		488347	488346.958
As	75	20.501	ug/L	3.271	30109	0.063
Se	77		ug/L		11207	0.009
Se	82	19.340	ug/L	2.416	3002	0.006
Kr	83		ug/L		429	0.001
Sr	88	25.956	ug/L	2.112	455843	1.376
Y	89		ug/L		717	0.002
Mo	98	1795.815	ug/L	0.228	8485446	25.635
Ag	107	19.454	ug/L	2.322	154561	0.467
Cd	111	19.913	ug/L	1.616	40113	0.121
Cd	114		ug/L		104916	0.317
> In	115		ug/L		331007	331007.181
Sn	120	21.124	ug/L	1.565	170090	0.513
Sb	121	21.156	ug/L	0.969	141717	0.427
Sb	123		ug/L		110137	0.332
Ba	135		ug/L		44251	0.071
Ba	137	20.377	ug/L	1.178	77727	0.124
Ho	165		ug/L		13358	0.021
> Lu	175		ug/L		624039	624039.312
Tl	205	20.864	ug/L	1.138	530352	0.847
Pb	208	21.830	ug/L	0.626	992892	1.590
Bi	209		ug/L		9139	0.014
Th	232	22.315	ug/L	1.168	1245990	1.996
U	238	22.980	ug/L	0.724	1343671	2.152

Sample ID: QC Std 5

Report Date/Time: Thursday, February 25, 2010 01:30:29

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	92.705				
Be	9	89.548				
B	11	87.719				
Na	23	79.987				
Mg	24	87.477				
Al	27	104.015				
P	31	86.226				
K	39	89.267				
Ca	43	89.016				
> Sc	45		83.3			
Ti	47	77.371				
V	51	106.760				
Cr	52	99.977				
Cr	53					
Mn	55	110.163				
Fe	57	99.770				
Co	59	105.787				
Ni	60	98.036				
Cu	63					
Cu	65	96.989				
Zn	66	96.476				
Zn	67					
Zn	68					
> Ge	74		85.4			
As	75	102.506				
Se	77					
Se	82	96.699				
Kr	83					
Sr	88	113.049				
Y	89					
Mo	98	89.791				
Ag	107	97.271				
Cd	111	97.402				
Cd	114					
> In	115		87.1			
Sn	120	105.621				
Sb	121	105.778				
Sb	123					
Ba	135					
Ba	137	97.974				
Ho	165					
> Lu	175		88.1			
Tl	205	104.321				
Pb	208	108.130				
Bi	209					
Th	232	111.574				
U	238	114.899				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Na	23	ICSAB is out of limits
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 01:33:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 6.197

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.856	ug/L	2.578	121226	0.291
Be	9	51.752	ug/L	3.240	26620	0.064
B	11	98.342	ug/L	3.613	51527	0.122
Na	23	4552.550	ug/L	15.725	20195760	48.501
Mg	24	5042.300	ug/L	2.663	14768916	35.438
Al	27	5207.421	ug/L	7.037	19690007	47.208
P	31	4703.749	ug/L	3.584	1171450	2.801
K	39	4332.637	ug/L	4.484	25671318	60.400
Ca	43	4771.309	ug/L	3.390	71592	0.171
> Sc	45		ug/L		416580	416580.161
Ti	47	49.205	ug/L	3.521	38889	0.093
V	51	52.394	ug/L	4.403	442610	1.043
Cr	52	52.723	ug/L	2.378	353165	0.838
Cr	53		ug/L		173110	0.138
Mn	55	53.516	ug/L	2.938	568853	1.362
Fe	57	4645.346	ug/L	3.429	1094022	2.613
Co	59	52.672	ug/L	3.053	446599	1.072
Ni	60	52.519	ug/L	1.808	102895	0.247
Cu	63		ug/L		246344	0.590
Cu	65	50.727	ug/L	1.756	119188	0.286
Zn	66	51.222	ug/L	2.930	77548	0.150
Zn	67		ug/L		29593	0.031
Zn	68		ug/L		56556	0.107
> Ge	74		ug/L		514672	514672.218
As	75	48.752	ug/L	2.768	76358	0.150
Se	77		ug/L		14469	0.014
Se	82	50.062	ug/L	2.082	8188	0.016
Kr	83		ug/L		141	-0.000
Sr	88	53.781	ug/L	1.710	984550	2.852
Y	89		ug/L		168	0.000
Mo	98	49.077	ug/L	0.791	241922	0.701
Ag	107	51.743	ug/L	1.540	428488	1.241
Cd	111	50.768	ug/L	0.996	106604	0.309
Cd	114		ug/L		248527	0.720
> In	115		ug/L		345156	345156.356
Sn	120	51.493	ug/L	1.373	431744	1.250
Sb	121	51.330	ug/L	1.027	357761	1.035
Sb	123		ug/L		282382	0.817
Ba	135		ug/L		115385	0.169
Ba	137	49.242	ug/L	1.246	205400	0.301
Ho	165		ug/L		67	0.000
> Lu	175		ug/L		682807	682807.409
Tl	205	49.827	ug/L	1.117	1383033	2.023
Pb	208	53.468	ug/L	1.497	2659287	3.894
Bi	209		ug/L		957	0.001
Th	232	51.536	ug/L	1.197	3147381	4.609
U	238	51.542	ug/L	1.737	3296507	4.828

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 01:36:36

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 01:36:36

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	101.711				
Be	9	103.504				
B	11	98.342				
Na	23	91.051				
Mg	24	100.846				
Al	27	103.117				
P	31	94.075				
K	39	86.653				
Ca	43	95.426				
> Sc	45		89.2			
Ti	47	98.410				
V	51	104.788				
Cr	52	105.446				
Cr	53					
Mn	55	107.032				
Fe	57	92.907				
Co	59	105.344				
Ni	60	105.038				
Cu	63					
Cu	65	101.454				
Zn	66	102.443				
Zn	67					
Zn	68					
> Ge	74		90.0			
As	75	97.504				
Se	77					
Se	82	100.123				
Kr	83					
Sr	88	107.563				
Y	89					
Mo	98	98.154				
Ag	107	103.486				
Cd	111	101.536				
Cd	114					
> In	115		90.9			
Sn	120	102.986				
Sb	121	102.661				
Sb	123					
Ba	135					
Ba	137	98.484				
Ho	165					
> Lu	175		96.4			
Tl	205	99.655				
Pb	208	106.936				
Bi	209					
Th	232	103.073				
U	238	103.085				

QC Out Of Limits

Measurement Type: Analyte
 QC Std 6 K
 Mass Out of Limits Message
 39CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 01:40:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 7.198

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.019	ug/L	19.141	149	0.000
Be	9	0.002	ug/L	728.636	25	0.000
B	11	2.533	ug/L	22.205	1848	0.003
Na	23	2.396	ug/L	51.756	27360	0.026
Mg	24	0.956	ug/L	114.511	6668	0.007
Al	27	2.695	ug/L	31.242	17010	0.024
P	31	1.126	ug/L	68.843	5507	0.001
K	39	5.504	ug/L	74.073	532758	0.077
Ca	43	1.125	ug/L	68.383	341	0.000
> Sc	45		ug/L		416774	416774.349
Ti	47	0.051	ug/L	49.426	400	0.000
V	51	-0.473	ug/L	18.561	4423	-0.009
Cr	52	-0.473	ug/L	9.957	914	-0.008
Cr	53		ug/L		108799	-0.017
Mn	55	-0.012	ug/L	34.432	1356	-0.000
Fe	57	-0.949	ug/L	26.247	5940	-0.001
Co	59	0.004	ug/L	38.201	167	0.000
Ni	60	0.010	ug/L	18.742	146	0.000
Cu	63		ug/L		387	-0.000
Cu	65	0.001	ug/L	229.755	233	0.000
Zn	66	-0.024	ug/L	53.198	599	-0.000
Zn	67		ug/L		12866	-0.002
Zn	68		ug/L		1437	-0.000
> Ge	74		ug/L		521240	521240.111
As	75	0.221	ug/L	53.128	-323	0.001
Se	77		ug/L		6939	-0.001
Se	82	0.016	ug/L	370.605	3	0.000
Kr	83		ug/L		144	-0.000
Sr	88	0.005	ug/L	47.801	374	0.000
Y	89		ug/L		70	-0.000
Mo	98	0.063	ug/L	5.593	450	0.001
Ag	107	0.006	ug/L	14.955	132	0.000
Cd	111	0.005	ug/L	128.110	43	0.000
Cd	114		ug/L		91	0.000
> In	115		ug/L		355440	355440.489
Sn	120	0.011	ug/L	35.866	490	0.000
Sb	121	0.155	ug/L	8.034	1659	0.003
Sb	123		ug/L		1327	0.003
Ba	135		ug/L		62	0.000
Ba	137	0.004	ug/L	49.014	105	0.000
Ho	165		ug/L		27	0.000
> Lu	175		ug/L		691627	691626.720
Tl	205	0.224	ug/L	18.598	8345	0.009
Pb	208	0.006	ug/L	37.321	1281	0.000
Bi	209		ug/L		617	0.000
Th	232	0.021	ug/L	5.469	2137	0.002
U	238	0.007	ug/L	32.882	1054	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 01:42:45

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate	Rel. % Difference
|	Li	7						
|	Be	9						
|	B	11						
|	Na	23						
|	Mg	24						
|	Al	27						
|	P	31						
|	K	39						
|	Ca	43						
>	Sc	45		89.3				
|	Ti	47						
|	V	51						
|	Cr	52						
|	Cr	53						
|	Mn	55						
|	Fe	57						
|	Co	59						
|	Ni	60						
|	Cu	63						
|	Cu	65						
|	Zn	66						
|	Zn	67						
|	Zn	68						
>	Ge	74		91.1				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88						
|	Y	89						
|	Mo	98						
|	Ag	107						
|	Cd	111						
|	Cd	114						
>	In	115		93.6				
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137						
|	Ho	165						
>	Lu	175		97.6				
|	Tl	205						
|	Pb	208						
|	Bi	209						
|	Th	232						
|	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 01:42:45

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Thursday, February 25, 2010 01:46:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 10.199

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	908.148	ug/L	2.424	1874486	5.194
Be	9	951.375	ug/L	1.719	423800	1.174
B	11	1.566	ug/L	15.177	1165	0.002
Na	23	48963.331	ug/L	5.462	188368267	521.633
Mg	24	52502.636	ug/L	11.268	133033673	369.000
Al	27	54937.246	ug/L	2.656	179751189	498.034
P	31	21975.073	ug/L	2.357	4726633	13.085
K	39	47751.459	ug/L	3.116	240644107	665.693
Ca	43	47390.870	ug/L	1.958	613793	1.700
> Sc	45		ug/L		361004	361003.669
Ti	47	43.749	ug/L	1.635	30006	0.082
V	51	904.479	ug/L	2.586	6505041	18.006
Cr	52	894.043	ug/L	3.388	5132659	14.214
Cr	53		ug/L		774563	1.869
Mn	55	965.413	ug/L	1.448	8874170	24.579
Fe	57	49460.687	ug/L	0.018	10047325	27.817
Co	59	879.775	ug/L	2.549	6462298	17.907
Ni	60	855.509	ug/L	3.761	1450545	4.019
Cu	63		ug/L		3370054	9.337
Cu	65	809.449	ug/L	1.865	1645282	4.558
Zn	66	2256.169	ug/L	0.467	2956197	6.585
Zn	67		ug/L		473424	1.028
Zn	68		ug/L		1846360	4.111
> Ge	74		ug/L		448846	448845.629
As	75	816.633	ug/L	0.627	1125003	2.508
Se	77		ug/L		55858	0.110
Se	82	459.331	ug/L	2.018	65518	0.146
Kr	83		ug/L		270	0.000
Sr	88	991.112	ug/L	0.957	16759897	52.560
Y	89		ug/L		613	0.002
Mo	98	915.334	ug/L	1.384	4166215	13.066
Ag	107	211.925	ug/L	0.351	1621230	5.084
Cd	111	830.235	ug/L	0.459	1609938	5.049
Cd	114		ug/L		3840458	12.044
> In	115		ug/L		318855	318855.037
Sn	120	888.428	ug/L	0.778	6876169	21.565
Sb	121	222.617	ug/L	1.988	1431814	4.489
Sb	123		ug/L		1131261	3.547
Ba	135		ug/L		1734671	2.749
Ba	137	844.735	ug/L	0.281	3255477	5.159
Ho	165		ug/L		194	0.000
> Lu	175		ug/L		631074	631073.614
Tl	205	466.428	ug/L	3.113	11948443	18.934
Pb	208	4781.042	ug/L	1.641	219700515	348.163
Bi	209		ug/L		6701	0.010
Th	232	2537.017	ug/L	2.540	143156342	226.877
U	238	5256.734	ug/L	0.889	310701302	492.353

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 01:48:50

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	90.815				
Be	9	95.138				
B	11					
Na	23	97.927				
Mg	24	105.005				
Al	27	109.874				
P	31	87.900				
K	39	95.503				
Ca	43	94.782				
> Sc	45		77.3			
Ti	47					
V	51	90.448				
Cr	52	89.404				
Cr	53					
Mn	55	96.541				
Fe	57	98.921				
Co	59	87.977				
Ni	60	85.551				
Cu	63					
Cu	65	80.945				
Zn	66	90.247				
Zn	67					
Zn	68					
> Ge	74		78.5			
As	75	81.663				
Se	77					
Se	82	91.866				
Kr	83					
Sr	88	99.111				
Y	89					
Mo	98	91.533				
Ag	107	84.770				
Cd	111	83.024				
Cd	114					
> In	115		83.9			
Sn	120	88.843				
Sb	121	89.047				
Sb	123					
Ba	135					
Ba	137	84.474				
Ho	165					
> Lu	175		89.1			
Tl	205	93.286				
Pb	208	95.621				
Bi	209					
Th	232	101.481				
U	238	105.135				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	P	31	LRS is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
Ge 74 Int Std for QC	Ge	74	

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 01:48:50

Page 3

QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Ag	107LRS is out of limits (+/- 10%)
QC Std 10	Cd	111LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)
QC Std 10	Sb	121LRS is out of limits (+/- 10%)
QC Std 10	Ba	137LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Thursday, February 25, 2010 01:52:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 11.200

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.196	ug/L	0.675	124156	0.310
Be	9	54.193	ug/L	1.593	26794	0.067
B	11	102.665	ug/L	4.172	51685	0.128
Na	23	4788.488	ug/L	4.856	20434884	51.014
Mg	24	5400.192	ug/L	4.677	15194288	37.954
Al	27	5449.235	ug/L	5.070	19779169	49.400
P	31	4764.081	ug/L	0.169	1140414	2.837
K	39	5151.257	ug/L	13.117	29223170	71.813
Ca	43	4933.715	ug/L	1.733	71145	0.177
> Sc	45		ug/L		400258	400258.051
Ti	47	50.075	ug/L	2.048	38038	0.094
V	51	52.375	ug/L	2.015	425346	1.043
Cr	52	52.430	ug/L	1.642	337549	0.834
Cr	53		ug/L		165024	0.135
Mn	55	54.510	ug/L	0.980	556900	1.388
Fe	57	4766.520	ug/L	1.578	1078880	2.681
Co	59	53.611	ug/L	1.011	436890	1.091
Ni	60	53.600	ug/L	1.754	100915	0.252
Cu	63		ug/L		236140	0.589
Cu	65	52.077	ug/L	1.536	117580	0.293
Zn	66	52.112	ug/L	1.547	76044	0.152
Zn	67		ug/L		29932	0.034
Zn	68		ug/L		55232	0.108
> Ge	74		ug/L		496057	496057.360
As	75	48.906	ug/L	0.967	73856	0.150
Se	77		ug/L		12992	0.012
Se	82	49.965	ug/L	2.870	7876	0.016
Kr	83		ug/L		137	-0.000
Sr	88	54.271	ug/L	2.485	961158	2.878
Y	89		ug/L		119	0.000
Mo	98	49.006	ug/L	3.544	233635	0.700
Ag	107	52.610	ug/L	2.993	421432	1.262
Cd	111	51.427	ug/L	2.143	104455	0.313
Cd	114		ug/L		244311	0.732
> In	115		ug/L		334023	334023.113
Sn	120	52.691	ug/L	3.573	427313	1.279
Sb	121	54.043	ug/L	3.070	364319	1.090
Sb	123		ug/L		286486	0.857
Ba	135		ug/L		115314	0.174
Ba	137	49.566	ug/L	2.291	200991	0.303
Ho	165		ug/L		59	0.000
> Lu	175		ug/L		663851	663850.793
Tl	205	52.389	ug/L	2.109	1413544	2.127
Pb	208	55.266	ug/L	1.770	2672392	4.025
Bi	209		ug/L		902	0.001
Th	232	53.892	ug/L	1.577	3199837	4.819
U	238	55.370	ug/L	0.825	3443184	5.186

Sample ID: QC Std 11

Report Date/Time: Thursday, February 25, 2010 01:54:55

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	108.391				
Be	9	108.386				
B	11	102.665				
Na	23	95.770				
Mg	24	108.004				
Al	27	107.906				
P	31	95.282				
K	39	103.025				
Ca	43	98.674				
> Sc	45		85.7			
Ti	47	100.150				
V	51	104.750				
Cr	52	104.861				
Cr	53					
Mn	55	109.021				
Fe	57	95.330				
Co	59	107.223				
Ni	60	107.200				
Cu	63					
Cu	65	104.154				
Zn	66	104.223				
Zn	67					
Zn	68					
> Ge	74		86.7			
As	75	97.812				
Se	77					
Se	82	99.930				
Kr	83					
Sr	88	108.542				
Y	89					
Mo	98	98.011				
Ag	107	105.220				
Cd	111	102.854				
Cd	114					
> In	115		87.9			
Sn	120	105.383				
Sb	121	108.087				
Sb	123					
Ba	135					
Ba	137	99.132				
Ho	165					
> Lu	175		93.7			
Tl	205	104.778				
Pb	208	110.532				
Bi	209					
Th	232	107.784				
U	238	110.740				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Pb	208	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Thursday, February 25, 2010 01:58:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 12.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.081	ug/L	10.197	299	0.000
Be	9	0.018	ug/L	51.844	33	0.000
B	11	2.579	ug/L	15.125	1884	0.003
Na	23	1.316	ug/L	84.987	22685	0.014
Mg	24	0.489	ug/L	108.302	5334	0.003
Al	27	1.173	ug/L	112.531	11338	0.011
P	31	1.722	ug/L	86.879	5697	0.001
K	39	3.328	ug/L	55.503	524112	0.046
Ca	43	0.968	ug/L	59.645	341	0.000
> Sc	45		ug/L		419767	419767.140
Ti	47	0.004	ug/L	877.318	365	0.000
V	51	-1.017	ug/L	82.790	-111	-0.020
Cr	52	-0.487	ug/L	21.332	828	-0.008
Cr	53		ug/L		109105	-0.018
Mn	55	-0.010	ug/L	62.129	1378	-0.000
Fe	57	-2.374	ug/L	42.893	5645	-0.001
Co	59	0.017	ug/L	11.866	281	0.000
Ni	60	0.018	ug/L	17.750	162	0.000
Cu	63		ug/L		554	0.000
Cu	65	0.028	ug/L	53.165	297	0.000
Zn	66	0.008	ug/L	100.614	644	0.000
Zn	67		ug/L		13924	0.000
Zn	68		ug/L		1632	0.000
> Ge	74		ug/L		518179	518178.770
As	75	0.331	ug/L	97.478	-143	0.001
Se	77		ug/L		6369	-0.002
Se	82	0.194	ug/L	18.296	32	0.000
Kr	83		ug/L		147	-0.000
Sr	88	0.016	ug/L	25.521	573	0.001
Y	89		ug/L		59	-0.000
Mo	98	0.086	ug/L	12.447	565	0.001
Ag	107	0.009	ug/L	7.425	155	0.000
Cd	111	0.019	ug/L	49.545	72	0.000
Cd	114		ug/L		158	0.000
> In	115		ug/L		354160	354159.678
Sn	120	0.048	ug/L	27.503	801	0.001
Sb	121	0.877	ug/L	10.887	6799	0.018
Sb	123		ug/L		5313	0.014
Ba	135		ug/L		88	0.000
Ba	137	0.015	ug/L	32.187	150	0.000
Ho	165		ug/L		30	0.000
> Lu	175		ug/L		692811	692811.033
Tl	205	0.297	ug/L	15.828	10425	0.012
Pb	208	0.072	ug/L	19.153	4624	0.005
Bi	209		ug/L		573	-0.000
Th	232	0.062	ug/L	6.357	4669	0.006
U	238	0.087	ug/L	17.296	6259	0.008

Sample ID: QC Std 12

Report Date/Time: Thursday, February 25, 2010 02:01:04

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		90.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 03:06:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 8.212

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.465	ug/L	1.954	118632	0.306
Be	9	53.925	ug/L	1.997	25821	0.067
B	11	99.750	ug/L	1.592	48652	0.124
Na	23	4455.631	ug/L	3.102	18422685	47.468
Mg	24	4776.217	ug/L	5.396	13019219	33.568
Al	27	5033.646	ug/L	3.899	17701688	45.633
P	31	4544.170	ug/L	0.649	1053826	2.706
K	39	4592.157	ug/L	5.447	25279389	64.018
Ca	43	4816.015	ug/L	1.923	67269	0.173
> Sc	45		ug/L		387700	387700.329
Ti	47	49.528	ug/L	3.202	36438	0.093
V	51	49.899	ug/L	3.841	392794	0.993
Cr	52	51.839	ug/L	1.935	323304	0.824
Cr	53		ug/L		170480	0.162
Mn	55	54.104	ug/L	2.127	535329	1.377
Fe	57	4692.131	ug/L	2.583	1028649	2.639
Co	59	52.684	ug/L	1.709	415824	1.072
Ni	60	52.046	ug/L	2.538	94908	0.245
Cu	63		ug/L		227636	0.586
Cu	65	51.237	ug/L	1.995	112052	0.288
Zn	66	50.843	ug/L	0.318	71998	0.148
Zn	67		ug/L		29748	0.035
Zn	68		ug/L		51891	0.105
> Ge	74		ug/L		481221	481220.561
As	75	47.765	ug/L	1.495	69952	0.147
Se	77		ug/L		13474	0.014
Se	82	49.353	ug/L	3.993	7546	0.016
Kr	83		ug/L		134	-0.000
Sr	88	52.285	ug/L	2.686	918989	2.773
Y	89		ug/L		155	0.000
Mo	98	47.993	ug/L	2.726	227104	0.685
Ag	107	51.141	ug/L	2.709	406585	1.227
Cd	111	49.932	ug/L	3.069	100630	0.304
Cd	114		ug/L		235139	0.709
> In	115		ug/L		331469	331469.489
Sn	120	52.088	ug/L	3.245	419230	1.264
Sb	121	51.190	ug/L	3.297	342473	1.032
Sb	123		ug/L		271371	0.818
Ba	135		ug/L		110871	0.165
Ba	137	48.101	ug/L	0.597	197420	0.294
Ho	165		ug/L		62	0.000
> Lu	175		ug/L		671772	671772.270
Tl	205	50.110	ug/L	2.090	1368390	2.034
Pb	208	53.590	ug/L	2.298	2621957	3.902
Bi	209		ug/L		848	0.000
Th	232	50.971	ug/L	1.947	3062468	4.558
U	238	51.964	ug/L	0.543	3270061	4.867

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 03:09:07

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 03:09:07

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Li	7	106.929					
Be	9	107.850					
B	11	99.750					
Na	23	89.113					
Mg	24	95.524					
Al	27	99.676					
P	31	90.883					
K	39	91.843					
Ca	43	96.320					
> Sc	45		83.0				
Ti	47	99.055					
V	51	99.799					
Cr	52	103.679					
Cr	53						
Mn	55	108.207					
Fe	57	93.843					
Co	59	105.369					
Ni	60	104.092					
Cu	63						
Cu	65	102.474					
Zn	66	101.686					
Zn	67						
Zn	68						
> Ge	74		84.1				
As	75	95.529					
Se	77						
Se	82	98.706					
Kr	83						
Sr	88	104.570					
Y	89						
Mo	98	95.986					
Ag	107	102.281					
Cd	111	99.864					
Cd	114						
> In	115		87.3				
Sn	120	104.176					
Sb	121	102.380					
Sb	123						
Ba	135						
Ba	137	96.202					
Ho	165						
> Lu	175		94.8				
Tl	205	100.221					
Pb	208	107.179					
Bi	209						
Th	232	101.942					
U	238	103.927					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 03:12:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 9.213

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.002	ug/L	181.797	93	-0.000
Be	9	0.013	ug/L	92.819	29	0.000
B	11	2.538	ug/L	12.464	1751	0.003
Na	23	0.699	ug/L	252.559	18680	0.007
Mg	24	-0.119	ug/L	174.163	3334	-0.001
Al	27	0.522	ug/L	164.908	8336	0.005
P	31	1.329	ug/L	32.453	5261	0.001
K	39	7.771	ug/L	109.355	516903	0.108
Ca	43	2.269	ug/L	113.069	339	0.000
> Sc	45		ug/L		394424	394423.568
Ti	47	0.008	ug/L	876.599	346	0.000
V	51	-1.188	ug/L	23.281	-1433	-0.024
Cr	52	-0.577	ug/L	10.875	218	-0.009
Cr	53		ug/L		112822	0.008
Mn	55	-0.016	ug/L	16.502	1237	-0.000
Fe	57	-2.116	ug/L	7.287	5362	-0.001
Co	59	0.004	ug/L	23.457	153	0.000
Ni	60	0.003	ug/L	344.680	124	0.000
Cu	63		ug/L		385	-0.000
Cu	65	-0.003	ug/L	129.972	211	-0.000
Zn	66	-0.014	ug/L	215.355	588	-0.000
Zn	67		ug/L		13821	0.001
Zn	68		ug/L		1600	0.000
> Ge	74		ug/L		497771	497770.977
As	75	0.140	ug/L	10.133	-434	0.000
Se	77		ug/L		6583	-0.001
Se	82	-0.002	ug/L	3289.256	-0	-0.000
Kr	83		ug/L		151	0.000
Sr	88	0.003	ug/L	27.952	314	0.000
Y	89		ug/L		62	-0.000
Mo	98	0.020	ug/L	18.977	229	0.000
Ag	107	0.003	ug/L	65.382	102	0.000
Cd	111	0.007	ug/L	30.382	44	0.000
Cd	114		ug/L		74	0.000
> In	115		ug/L		347292	347291.835
Sn	120	0.009	ug/L	15.923	465	0.000
Sb	121	0.142	ug/L	15.937	1529	0.003
Sb	123		ug/L		1169	0.002
Ba	135		ug/L		65	0.000
Ba	137	-0.000	ug/L	430.105	87	-0.000
Ho	165		ug/L		28	0.000
> Lu	175		ug/L		688217	688216.705
Tl	205	0.228	ug/L	22.575	8414	0.009
Pb	208	0.005	ug/L	6.134	1229	0.000
Bi	209		ug/L		507	-0.000
Th	232	0.025	ug/L	11.434	2360	0.002
U	238	0.006	ug/L	7.177	1001	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 03:15:16

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		84.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
F Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.0			
As	75					
Se	77					
Se	82					
L Kr	83					
F Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.4			
Sn	120					
Sb	121					
L Sb	123					
F Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 03:15:16

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 04:01:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 8.221

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.297	ug/L	0.876	110710	0.305
Be	9	54.146	ug/L	3.019	24265	0.067
B	11	100.480	ug/L	3.587	45859	0.125
Na	23	4171.471	ug/L	2.958	16138293	44.441
Mg	24	4586.782	ug/L	5.716	11694894	32.237
Al	27	5055.741	ug/L	4.486	16631740	45.833
P	31	4577.718	ug/L	2.256	993543	2.726
K	39	4802.389	ug/L	2.715	24743549	66.949
Ca	43	4846.935	ug/L	0.926	63379	0.174
> Sc	45		ug/L		362947	362947.495
Ti	47	49.047	ug/L	3.723	33775	0.092
V	51	50.336	ug/L	6.076	370668	1.002
Cr	52	51.846	ug/L	1.989	302704	0.824
Cr	53		ug/L		167069	0.183
Mn	55	53.537	ug/L	2.899	495800	1.363
Fe	57	4713.288	ug/L	3.470	967035	2.651
Co	59	53.158	ug/L	2.348	392706	1.082
Ni	60	52.434	ug/L	1.328	89505	0.246
Cu	63		ug/L		213057	0.586
Cu	65	51.062	ug/L	1.162	104532	0.287
Zn	66	50.557	ug/L	2.303	67110	0.148
Zn	67		ug/L		27645	0.035
Zn	68		ug/L		49177	0.106
> Ge	74		ug/L		451139	451139.409
As	75	48.399	ug/L	2.181	66454	0.149
Se	77		ug/L		13618	0.016
Se	82	50.015	ug/L	0.660	7172	0.016
Kr	83		ug/L		136	-0.000
Sr	88	53.795	ug/L	2.400	874162	2.853
Y	89		ug/L		146	0.000
Mo	98	48.885	ug/L	0.506	213906	0.698
Ag	107	51.628	ug/L	1.230	379525	1.239
Cd	111	50.511	ug/L	0.583	94137	0.307
Cd	114		ug/L		218241	0.712
> In	115		ug/L		306374	306373.728
Sn	120	52.632	ug/L	1.336	391718	1.278
Sb	121	52.095	ug/L	0.572	322301	1.050
Sb	123		ug/L		255324	0.832
Ba	135		ug/L		104261	0.162
Ba	137	47.032	ug/L	1.624	184518	0.287
Ho	165		ug/L		64	0.000
> Lu	175		ug/L		642286	642285.524
Tl	205	47.409	ug/L	2.192	1238198	1.924
Pb	208	53.506	ug/L	1.974	2502884	3.896
Bi	209		ug/L		767	0.000
Th	232	50.854	ug/L	1.982	2920992	4.548
U	238	52.228	ug/L	2.841	3141856	4.892

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 04:04:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	106.593				
Be	9	108.292				
B	11	100.480				
Na	23	83.429				
Mg	24	91.736				
Al	27	100.114				
P	31	91.554				
K	39	96.048				
Ca	43	96.939				
> Sc	45		77.7			
Ti	47	98.095				
V	51	100.671				
Cr	52	103.692				
Cr	53					
Mn	55	107.074				
Fe	57	94.266				
Co	59	106.317				
Ni	60	104.868				
Cu	63					
Cu	65	102.124				
Zn	66	101.114				
Zn	67					
Zn	68					
> Ge	74		78.9			
As	75	96.798				
Se	77					
Se	82	100.031				
Kr	83					
Sr	88	107.591				
Y	89					
Mo	98	97.769				
Ag	107	103.257				
Cd	111	101.022				
Cd	114					
> In	115		80.7			
Sn	120	105.263				
Sb	121	104.191				
Sb	123					
Ba	135					
Ba	137	94.064				
Ho	165					
> Lu	175		90.7			
Tl	205	94.818				
Pb	208	107.012				
Bi	209					
Th	232	101.709				
U	238	104.456				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na		23CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	

QC Action

Sample ID: QC Std 8
 Report Date/Time: Thursday, February 25, 2010 04:04:33
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 04:07:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 9.222

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.007	ug/L	70.600	75	-0.000
Be	9	0.001	ug/L	427.705	21	0.000
B	11	2.858	ug/L	13.649	1735	0.004
Na	23	2.439	ug/L	61.149	23687	0.026
Mg	24	-0.394	ug/L	209.953	2334	-0.003
Al	27	0.134	ug/L	261.103	6335	0.001
P	31	1.182	ug/L	136.933	4755	0.001
K	39	5.490	ug/L	106.207	458943	0.077
Ca	43	3.046	ug/L	45.207	318	0.000
> Sc	45		ug/L		358890	358890.056
Ti	47	0.028	ug/L	71.080	328	0.000
V	51	-1.351	ug/L	6.580	-2470	-0.027
Cr	52	-0.516	ug/L	15.492	547	-0.008
Cr	53		ug/L		104474	0.013
Mn	55	-0.015	ug/L	1.320	1138	-0.000
Fe	57	-3.066	ug/L	9.844	4687	-0.002
Co	59	0.004	ug/L	29.358	141	0.000
Ni	60	0.018	ug/L	28.015	139	0.000
Cu	63		ug/L		370	0.000
Cu	65	-0.003	ug/L	222.559	192	-0.000
Zn	66	-0.088	ug/L	17.806	449	-0.000
Zn	67		ug/L		12172	-0.001
Zn	68		ug/L		1411	0.000
> Ge	74		ug/L		466737	466736.805
As	75	0.324	ug/L	144.041	-140	0.001
Se	77		ug/L		6273	-0.001
Se	82	0.082	ug/L	142.286	12	0.000
Kr	83		ug/L		123	-0.000
Sr	88	0.003	ug/L	29.478	298	0.000
Y	89		ug/L		55	-0.000
Mo	98	0.024	ug/L	22.589	233	0.000
Ag	107	0.003	ug/L	88.056	98	0.000
Cd	111	0.002	ug/L	268.427	32	0.000
Cd	114		ug/L		77	0.000
> In	115		ug/L		324681	324681.252
Sn	120	0.012	ug/L	31.440	456	0.000
Sb	121	0.144	ug/L	16.700	1443	0.003
Sb	123		ug/L		1182	0.002
Ba	135		ug/L		58	0.000
Ba	137	-0.000	ug/L	774.420	84	-0.000
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		664658	664658.160
Tl	205	1.290	ug/L	8.742	36744	0.052
Pb	208	0.004	ug/L	43.036	1148	0.000
Bi	209		ug/L		514	-0.000
Th	232	0.027	ug/L	8.660	2372	0.002
U	238	0.006	ug/L	26.064	963	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 04:10:42

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		81.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		85.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
QC Std 9	TI		205CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Thursday, February 25, 2010 04:14:08

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032562.223

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.016	ug/L	22.151	128	0.000
Be	9	-0.009	ug/L	29.117	17	-0.000
B	11	1.401	ug/L	17.463	1134	0.002
Na	23	4.350	ug/L	35.523	32371	0.046
Mg	24	-0.560	ug/L	68.232	2000	-0.004
Al	27	7.783	ug/L	4.956	32704	0.071
P	31	6.164	ug/L	43.133	6087	0.004
K	39	21.005	ug/L	11.696	561489	0.293
Ca	43	30.231	ug/L	3.138	699	0.001
> Sc	45		ug/L		375746	375745.796
Ti	47	0.449	ug/L	5.663	641	0.001
V	51	-7.066	ug/L	16.943	-45278	-0.141
Cr	52	-0.014	ug/L	288.062	3574	-0.000
Cr	53		ug/L		299123	0.519
Mn	55	0.270	ug/L	5.227	3919	0.007
Fe	57	19.815	ug/L	3.550	9741	0.011
Co	59	-0.002	ug/L	64.075	105	-0.000
Ni	60	0.059	ug/L	20.296	218	0.000
Cu	63		ug/L		660	0.001
Cu	65	0.067	ug/L	16.819	348	0.000
Zn	66	1.501	ug/L	2.297	2515	0.004
Zn	67		ug/L		55765	0.097
Zn	68		ug/L		4784	0.008
> Ge	74		ug/L		449040	449040.038
As	75	-1.259	ug/L	75.403	-2320	-0.004
Se	77		ug/L		21464	0.033
Se	82	0.095	ug/L	50.908	14	0.000
Kr	83		ug/L		116	-0.000
Sr	88	0.103	ug/L	3.988	1818	0.005
Y	89		ug/L		82	0.000
Mo	98	0.030	ug/L	15.255	234	0.000
Ag	107	-0.001	ug/L	75.904	61	-0.000
Cd	111	-0.003	ug/L	179.448	20	-0.000
Cd	114		ug/L		35	-0.000
> In	115		ug/L		291215	291215.233
Sn	120	0.147	ug/L	3.602	1361	0.004
Sb	121	0.093	ug/L	28.490	990	0.002
Sb	123		ug/L		800	0.002
Ba	135		ug/L		131	0.000
Ba	137	0.040	ug/L	11.205	230	0.000
Ho	165		ug/L		28	0.000
> Lu	175		ug/L		620339	620338.726
Tl	205	0.831	ug/L	3.621	22760	0.034
Pb	208	0.012	ug/L	8.330	1401	0.001
Bi	209		ug/L		329	-0.000
Th	232	0.032	ug/L	27.318	2528	0.003
U	238	-0.006	ug/L	5.233	219	-0.001

Sample ID: 1202032562

Report Date/Time: Thursday, February 25, 2010 04:16:53

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		80.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		78.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		76.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032562

Report Date/Time: Thursday, February 25, 2010 04:16:53

Page 3

ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Thursday, February 25, 2010 04:20:19

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032563.224

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.569	ug/L	1.851	104603	0.283
Be	9	53.487	ug/L	0.551	24361	0.066
B	11	98.988	ug/L	1.738	45918	0.123
Na	23	1723.869	ug/L	3.011	6784493	18.365
Mg	24	1958.303	ug/L	5.903	5078942	13.763
Al	27	2003.800	ug/L	6.081	6705005	18.165
P	31	1877.731	ug/L	2.492	416782	1.118
K	39	1949.349	ug/L	7.980	10459592	27.175
Ca	43	1885.290	ug/L	1.577	25220	0.068
> Sc	45		ug/L		368745	368744.994
Ti	47	42.497	ug/L	2.978	29779	0.080
V	51	38.420	ug/L	4.356	289276	0.765
Cr	52	47.878	ug/L	3.131	284186	0.761
Cr	53		ug/L		324168	0.602
Mn	55	50.570	ug/L	2.495	475927	1.287
Fe	57	1870.062	ug/L	1.803	393191	1.052
Co	59	49.544	ug/L	3.461	371830	1.008
Ni	60	48.465	ug/L	2.757	84051	0.228
Cu	63		ug/L		202473	0.548
Cu	65	47.455	ug/L	2.259	98703	0.267
Zn	66	49.371	ug/L	2.096	64352	0.144
Zn	67		ug/L		66996	0.125
Zn	68		ug/L		49465	0.109
> Ge	74		ug/L		442864	442864.089
As	75	45.802	ug/L	0.542	61708	0.141
Se	77		ug/L		25591	0.043
Se	82	49.700	ug/L	0.975	6997	0.016
Kr	83		ug/L		127	-0.000
Sr	88	52.381	ug/L	1.355	801820	2.778
Y	89		ug/L		124	0.000
Mo	98	48.629	ug/L	2.407	200393	0.694
Ag	107	51.470	ug/L	2.157	356353	1.235
Cd	111	48.569	ug/L	2.043	85251	0.295
Cd	114		ug/L		197890	0.685
> In	115		ug/L		288597	288597.458
Sn	120	50.304	ug/L	2.798	352607	1.221
Sb	121	52.327	ug/L	2.756	304870	1.055
Sb	123		ug/L		240133	0.831
Ba	135		ug/L		92888	0.152
Ba	137	44.194	ug/L	2.352	165053	0.270
Ho	165		ug/L		52	0.000
> Lu	175		ug/L		611402	611401.608
Tl	205	43.929	ug/L	5.775	1091482	1.783
Pb	208	52.668	ug/L	1.824	2345327	3.835
Bi	209		ug/L		1852324	3.029
Th	232	47.940	ug/L	2.144	2621285	4.287
U	238	49.516	ug/L	2.470	2835286	4.638

Sample ID: 1202032563

Report Date/Time: Thursday, February 25, 2010 04:23:04

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		79.0			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		77.4			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		76.0			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		86.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 04:57:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 8.230

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.506	ug/L	0.339	109582	0.306
Be	9	54.515	ug/L	0.898	24094	0.067
B	11	99.038	ug/L	1.385	44587	0.123
Na	23	4616.235	ug/L	9.139	17595928	49.179
Mg	24	5036.190	ug/L	4.456	12664742	35.395
Al	27	5078.636	ug/L	3.934	16474220	46.040
P	31	4592.433	ug/L	3.138	982657	2.734
K	39	4762.234	ug/L	3.561	24180152	66.389
Ca	43	4847.075	ug/L	1.802	62484	0.174
> Sc	45		ug/L		357833	357833.029
Ti	47	49.687	ug/L	0.710	33742	0.093
V	51	50.563	ug/L	4.728	367223	1.007
Cr	52	51.936	ug/L	2.975	298873	0.826
Cr	53		ug/L		170179	0.198
Mn	55	54.215	ug/L	1.908	495131	1.380
Fe	57	4774.446	ug/L	3.694	965925	2.685
Co	59	53.053	ug/L	2.866	386422	1.080
Ni	60	53.199	ug/L	1.625	89530	0.250
Cu	63		ug/L		210242	0.587
Cu	65	51.309	ug/L	2.290	103546	0.289
Zn	66	49.773	ug/L	1.522	66136	0.145
Zn	67		ug/L		28288	0.036
Zn	68		ug/L		48867	0.105
> Ge	74		ug/L		451461	451460.838
As	75	48.008	ug/L	0.832	65967	0.147
Se	77		ug/L		13698	0.016
Se	82	49.592	ug/L	2.864	7117	0.016
Kr	83		ug/L		128	-0.000
Sr	88	52.768	ug/L	1.425	855952	2.798
Y	89		ug/L		149	0.000
Mo	98	48.988	ug/L	3.210	213900	0.699
Ag	107	51.362	ug/L	2.086	376828	1.232
Cd	111	50.212	ug/L	2.678	93390	0.305
Cd	114		ug/L		216323	0.707
> In	115		ug/L		305832	305831.645
Sn	120	51.900	ug/L	2.512	385500	1.260
Sb	121	52.095	ug/L	1.504	321698	1.050
Sb	123		ug/L		251575	0.821
Ba	135		ug/L		102932	0.163
Ba	137	47.701	ug/L	2.112	184012	0.291
Ho	165		ug/L		65	0.000
> Lu	175		ug/L		631515	631515.344
Tl	205	46.443	ug/L	1.654	1192587	1.885
Pb	208	54.462	ug/L	2.067	2505112	3.966
Bi	209		ug/L		753	0.000
Th	232	51.448	ug/L	0.273	2906226	4.601
U	238	52.522	ug/L	1.676	3106822	4.919

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 05:00:05

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	107.011				
Be	9	109.029				
B	11	99.038				
Na	23	92.325				
Mg	24	100.724				
Al	27	100.567				
P	31	91.849				
K	39	95.245				
Ca	43	96.942				
> Sc	45		76.7			
Ti	47	99.375				
V	51	101.126				
Cr	52	103.872				
Cr	53					
Mn	55	108.431				
Fe	57	95.489				
Co	59	106.105				
Ni	60	106.397				
Cu	63					
Cu	65	102.617				
Zn	66	99.546				
Zn	67					
Zn	68					
> Ge	74		78.9			
As	75	96.016				
Se	77					
Se	82	99.183				
Kr	83					
Sr	88	105.535				
Y	89					
Mo	98	97.976				
Ag	107	102.723				
Cd	111	100.424				
Cd	114					
> In	115		80.5			
Sn	120	103.799				
Sb	121	104.191				
Sb	123					
Ba	135					
Ba	137	95.401				
Ho	165					
> Lu	175		89.1			
Tl	205	92.886				
Pb	208	108.923				
Bi	209					
Th	232	102.896				
U	238	105.044				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits	Message
Sc 45 Int Std for QC	Sc	45		
Ge 74 Int Std for QC	Ge	74		

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 05:03:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 9.231

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.012	ug/L	7.011	65	-0.000
Be	9	0.018	ug/L	81.045	29	0.000
B	11	2.520	ug/L	20.602	1581	0.003
Na	23	1.317	ug/L	109.316	19347	0.014
Mg	24	-0.261	ug/L	317.906	2667	-0.002
Al	27	-0.580	ug/L	91.800	4001	-0.005
P	31	0.653	ug/L	186.201	4630	0.000
K	39	4.170	ug/L	428.340	451196	0.058
Ca	43	1.918	ug/L	39.840	303	0.000
> Sc	45		ug/L		357906	357906.486
Ti	47	-0.014	ug/L	177.898	299	-0.000
V	51	-1.313	ug/L	9.952	-2185	-0.026
Cr	52	-0.637	ug/L	9.607	-145	-0.010
Cr	53		ug/L		103662	0.012
Mn	55	-0.012	ug/L	60.588	1158	-0.000
Fe	57	-2.516	ug/L	16.303	4785	-0.001
Co	59	0.005	ug/L	11.714	149	0.000
Ni	60	0.003	ug/L	57.184	112	0.000
Cu	63		ug/L		346	-0.000
Cu	65	0.006	ug/L	92.591	210	0.000
Zn	66	-0.091	ug/L	4.032	435	-0.000
Zn	67		ug/L		12332	0.000
Zn	68		ug/L		1377	0.000
> Ge	74		ug/L		455989	455989.224
As	75	0.415	ug/L	33.315	-11	0.001
Se	77		ug/L		6238	-0.001
Se	82	0.102	ug/L	102.734	15	0.000
Kr	83		ug/L		125	-0.000
Sr	88	0.004	ug/L	21.231	308	0.000
Y	89		ug/L		59	-0.000
Mo	98	0.022	ug/L	28.215	216	0.000
Ag	107	0.004	ug/L	88.816	106	0.000
Cd	111	0.006	ug/L	78.285	39	0.000
Cd	114		ug/L		85	0.000
> In	115		ug/L		318667	318667.410
Sn	120	0.016	ug/L	16.376	477	0.000
Sb	121	0.142	ug/L	18.622	1397	0.003
Sb	123		ug/L		1102	0.002
Ba	135		ug/L		65	0.000
Ba	137	-0.000	ug/L	3212.883	83	-0.000
Ho	165		ug/L		22	0.000
> Lu	175		ug/L		652645	652644.906
Tl	205	1.016	ug/L	10.806	28833	0.041
Pb	208	0.005	ug/L	2.478	1156	0.000
Bi	209		ug/L		551	0.000
Th	232	0.027	ug/L	8.748	2327	0.002
U	238	0.006	ug/L	19.481	960	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 05:06:15

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		79.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		83.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
Ge 74 Int Std for QC	Ge	74	
QC Std 9	Tl		205CCB is out of limits (+/- PQL)

QC Action

Sample ID: QC Std 9
 Report Date/Time: Thursday, February 25, 2010 05:06:15
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 246000001

Sample Date/Time: Thursday, February 25, 2010 05:09:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\246000001.232

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.113	ug/L	6.799	331	0.001
Be	9	-0.001	ug/L	1360.939	21	-0.000
B	11	18.817	ug/L	0.796	9120	0.023
Na	23	168.608	ug/L	18.434	678057	1.796
Mg	24	5.508	ug/L	35.606	17678	0.039
Al	27	30.098	ug/L	5.301	106731	0.273
P	31	8.838	ug/L	16.959	6575	0.005
K	39	198.620	ug/L	11.711	1465862	2.769
Ca	43	58.832	ug/L	9.782	1065	0.002
> Sc	45		ug/L		369053	369053.234
Ti	47	0.969	ug/L	7.345	990	0.002
V	51	-6.020	ug/L	25.263	-36788	-0.120
Cr	52	0.592	ug/L	12.901	7063	0.009
Cr	53		ug/L		294430	0.520
Mn	55	0.552	ug/L	1.756	6494	0.014
Fe	57	14.892	ug/L	2.869	8548	0.008
Co	59	0.004	ug/L	35.876	144	0.000
Ni	60	0.103	ug/L	7.609	289	0.000
Cu	63		ug/L		2460	0.006
Cu	65	0.476	ug/L	5.545	1191	0.003
Zn	66	1.566	ug/L	2.629	2519	0.005
Zn	67		ug/L		52841	0.095
Zn	68		ug/L		4541	0.008
> Ge	74		ug/L		435036	435035.872
As	75	-1.718	ug/L	36.086	-2864	-0.005
Se	77		ug/L		21852	0.036
Se	82	0.095	ug/L	149.032	13	0.000
Kr	83		ug/L		121	-0.000
Sr	88	0.224	ug/L	4.217	3541	0.012
Y	89		ug/L		299	0.001
Mo	98	0.015	ug/L	30.937	163	0.000
Ag	107	0.002	ug/L	51.161	80	0.000
Cd	111	0.007	ug/L	78.682	36	0.000
Cd	114		ug/L		41	-0.000
> In	115		ug/L		280068	280067.956
Sn	120	0.301	ug/L	2.886	2356	0.007
Sb	121	0.094	ug/L	37.047	963	0.002
Sb	123		ug/L		770	0.002
Ba	135		ug/L		709	0.001
Ba	137	0.314	ug/L	7.386	1251	0.002
Ho	165		ug/L		43	0.000
> Lu	175		ug/L		611959	611959.123
Tl	205	0.525	ug/L	8.285	14854	0.021
Pb	208	0.114	ug/L	1.270	5923	0.008
Bi	209		ug/L		447	-0.000
Th	232	0.034	ug/L	25.981	2558	0.003
U	238	0.004	ug/L	2.863	777	0.000

Sample ID: 246000001

Report Date/Time: Thursday, February 25, 2010 05:12:25

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		79.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		76.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		73.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		86.4			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Thursday, February 25, 2010 05:15:52

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032564.233

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.124	ug/L	3.159	347	0.001
Be	9	-0.001	ug/L	1434.911	21	-0.000
B	11	18.592	ug/L	1.446	8852	0.023
Na	23	251.160	ug/L	6.598	984201	2.676
Mg	24	9.424	ug/L	27.192	27360	0.066
Al	27	41.416	ug/L	11.427	142042	0.375
P	31	8.631	ug/L	15.302	6409	0.005
K	39	182.608	ug/L	5.241	1357995	2.546
Ca	43	57.893	ug/L	8.766	1034	0.002
> Sc	45		ug/L		362357	362357.332
Ti	47	1.030	ug/L	0.840	1014	0.002
V	51	-6.936	ug/L	16.071	-42796	-0.138
Cr	52	0.861	ug/L	29.754	8488	0.014
Cr	53		ug/L		307959	0.572
Mn	55	0.615	ug/L	0.837	6960	0.016
Fe	57	18.038	ug/L	7.781	9033	0.010
Co	59	0.004	ug/L	3.140	146	0.000
Ni	60	0.110	ug/L	11.094	296	0.001
Cu	63		ug/L		2657	0.006
Cu	65	0.543	ug/L	1.168	1308	0.003
Zn	66	1.349	ug/L	0.752	2194	0.004
Zn	67		ug/L		53014	0.098
Zn	68		ug/L		4405	0.007
> Ge	74		ug/L		425364	425364.422
As	75	-1.587	ug/L	30.338	-2626	-0.005
Se	77		ug/L		24785	0.044
Se	82	0.113	ug/L	126.016	15	0.000
Kr	83		ug/L		114	-0.000
Sr	88	0.222	ug/L	1.047	3507	0.012
Y	89		ug/L		359	0.001
Mo	98	0.012	ug/L	14.229	151	0.000
Ag	107	0.011	ug/L	24.348	139	0.000
Cd	111	0.001	ug/L	1063.766	26	0.000
Cd	114		ug/L		47	-0.000
> In	115		ug/L		280041	280040.501
Sn	120	0.276	ug/L	0.637	2189	0.007
Sb	121	0.011	ug/L	90.073	488	0.000
Sb	123		ug/L		386	0.000
Ba	135		ug/L		796	0.001
Ba	137	0.345	ug/L	4.685	1343	0.002
Ho	165		ug/L		45	0.000
> Lu	175		ug/L		600179	600178.698
Tl	205	0.274	ug/L	4.149	8469	0.011
Pb	208	0.137	ug/L	3.445	6828	0.010
Bi	209		ug/L		768	0.000
Th	232	0.014	ug/L	11.562	1439	0.001
U	238	0.007	ug/L	10.552	920	0.001

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 05:18:37

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		77.6			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		74.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		73.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		84.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 05:18:37

Page 3

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Thursday, February 25, 2010 05:22:04

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032565.234

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.348	ug/L	0.616	100386	0.265
Be	9	51.058	ug/L	1.288	23862	0.063
B	11	112.113	ug/L	3.218	53293	0.140
Na	23	2102.246	ug/L	1.918	8491428	22.396
Mg	24	2025.051	ug/L	9.582	5393717	14.232
Al	27	2096.404	ug/L	8.492	7192425	19.005
P	31	1776.591	ug/L	2.501	404903	1.058
K	39	1918.428	ug/L	2.266	10575946	26.744
Ca	43	1903.254	ug/L	3.144	26117	0.068
> Sc	45		ug/L		378395	378394.950
Ti	47	41.965	ug/L	2.097	30182	0.079
V	51	35.766	ug/L	2.849	276914	0.712
Cr	52	48.741	ug/L	1.558	296849	0.775
Cr	53		ug/L		334865	0.607
Mn	55	47.573	ug/L	2.893	459466	1.211
Fe	57	1784.687	ug/L	3.326	385228	1.004
Co	59	46.837	ug/L	3.092	360716	0.953
Ni	60	45.989	ug/L	2.969	81841	0.216
Cu	63		ug/L		194638	0.514
Cu	65	44.187	ug/L	1.800	94328	0.249
Zn	66	48.302	ug/L	2.556	61956	0.141
Zn	67		ug/L		65350	0.123
Zn	68		ug/L		47075	0.105
> Ge	74		ug/L		435812	435811.885
As	75	69.840	ug/L	2.673	92868	0.214
Se	77		ug/L		25509	0.044
Se	82	19.025	ug/L	4.187	2635	0.006
Kr	83		ug/L		139	0.000
Sr	88	51.998	ug/L	1.358	767904	2.758
Y	89		ug/L		361	0.001
Mo	98	49.210	ug/L	2.112	195647	0.702
Ag	107	52.208	ug/L	1.463	348760	1.253
Cd	111	10.250	ug/L	2.148	17377	0.062
Cd	114		ug/L		38530	0.138
> In	115		ug/L		278448	278447.753
Sn	120	50.999	ug/L	1.680	344926	1.238
Sb	121	196.030	ug/L	2.833	1100667	3.953
Sb	123		ug/L		889988	3.196
Ba	135		ug/L		90502	0.147
Ba	137	42.890	ug/L	1.118	161441	0.262
Ho	165		ug/L		363	0.001
> Lu	175		ug/L		616160	616160.306
Tl	205	58.182	ug/L	9.183	1455510	2.362
Pb	208	41.180	ug/L	0.863	1848411	2.999
Bi	209		ug/L		1068	0.001
Th	232	46.865	ug/L	2.967	2582182	4.191
U	238	47.673	ug/L	3.116	2750697	4.465

Sample ID: 1202032565

Report Date/Time: Thursday, February 25, 2010 05:24:49

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		81.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		76.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		73.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032565

Report Date/Time: Thursday, February 25, 2010 05:24:49

Page 3

ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Thursday, February 25, 2010 05:28:16

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032566.235

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.006	ug/L	54.667	104	0.000
Be	9	0.006	ug/L	35.881	24	0.000
B	11	5.792	ug/L	13.589	3137	0.007
Na	23	24.488	ug/L	2.682	111434	0.261
Mg	24	0.719	ug/L	72.606	5334	0.005
Al	27	6.155	ug/L	11.270	26692	0.056
P	31	0.485	ug/L	351.904	4746	0.000
K	39	38.380	ug/L	33.080	641813	0.535
Ca	43	15.310	ug/L	11.022	491	0.001
> Sc	45		ug/L		370232	370232.331
Ti	47	0.207	ug/L	11.588	463	0.000
V	51	-2.110	ug/L	32.082	-8236	-0.042
Cr	52	0.149	ug/L	116.356	4463	0.002
Cr	53		ug/L		162376	0.161
Mn	55	0.103	ug/L	10.337	2279	0.003
Fe	57	-0.969	ug/L	127.725	5267	-0.001
Co	59	0.000	ug/L	2365.380	117	0.000
Ni	60	0.023	ug/L	10.007	152	0.000
Cu	63		ug/L		665	0.001
Cu	65	0.071	ug/L	8.532	351	0.000
Zn	66	0.311	ug/L	4.184	961	0.001
Zn	67		ug/L		17816	0.013
Zn	68		ug/L		2050	0.002
> Ge	74		ug/L		451489	451488.745
As	75	-0.393	ug/L	65.339	-1130	-0.001
Se	77		ug/L		12404	0.013
Se	82	0.092	ug/L	176.230	13	0.000
Kr	83		ug/L		114	-0.000
Sr	88	0.043	ug/L	7.643	920	0.002
Y	89		ug/L		105	0.000
Mo	98	0.011	ug/L	20.574	161	0.000
Ag	107	0.000	ug/L	504.683	73	0.000
Cd	111	-0.002	ug/L	40.906	22	-0.000
Cd	114		ug/L		40	-0.000
> In	115		ug/L		303525	303525.381
Sn	120	0.059	ug/L	8.927	775	0.001
Sb	121	0.003	ug/L	180.420	486	0.000
Sb	123		ug/L		379	0.000
Ba	135		ug/L		167	0.000
Ba	137	0.056	ug/L	7.739	299	0.000
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		636269	636269.192
Tl	205	3.215	ug/L	9.914	84931	0.130
Pb	208	0.015	ug/L	2.741	1592	0.001
Bi	209		ug/L		410	-0.000
Th	232	0.013	ug/L	9.472	1473	0.001
U	238	-0.000	ug/L	1010.928	572	-0.000

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 05:31:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		79.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		78.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		79.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		89.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 05:31:02

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 05:34:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 6.236

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.917	ug/L	1.868	108597	0.303
Be	9	54.344	ug/L	3.265	24062	0.067
B	11	98.597	ug/L	4.825	44462	0.123
Na	23	4364.899	ug/L	10.122	16677592	46.502
Mg	24	5166.651	ug/L	5.836	13022055	36.312
Al	27	5309.819	ug/L	5.270	17255876	48.136
P	31	4490.103	ug/L	3.876	962807	2.674
K	39	4761.044	ug/L	2.718	24229143	66.373
Ca	43	4781.332	ug/L	1.206	61786	0.172
Sc	45		ug/L		358648	358648.450
Ti	47	49.162	ug/L	3.254	33457	0.092
V	51	48.521	ug/L	5.223	353326	0.966
Cr	52	51.502	ug/L	4.424	296952	0.819
Cr	53		ug/L		159249	0.166
Mn	55	53.828	ug/L	3.683	492501	1.370
Fe	57	4662.444	ug/L	3.954	945190	2.622
Co	59	52.524	ug/L	2.604	383384	1.069
Ni	60	51.967	ug/L	2.640	87643	0.244
Cu	63		ug/L		208193	0.580
Cu	65	51.065	ug/L	2.197	103281	0.288
Zn	66	50.165	ug/L	2.388	65743	0.146
Zn	67		ug/L		26546	0.033
Zn	68		ug/L		48197	0.105
Ge	74		ug/L		445320	445319.542
As	75	47.833	ug/L	2.613	64826	0.147
Se	77		ug/L		13497	0.016
Se	82	50.120	ug/L	1.860	7094	0.016
Kr	83		ug/L		138	0.000
Sr	88	52.759	ug/L	3.617	862826	2.798
Y	89		ug/L		136	0.000
Mo	98	47.856	ug/L	2.730	210771	0.683
Ag	107	50.495	ug/L	4.061	373528	1.211
Cd	111	49.369	ug/L	3.327	92594	0.300
Cd	114		ug/L		215515	0.699
In	115		ug/L		308474	308473.645
Sn	120	50.731	ug/L	1.832	380087	1.231
Sb	121	50.710	ug/L	3.139	315747	1.023
Sb	123		ug/L		248882	0.806
Ba	135		ug/L		103265	0.162
Ba	137	46.919	ug/L	2.371	183074	0.287
Ho	165		ug/L		62	0.000
Lu	175		ug/L		638898	638898.483
Tl	205	46.584	ug/L	5.676	1208963	1.891
Pb	208	54.008	ug/L	2.258	2512712	3.933
Bi	209		ug/L		723	0.000
Th	232	50.785	ug/L	5.054	2899879	4.542
U	238	52.456	ug/L	4.393	3137205	4.913

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 05:37:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	105.835				
Be	9	108.687				
B	11	98.597				
Na	23	87.298				
Mg	24	103.333				
Al	27	105.145				
P	31	89.802				
K	39	95.221				
Ca	43	95.627				
> Sc	45		76.8			
Ti	47	98.324				
V	51	97.043				
Cr	52	103.003				
Cr	53					
Mn	55	107.655				
Fe	57	93.249				
Co	59	105.048				
Ni	60	103.935				
Cu	63					
Cu	65	102.130				
Zn	66	100.329				
Zn	67					
Zn	68					
> Ge	74		77.9			
As	75	95.665				
Se	77					
Se	82	100.239				
Kr	83					
Sr	88	105.518				
Y	89					
Mo	98	95.711				
Ag	107	100.990				
Cd	111	98.739				
Cd	114					
> In	115		81.2			
Sn	120	101.463				
Sb	121	101.420				
Sb	123					
Ba	135					
Ba	137	93.838				
Ho	165					
> Lu	175		90.2			
Tl	205	93.168				
Pb	208	108.016				
Bi	209					
Th	232	101.570				
U	238	104.911				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 05:40:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 7.237

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.008	ug/L	35.434	71	-0.000
Be	9	0.012	ug/L	44.342	26	0.000
B	11	2.894	ug/L	15.369	1738	0.004
Na	23	1.175	ug/L	54.758	18679	0.013
Mg	24	-0.791	ug/L	27.434	1333	-0.006
Al	27	1.002	ug/L	131.615	9003	0.009
P	31	-0.273	ug/L	450.430	4404	-0.000
K	39	5.024	ug/L	159.839	452058	0.070
Ca	43	1.755	ug/L	118.621	299	0.000
> Sc	45		ug/L		355897	355897.204
Ti	47	0.024	ug/L	59.762	323	0.000
V	51	-1.430	ug/L	43.242	-3078	-0.028
Cr	52	-0.546	ug/L	13.221	364	-0.009
Cr	53		ug/L		100757	0.005
Mn	55	-0.012	ug/L	22.218	1151	-0.000
Fe	57	-2.595	ug/L	49.371	4738	-0.001
Co	59	0.003	ug/L	75.329	136	0.000
Ni	60	0.006	ug/L	57.367	117	0.000
Cu	63		ug/L		374	0.000
L Cu	65	0.001	ug/L	1267.111	198	0.000
Zn	66	-0.105	ug/L	6.230	414	-0.000
Zn	67		ug/L		11868	-0.001
Zn	68		ug/L		1291	-0.000
> Ge	74		ug/L		453770	453770.256
As	75	0.178	ug/L	92.795	-343	0.001
Se	77		ug/L		6176	-0.001
Se	82	-0.039	ug/L	402.610	-5	-0.000
L Kr	83		ug/L		130	-0.000
Sr	88	0.002	ug/L	136.865	273	0.000
Y	89		ug/L		58	-0.000
Mo	98	0.027	ug/L	29.378	238	0.000
Ag	107	0.004	ug/L	72.977	103	0.000
Cd	111	0.006	ug/L	24.325	40	0.000
Cd	114		ug/L		74	0.000
> In	115		ug/L		316780	316780.065
Sn	120	0.009	ug/L	42.527	422	0.000
Sb	121	0.141	ug/L	22.448	1380	0.003
L Sb	123		ug/L		1128	0.002
Ba	135		ug/L		52	0.000
Ba	137	-0.002	ug/L	173.345	75	-0.000
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		652981	652980.698
Tl	205	2.263	ug/L	3.135	61943	0.092
Pb	208	0.005	ug/L	17.380	1143	0.000
Bi	209		ug/L		536	-0.000
Th	232	0.025	ug/L	6.004	2231	0.002
L U	238	0.005	ug/L	19.730	901	0.000

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 05:43:19

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		79.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		83.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
Ge 74 Int Std for QC	Ge	74	
QC Std 7	Tl	205	CCB is out of limits (+/- PQL)

QC Action

Sample ID: QC Std 7
 Report Date/Time: Thursday, February 25, 2010 05:43:19
 Page 3

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, February 25, 2010 10:21:12

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.587

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD
Be	9.0		7667.7		7667.657		92.696		1.2
Mg	24.0		65438.4		65438.352		810.719		1.2
Co	58.9		148768.2		148768.250		1242.721		0.8
Rh	102.9		281248.6		281248.630		3259.965		1.2
In	114.9		364299.1		364299.123		3937.746		1.1
Pb	208.0		327198.7		327198.660		900.422		0.3
[> Ba	137.9		337284.3		337284.262		1053.536		0.3
[Ba++	69.0		6381.2		0.019		0.000		1.2
[> Ce	139.9		411857.7		411857.650		5034.814		1.2
[CeO	155.9		10883.8		0.026		0.000		1.5
Bkgd	220.0		24.6		24.600		6.358		25.8

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.8	7423.9
Co	59	13	6.3	140852.6
In	115	13	6.8	347281.8

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	589	2072	0.604
Be	9.0	9.0	2056	2088	0.598
Mg	24.0	24.0	5695	2100	0.591
Mg	25.0	25.0	5935	2100	0.577
Mg	26.0	26.0	6177	2100	0.596
Co	58.9	59.0	14189	2125	0.594
Rh	102.9	102.9	24878	2180	0.579
In	114.9	114.9	27792	2200	0.585
Ce	139.9	139.9	33864	2220	0.581
Pb	206.0	206.0	49948	2305	0.587
Pb	207.0	207.0	50159	2240	0.631
Pb	208.0	208.0	50451	2265	0.710
U	238.1	238.1	57732	2275	0.744

Report Date/Time: Thursday, February 25, 2010 10:19:28

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 14:12:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0225.mth

Dataset File: c:\elandata\Dataset\100224\Blank.347

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9		ug/L		25	
[> Sc	45		ug/L		668888	
[Mn	55		ug/L		2291	
[> Lu	175		ug/L		595837	
[Tl	205		ug/L		883	
[Pb	208		ug/L		475	
[U	238		ug/L		204	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 14:12:52

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	
Sc	45Linear Thru Zero	
Mn	55Simple Linear	
Lu	175Simple Linear	
Tl	205Simple Linear	
Pb	208Simple Linear	
U	238Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45					
[	Mn	55					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 14:14:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.348

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	0.828	6540	0.010
|>	Sc	45		ug/L		676851	676850.534
[	Mn	55	10.000	ug/L	1.904	177072	0.258
[>	Lu	175		ug/L		589758	589757.524
|	Tl	205	10.000	ug/L	0.453	263884	0.446
|	Pb	208	10.000	ug/L	2.877	474859	0.805
[	U	238	10.000	ug/L	0.241	601643	1.020

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 14:15:20

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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 % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45					
[	Mn	55					
[>	Lu	175					
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 14:17:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0225.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.349

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.022	ug/L	1.049	63615	0.098
|>	Sc	45		ug/L		645973	645972.524
[	Mn	55	99.878	ug/L	2.401	1486823	2.298
[>	Lu	175		ug/L		584303	584303.328
|	Tl	205	99.812	ug/L	2.029	2189635	3.747
|	Pb	208	99.844	ug/L	1.355	4061519	6.951
[	U	238	99.831	ug/L	0.936	5089463	8.710

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 14:17:49

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45						
[	Mn	55						
[>	Lu	175						
|	Ti	205						
|	Pb	208						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 14:19:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.350

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.337	ug/L	0.831	31823	0.051
|>	Sc	45		ug/L		629483	629482.623
[	Mn	55	54.535	ug/L	2.129	791888	1.255
[>	Lu	175		ug/L		589274	589274.225
|	Tl	205	52.420	ug/L	0.813	1160354	1.968
|	Pb	208	53.310	ug/L	1.745	2187052	3.711
[	U	238	52.301	ug/L	0.705	2689274	4.563

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 14:20:18

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	102.674				
|>	Sc	45		94.1			
[	Mn	55	109.069				
|>	Lu	175		98.9			
|	Tl	205	104.839				
|	Pb	208	106.620				
[	U	238	104.602				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 14:22:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.351

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.002	ug/L	214.675	24	-0.000
|>	Sc	45		ug/L		654529	654529.493
[	Mn	55	-0.004	ug/L	100.755	2183	-0.000
[>	Lu	175		ug/L		595331	595330.522
|	Tl	205	0.102	ug/L	6.118	3167	0.004
|	Pb	208	0.003	ug/L	26.105	579	0.000
[	U	238	0.008	ug/L	1.572	602	0.001

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 14:22:52

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
| >	Sc	45			97.9			
|	Mn	55						
[>	Lu	175			99.9			
|	Tl	205						
|	Pb	208						
|	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 14:24:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.352

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.557	ug/L	9.676	385	0.001
|> Sc	45		ug/L		658791	658790.794
[Mn	55	6.275	ug/L	4.301	97305	0.144
|> Lu	175		ug/L		592978	592978.327
| Tl	205	1.277	ug/L	1.263	29298	0.048
| Pb	208	2.551	ug/L	2.809	105733	0.178
[U	238	0.290	ug/L	0.556	15199	0.025

Sample ID: QC Std 3

Report Date/Time: Thursday, February 25, 2010 14:25:22

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	111.411				
|>	Sc	45		98.5			
[	Mn	55	125.508				
[>	Lu	175		99.5			
|	Tl	205	127.675				
|	Pb	208	127.538				
[	U	238	144.913				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 14:27:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.353

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.089	ug/L	12.417	70	0.000
|>	Sc	45		ug/L		556722	556721.917
[	Mn	55	6.374	ug/L	2.843	83520	0.147
[>	Lu	175		ug/L		546173	546173.398
|	Tl	205	0.027	ug/L	7.143	1352	0.001
|	Pb	208	0.239	ug/L	1.772	9511	0.017
[	U	238	-0.001	ug/L	7.538	150	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			83.2		
[	Mn	55	109.892				
[>	Lu	175			91.7		
|	Tl	205					
|	Pb	208	126.313				
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 14:29:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 5.354

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.782	ug/L	1.989	10470	0.019
> Sc	45		ug/L		536856	536856.079
[Mn	55	28.447	ug/L	1.663	353252	0.655
[> Lu	175		ug/L		544762	544762.461
| Ti	205	21.404	ug/L	1.003	438467	0.803
| Pb	208	21.975	ug/L	2.109	833709	1.530
[U	238	23.745	ug/L	0.446	1128817	2.072

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9	98.910					
> Sc	45		80.3				
[Mn	55	110.258					
[> Lu	175		91.4				
| Ti	205	107.019					
| Pb	208	108.847					
[U	238	118.723					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 14:32:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nml 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.355

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.548	ug/L	3.801	31989	0.053
Sc	45		ug/L		606838	606838.403
Mn	55	54.439	ug/L	2.137	762096	1.253
Lu	175		ug/L		601484	601484.197
Tl	205	51.997	ug/L	0.762	1174882	1.952
Pb	208	54.077	ug/L	2.248	2264396	3.765
U	238	53.307	ug/L	0.482	2797685	4.651

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9	107.095					
Sc	45		90.7				
Mn	55	108.878					
Lu	175		100.9				
Tl	205	103.993					
Pb	208	108.154					
U	238	106.613					

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: Thursday, February 25, 2010 14:32:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 14:34:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.356

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.001	ug/L	739.982	24	-0.000
[>	Sc	45		ug/L		649200	649199.690
[	Mn	55	-0.021	ug/L	1.269	1911	-0.000
[>	Lu	175		ug/L		625070	625069.607
[	Tl	205	0.087	ug/L	3.030	2978	0.003
[	Pb	208	0.000	ug/L	61.802	513	0.000
[	U	238	0.005	ug/L	17.144	503	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
[>	Sc	45		97.1			
[	Mn	55					
[>	Lu	175		104.9			
[	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

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 14:35:29

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 14:56:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 8.364

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.970	ug/L	1.302	31179	0.052
> Sc	45		ug/L		597786	597786.220
[Mn	55	55.100	ug/L	1.866	759807	1.268
> Lu	175		ug/L		595134	595133.877
| Ti	205	52.325	ug/L	0.329	1169829	1.964
| Pb	208	53.592	ug/L	1.336	2220837	3.731
[U	238	52.623	ug/L	2.770	2733100	4.591

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	105.941					
> Sc	45		89.4				
[Mn	55	110.199					
> Lu	175		99.9				
| Ti	205	104.651					
| Pb	208	107.184					
[U	238	105.247					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mn	55	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 14:57:27

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 14:59:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 9.365

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.001	ug/L	1466.131	23	0.000
> Sc	45		ug/L		607338	607337.892
Mn	55	0.001	ug/L	693.699	2089	0.000
> Lu	175		ug/L		599774	599774.272
Tl	205	0.874	ug/L	1.983	20554	0.033
Pb	208	0.003	ug/L	4.189	607	0.000
U	238	0.008	ug/L	2.310	641	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		90.8				
Mn	55						
> Lu	175		100.7				
Tl	205						
Pb	208						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 15:00:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Thursday, February 25, 2010 15:13:21

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032562.370

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.005	ug/L	99.825	21	-0.000
|>	Sc	45		ug/L		643470	643470.488
[	Mn	55	0.283	ug/L	5.774	6389	0.007
[>	Lu	175		ug/L		585134	585134.328
|	Tl	205	0.483	ug/L	1.138	11475	0.018
|	Pb	208	0.021	ug/L	5.320	1327	0.001
[	U	238	-0.000	ug/L	198.800	193	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45		96.2				
[	Mn	55						
[>	Lu	175		98.2				
|	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

Sample ID: 1202032562

Report Date/Time: Thursday, February 25, 2010 15:13:55

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Thursday, February 25, 2010 15:15:56

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\ani 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032563.371

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.625	ug/L	4.308	32048	0.049
Sc	45		ug/L		656083	656083.082
Mn	55	50.137	ug/L	2.054	758987	1.154
Lu	175		ug/L		589037	589037.009
Tl	205	42.034	ug/L	2.037	930318	1.578
Pb	208	52.764	ug/L	2.619	2163992	3.673
U	238	51.774	ug/L	0.516	2660967	4.517

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.1			
Mn	55					
Lu	175		98.9			
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

Sample ID: 1202032563

Report Date/Time: Thursday, February 25, 2010 15:16:31

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 15:23:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.374

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	54.183	ug/L	1.937	31055	0.053
Sc	45		ug/L		582090	582090.176
Mn	55	54.374	ug/L	3.736	730010	1.251
Lu	175		ug/L		593497	593496.547
Tl	205	52.300	ug/L	3.630	1165289	1.963
Pb	208	54.421	ug/L	2.513	2248095	3.789
U	238	53.119	ug/L	0.451	2750767	4.635

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	108.365					
Sc	45		87.0				
Mn	55	108.748					
Lu	175		99.6				
Tl	205	104.601					
Pb	208	108.842					
U	238	106.238					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 15:24:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 15:26:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.375

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.005	ug/L	23.854	26	0.000
[>	Sc	45		ug/L		602746	602745.952
[	Mn	55	0.003	ug/L	113.169	2105	0.000
[>	Lu	175		ug/L		615579	615578.706
[	Tl	205	0.490	ug/L	4.079	12233	0.018
[	Pb	208	0.001	ug/L	113.914	533	0.000
[	U	238	0.006	ug/L	6.248	549	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
[>	Sc	45		90.1			
[	Mn	55					
[>	Lu	175		103.3			
[	Tl	205					
[	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 15:26:49

Page 1

ICPMS#5 - Summary Report

Sample ID: 246000001

Sample Date/Time: Thursday, February 25, 2010 15:37:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\Nanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\246000001.379

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	294.273	26	0.000
> Sc	45		ug/L		638746	638746.070
[Mn	55	0.570	ug/L	1.732	10566	0.013
> Lu	175		ug/L		585764	585763.695
| Ti	205	0.131	ug/L	3.833	3754	0.005
| Pb	208	0.129	ug/L	2.564	5712	0.009
[U	238	0.011	ug/L	2.653	741	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		95.5			
[Mn	55					
> Lu	175		98.3			
| Ti	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

Sample ID: 246000001

Report Date/Time: Thursday, February 25, 2010 15:37:43

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Thursday, February 25, 2010 15:39:45

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032564.380

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.003	ug/L	216.799	22	-0.000
Sc	45		ug/L		643322	643321.984
Mn	55	0.626	ug/L	2.225	11465	0.014
Lu	175		ug/L		594600	594599.800
Tl	205	0.097	ug/L	3.017	3045	0.004
Pb	208	0.145	ug/L	1.845	6466	0.010
U	238	0.013	ug/L	4.690	878	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		96.2				
Mn	55						
Lu	175		99.8				
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

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 15:40:19

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Thursday, February 25, 2010 15:42:21

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\Vanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032565.381

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.665	ug/L	3.328	29818	0.047
Sc	45		ug/L		635371	635371.076
Mn	55	48.892	ug/L	0.732	717113	1.125
Lu	175		ug/L		588240	588240.219
Tl	205	57.057	ug/L	5.253	1260682	2.142
Pb	208	42.232	ug/L	0.828	1729953	2.940
U	238	51.407	ug/L	1.109	2638697	4.485

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		95.0				
Mn	55						
Lu	175		98.7				
Tl	205						
Pb	208						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Thursday, February 25, 2010 15:44:58

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|ba|

Method File: c:\elandata\Method\NanI 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032566.382

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.000	ug/L	11232.568	23	0.000
[>	Sc	45		ug/L		614367	614367.315
[	Mn	55	0.101	ug/L	4.725	3533	0.002
[>	Lu	175		ug/L		627621	627620.913
|	Tl	205	2.853	ug/L	3.675	68114	0.107
|	Pb	208	0.023	ug/L	6.465	1516	0.002
[	U	238	0.004	ug/L	2.553	424	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
[>	Sc	45		91.8			
[	Mn	55					
[>	Lu	175		105.3			
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 15:45:34

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 15:50:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.384

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.732	ug/L	4.848	29509	0.051
|>	Sc	45		ug/L		579534	579534.140
[	Mn	55	53.551	ug/L	1.178	716125	1.232
[>	Lu	175		ug/L		613922	613922.104
|	Tl	205	50.004	ug/L	1.850	1153173	1.877
|	Pb	208	52.325	ug/L	1.116	2236872	3.643
[	U	238	51.422	ug/L	0.906	2754482	4.487

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	103.463					
|>	Sc	45		86.6				
[	Mn	55	107.101					
[>	Lu	175		103.0				
|	Tl	205	100.009					
|	Pb	208	104.651					
[	U	238	102.844					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 15:52:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.385

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	176.091	23	0.000
Sc	45		ug/L		580751	580751.122
Mn	55	0.006	ug/L	93.107	2066	0.000
Lu	175		ug/L		608046	608045.886
Tl	205	1.444	ug/L	1.703	33844	0.054
Pb	208	0.002	ug/L	22.146	571	0.000
U	238	0.007	ug/L	7.541	605	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		86.8			
Mn	55					
Lu	175		102.0			
Tl	205					
Pb	208					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Tl	205	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 15:53:31

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 15:57:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\Blank.386

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		599602	
[U	238		ug/L		354	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 15:58:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.387

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		598286	598285.760
[	U	238	10.000	ug/L	1.095	639626	1.069

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175					
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 16:00:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.388

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		591647	591647.028
[U	238	99.816	ug/L	0.480	5330455	9.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 16:01:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.389

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		594744	594744.465
[	U	238	52.109	ug/L	1.185	2797259	4.703

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			99.2		
[	U	238	104.217				

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: Thursday, February 25, 2010 16:03:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.390

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		616563	616563.277
[U	238	0.017	ug/L	6.946	1307	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		102.8			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 16:03:46

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 16:05:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.391

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		600065	600064.857
[	U	238	0.244	ug/L	1.225	13546	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		100.1			
[	U	238	121.797				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 16:07:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.392

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		544306	544305.822
[U	238	-0.001	ug/L	6.362	248	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175		90.8				
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 16:08:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 5.393

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		539792	539791.708
[	U	238	23.423	ug/L	0.126	1141451	2.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			90.0			
[	U	238	117.115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC-out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 16:10:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\du only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.394

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		596598	596598.137
[	U	238	51.765	ug/L	0.946	2787532	4.672

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			99.5		
[	U	238	103.530				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 16:12:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.395

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		594162	594161.567
[	U	238	0.010	ug/L	6.225	887	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		99.1			
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Thursday, February 25, 2010 16:13:44

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032562.396

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		561602	561602.446
[	U	238	-0.000	ug/L	231.891	321	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		93.7			
[	U	238					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Thursday, February 25, 2010 16:15:27

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032563.397

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		570802	570802.292
[	U	238	50.564	ug/L	1.023	2605073	4.564

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		95.2			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 16:24:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.402

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		619346	619345.966
[	U	238	49.089	ug/L	0.403	2744254	4.430

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			103.3			
[	U	238	98.177					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 16:25:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.403

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		622016	622015.783
[	U	238	0.010	ug/L	6.333	921	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			103.7			
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 16:25:57

Page 1

ICPMS#5 - Summary Report

Sample ID: 246000001

Sample Date/Time: Thursday, February 25, 2010 16:29:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\246000001.405

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		574188	574187.732
[	U	238	0.008	ug/L	4.859	769	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		95.8			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Thursday, February 25, 2010 16:30:55

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202032564.406

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		587644	587643.561
[	U	238	0.010	ug/L	6.425	883	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		98.0			
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 16:31:08

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Thursday, February 25, 2010 16:32:39

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032565.407

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		587968	587967.926
[U	238	49.454	ug/L	1.450	2624658	4.463

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175		98.1				
[U	238						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Thursday, February 25, 2010 16:34:25

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032566.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		624063	624063.010
[	U	238	0.006	ug/L	8.896	693	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		104.1				
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 16:36:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.409

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		604405	604404.935
[	U	238	50.306		ug/L	0.810	2744319	4.540

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			100.8		
[	U	238	100.612				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 16:37:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.410

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		601216	601215.925
[	U	238	0.010	ug/L	9.203	908	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			100.3			
[	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Sunday, February 28, 2010 11:19:11

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.612

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		6196.3		6196.344		143.347		2.3
Mg	24.0		67234.2		67234.247		309.860		0.5
Co	58.9		132558.2		132558.202		1103.361		0.8
Rh	102.9		258781.3		258781.341		1982.494		0.8
In	114.9		336320.1		336320.050		2837.596		0.8
Pb	208.0		320426.5		320426.537		1072.771		0.3
[> Ba	137.9		331832.6		331832.612		2204.656		0.7
[Ba++	69.0		5415.4		0.016		0.000		1.6
[> Ce	139.9		412164.8		412164.835		3829.750		0.9
[CeO	155.9		10667.4		0.026		0.001		3.8
Bkgd	220.0		21.3		21.300		4.604		21.6

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.00	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.0	6925.3
Co	59	13	6.5	130705.5
In	115	13	7.3	340695.4

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	595	2050	0.661
Be	9.0	9.0	2061	2075	0.622
Mg	24.0	24.0	5689	2080	0.610
Mg	25.0	25.0	5941	2080	0.625
Mg	26.0	26.0	6167	2080	0.630
Co	58.9	58.9	14183	2110	0.614
Rh	102.9	102.9	24875	2160	0.629
In	114.9	114.9	27789	2180	0.626
Ce	139.9	139.9	33873	2200	0.627
Pb	206.0	206.0	49948	2295	0.581
Pb	207.0	207.0	50171	2240	0.628
Pb	208.0	208.0	50451	2265	0.688
U	238.1	238.1	57734	2275	0.722

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 28, 2010 11:32:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\Blank.001

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		677057	
[TI	205		ug/L		808	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Simple Linear	
Tl	205	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 28, 2010 11:35:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100228\Standard 1.002

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		667556	667556.025
[TI	205	10.000	ug/L	0.862	294295	0.440

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175						
[TI	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Sunday, February 28, 2010 11:36:00

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 28, 2010 11:38:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100228\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		659367	659366.978
[	TI	205	99.812	ug/L	1.331	2437008	3.695

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175						
[	TI	205						

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 28, 2010 11:42:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		673365	673364.882
[	TI	205	53.184	ug/L	1.645	1326362	1.969

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			99.5			
[	TI	205	106.368					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, February 28, 2010 11:45:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 2.005

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		681777	681776.982
[TI	205	0.030	ug/L	1.811	1560	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		100.7			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 28, 2010 11:48:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		672467	672467.132
[	TI	205	1.266	ug/L	0.670	32318	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			99.3			
[	TI	205	126.599					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, February 28, 2010 11:51:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		588832	588831.842
[	Tl	205	0.013	ug/L	10.715	984	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		87.0			
[	Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 28, 2010 11:54:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		590656	590656.176
[	TI	205	22.733	ug/L	1.043	497747	0.842

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			87.2			
[	TI	205	113.667					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 11:57:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		670145	670145.439
[	Tl	205	53.996	ug/L	0.427	1340274	1.999

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			99.0			
[	Tl	205	107.992					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 28, 2010 12:01:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		686615	686614.820
[	Tl	205	0.021	ug/L	4.777	1342	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		101.4				
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 12:20:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		686305	686304.568
[	TI	205	52.972	ug/L	1.323	1346565	1.961

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			101.4		
[	TI	205	105.943				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 12:23:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		688824	688824.054
[	TI	205	0.058	ug/L	1.241	2291	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		101.7			
[	TI	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, February 28, 2010 12:23:32

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 12:42:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.023

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		668337	668336.676
[	Tl	205	53.656	ug/L	1.715	1328080	1.986

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			98.7			
[	Tl	205	107.312					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, February 28, 2010 12:42:42

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 12:45:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.024

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		670679	670678.529
[	TI	205	0.170	ug/L	2.585	5015	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		99.1			
[	TI	205					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 13:06:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		668176	668175.537
[	Tl	205	52.327	ug/L	0.462	1295066	1.937

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			98.7			
[	Tl	205	104.655					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 13:09:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.031

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		649044	649044.468
[TI	205	0.080	ug/L	1.399	2707	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175			95.9			
[TI	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 13:29:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.037

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		635047	635047.332
[	Tl	205	53.266	ug/L	1.058	1252817	1.972

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			93.8			
[	Tl	205	106.531					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, February 28, 2010 13:29:11

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 13:32:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.038

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		653533	653533.489
[	Tl	205	0.138	ug/L	1.085	4121	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		96.5			
[	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: QC Std 9

Report Date/Time: Sunday, February 28, 2010 13:32:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 13:51:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.044

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		630598	630597.877
[	Tl	205	53.890	ug/L	0.285	1258712	1.995

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		93.1			
[	Tl	205	107.780				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 13:54:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.045

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		655368	655368.483
[	TI	205	0.124	ug/L	1.141	3781	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			96.8			
[	TI	205						

QC Out Of Limits

Measurement	Type	Analyte	Mass	Out of Limits Message
-------------	------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 14:10:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.050

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		656527	656526.813
[	Tl	205	52.015	ug/L	0.912	1264760	1.925

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			97.0			
[	Tl	205	104.030					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 14:13:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\11 only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.051

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		633750	633749.781
[	Tl	205	0.304	ug/L	2.392	7889	0.011

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
>	Lu	175			93.6			
[	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Sunday, February 28, 2010 14:17:07

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|ba|

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100228\1202032562.052

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		637279	637278.987
[	TI	205	0.165	ug/L	0.459	4652	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			94.1			
[	TI	205						

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Sunday, February 28, 2010 14:20:21

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100228\1202032563.053

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		618802	618801.549
[	Tl	205	52.260	ug/L	0.827	1197858	1.935

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		91.4			
[	Tl	205					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 14:39:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.059

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		636661	636661.313
[	Tl	205	51.753	ug/L	1.268	1220367	1.916

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			94.0			
[	Tl	205	103.507					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 14:42:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.060

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		646420	646420.439
[	Tl	205	0.124	ug/L	3.474	3745	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		95.5			
[	Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 246000001

Sample Date/Time: Sunday, February 28, 2010 14:46:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\1l only.mth

Dataset File: C:\elandata\Dataset\100228\246000001.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		606998	606997.527
[	Tl	205	0.053	ug/L	3.652	1904	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			89.7		
[	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

Sample ID: 246000001

Report Date/Time: Sunday, February 28, 2010 14:46:16

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Sunday, February 28, 2010 14:49:15

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|ba|

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\1202032564.062

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		606403	606402.736
[	Tl	205	ug/L	8.276	1508	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		89.6		
[	Tl	205				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Sunday, February 28, 2010 14:52:24

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\1202032565.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		604264	604263.531
[	Tl	205	74.988	ug/L	1.789	1678038	2.776

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			89.2			
[	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#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Sunday, February 28, 2010 14:55:34

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|baj

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\1202032566.064

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		622697	622697.219
[	TI	205	1.665		ug/L	1.459	39115	0.062

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			92.0		
[	TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 14:58:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 6.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		639572	639571.983
[	Tl	205	52.103	ug/L	0.346	1234316	1.929

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			94.5			
[	Tl	205	104.206					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 28, 2010 15:01:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 7.066

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		627865	627864.641
[	TI	205	0.778		ug/L	1.776	18837	0.029

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[>	Lu	175			92.7			
[	TI	205						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

=====
Analysis Begun

Logged In Analyst: Administrator

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\020510W1.SIF

Batch ID:

Results Data Set: 020510W1

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: WATER

Method Last Saved: 12/28/2009 15:47:50

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/5/2010 09:03:54

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	0.0006	0.0003	09:04:56	Yes
2		[0.00]	0.0002	-0.0003	0.0002	09:05:30	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	20.18				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/5/2010 09:05:49

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]	0.0019	0.0085	0.0021	09:06:50	Yes
2		[0.2]	0.0019	0.0079	0.0021	09:07:24	Yes
Mean:		[0.2]	0.0019				
SD:		0.0	0.0000				
%RSD:		0.0	0.42				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00933 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/5/2010 09:07:43

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]	0.0047	0.0201	0.0049	09:08:45	Yes
2		[0.5]	0.0048	0.0214	0.0050	09:09:19	Yes
Mean:		[0.5]	0.0047				
SD:		0.0	0.0001				
%RSD:		0.0	1.87				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999967 Slope: 0.00950 Intercept: -0.00001

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/5/2010 09:09:39

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0191	0.0825	0.0194	09:10:40	Yes
2		[2.0]	0.0190	0.0814	0.0192	09:11:15	Yes
Mean:		[2.0]	0.0190				
SD:		0.0	0.0001				
%RSD:		0.0	0.73				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999998 Slope: 0.00953 Intercept: -0.00002

Sequence No.: 5

Autosampler Location: 5

Sample ID: S5.0

Date Collected: 2/5/2010 09:11:35

Analyst:

Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0473	0.2057	0.0476	09:12:37	Yes
2		[5.0]	0.0469	0.2028	0.0471	09:13:12	Yes
Mean:		[5.0]	0.0471				
SD:		0.0	0.0003				
%RSD:		0.0	0.72				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999989 Slope: 0.00942 Intercept: 0.00004

Sequence No.: 6

Autosampler Location: 6

Sample ID: S10.0

Date Collected: 2/5/2010 09:13:32

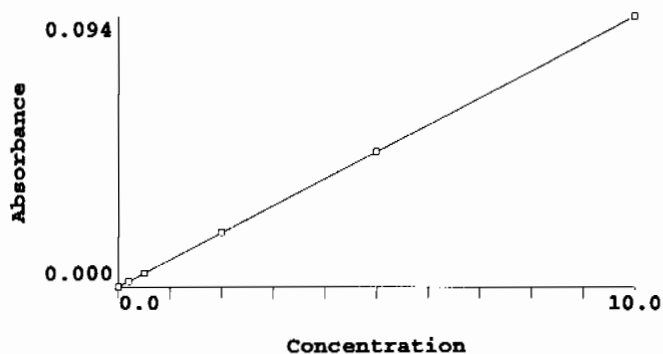
Analyst:

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0944	0.4143	0.0947	09:14:32	Yes
2		[10.0]	0.0937	0.4076	0.0940	09:15:07	Yes
Mean:		[10.0]	0.0941				
SD:		0.0	0.0005				
%RSD:		0.0	0.53				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999997 Slope: 0.00941 Intercept: 0.00006

-----
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	-0.006	0.00	20.2
S0.2	0.0019	0.2	0.192	0.00	0.4
S0.5	0.0047	0.5	0.498	0.00	1.9
S2.0	0.0190	2.0	2.019	0.00	0.7

S5.0	0.0471	5.0	5.001	0.00	0.7
S10.0	0.0941	10.0	9.996	0.00	0.5

Correlation Coef.: 0.999997 Slope: 0.00941 Intercept: 0.00006

Sequence No.: 7

Autosampler Location: 9

Sample ID: ICV

Date Collected: 2/5/2010 09:15:26

Analyst:

Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.965	4.965	0.0468	0.2021	0.0470	09:16:27	Yes
2	4.945	4.945	0.0466	0.2010	0.0468	09:17:02	Yes
Mean:	4.955	4.955	0.0467				
SD:	0.014	0.014	0.0001				
%RSD:	0.281	0.281	0.28				

QC value within limits for Hg 253.7 Recovery = 99.10%
All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 10

Sample ID: ICB

Date Collected: 2/5/2010 09:17:22

Analyst:

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	-0.0008	0.0002	09:18:23	Yes
2	-0.012	-0.012	-0.0000	-0.0006	0.0002	09:18:58	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	11.89	11.89	23.69				

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: 2/5/2010 09:19:18

Analyst:

Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.191	0.191	0.0019	0.0082	0.0021	09:20:19	Yes
2	0.191	0.191	0.0019	0.0082	0.0021	09:20:54	Yes
Mean:	0.191	0.191	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.034	0.034	0.03				

QC value within limits for Hg 253.7 Recovery = 95.30%
All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 09:21:14

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.014	5.014	0.0472	0.2051	0.0475	09:22:14	Yes
2	4.974	4.974	0.0468	0.2038	0.0471	09:22:50	Yes
Mean:	4.994	4.994	0.0470				
SD:	0.029	0.029	0.0003				
%RSD:	0.577	0.577	0.58				

QC value within limits for Hg 253.7 Recovery = 99.88%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 2/5/2010 09:23:09
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0000	-0.0002	0.0002	09:24:10	Yes
2	-0.006	-0.006	0.0000	0.0002	0.0002	09:24:45	Yes
Mean:	-0.009	-0.009	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	42.32	42.32	156.50				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202029931|947628|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 2/5/2010 09:25:04
Data Type: Original

Replicate Data: 1202029931|947628|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0000	-0.0005	0.0002	09:26:06	Yes
2	-0.005	-0.005	0.0000	-0.0001	0.0002	09:26:40	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	44.19	44.19	224.20				

Sequence No.: 13
Sample ID: 1202029932|947628|1
Analyst: JXL

Autosampler Location: 13
Date Collected: 2/5/2010 09:27:01
Data Type: Original

Replicate Data: 1202029932|947628|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.022	2.022	0.0191	0.0835	0.0193	09:28:02	Yes
2	2.026	2.026	0.0191	0.0827	0.0193	09:28:37	Yes
Mean:	2.024	2.024	0.0191				
SD:	0.003	0.003	0.0000				
%RSD:	0.144	0.144	0.14				

Sequence No.: 14
Sample ID: 245601001|947628|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 2/5/2010 09:28:58
Data Type: Original

Replicate Data: 245601001|947628|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0002	0.0002	09:29:58	Yes
2	0.002	0.002	0.0001	0.0008	0.0003	09:30:33	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	299.4	299.4	87.21				

Sequence No.: 15
Sample ID: 245614001|947628|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 2/5/2010 09:30:52
Data Type: Original

Replicate Data: 245614001|947628|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	----------------	-----------------	-----------	-------------	------	-------------

Replicate Data: 1202029937|947628|5

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	-0.0000	0.0002	0.0002	09:41:26	Yes
2	-0.008	-0.008	-0.0000	-0.0004	0.0002	09:42:01	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.270	1.270	5.82				

=====

Sequence No.: 21
Sample ID: 1202033203|949020|1
Analyst: JXLAutosampler Location: 21
Date Collected: 2/5/2010 09:42:20
Data Type: Original-----
Replicate Data: 1202033203|949020|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	0.0001	0.0006	0.0003	09:43:21	Yes
2	0.003	0.003	0.0001	0.0014	0.0003	09:43:56	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	53.61	53.61	15.02				

=====

Sequence No.: 22
Sample ID: CCV
Analyst:Autosampler Location: 7
Date Collected: 2/5/2010 09:44:15
Data Type: Original-----
Replicate Data: CCV

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.947	4.947	0.0466	0.2056	0.0468	09:45:17	Yes
2	4.906	4.906	0.0462	0.2030	0.0464	09:45:52	Yes
Mean:	4.927	4.927	0.0464				
SD:	0.029	0.029	0.0003				
%RSD:	0.589	0.589	0.59				

QC value within limits for Hg 253.7 Recovery = 98.53%
All analyte(s) passed QC.

=====

Sequence No.: 23
Sample ID: CCB
Analyst:Autosampler Location: 8
Date Collected: 2/5/2010 09:46:11
Data Type: Original-----
Replicate Data: CCB

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	-0.0000	0.0003	0.0002	09:47:12	Yes
2	0.006	0.006	0.0001	0.0006	0.0003	09:47:46	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	>999.9%	>999.9%	153.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 24
Sample ID: 1202033204|949020|1
Analyst: JXLAutosampler Location: 22
Date Collected: 2/5/2010 09:48:06
Data Type: Original-----
Replicate Data: 1202033204|949020|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.013	2.013	0.0190	0.0852	0.0192	09:49:07	Yes
2	2.004	2.004	0.0189	0.0839	0.0191	09:49:42	Yes

Mean: 2.009 2.009 0.0190
SD: 0.006 0.006 0.0001
%RSD: 0.312 0.312 0.31

Sequence No.: 25

Autosampler Location: 23

Sample ID: 245911001|949020|1

Date Collected: 2/5/2010 09:50:02

Analyst: JXL

Data Type: Original

Replicate Data: 245911001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.015	0.015	0.0002	0.0022	0.0004	09:51:03	Yes
2	0.017	0.017	0.0002	0.0028	0.0005	09:51:38	Yes
Mean:	0.016	0.016	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	7.972	7.972	5.75				

Sequence No.: 26

Autosampler Location: 24

Sample ID: 245922001|949020|1

Date Collected: 2/5/2010 09:51:58

Analyst: JXL

Data Type: Original

Replicate Data: 245922001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	0.0001	0.0012	0.0003	09:53:00	Yes
2	0.007	0.007	0.0001	0.0009	0.0004	09:53:35	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	44.12	44.12	20.60				

Sequence No.: 27

Autosampler Location: 25

Sample ID: 245939001|949020|1

Date Collected: 2/5/2010 09:53:55

Analyst: JXL

Data Type: Original

Replicate Data: 245939001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0002	0.0030	0.0005	09:54:57	Yes
2	0.022	0.022	0.0003	0.0034	0.0005	09:55:32	Yes
Mean:	0.020	0.020	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	14.54	14.54	11.04				

Sequence No.: 28

Autosampler Location: 26

Sample ID: 245939002|949020|1

Date Collected: 2/5/2010 09:55:52

Analyst: JXL

Data Type: Original

Replicate Data: 245939002|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	0.0001	0.0010	0.0003	09:56:53	Yes
2	0.006	0.006	0.0001	0.0011	0.0003	09:57:28	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	80.46	80.46	31.18				

Sequence No.: 29

Autosampler Location: 27

Sample ID: 245953001|949020|1

Date Collected: 2/5/2010 09:57:47

Analyst: JXL

Data Type: Original

Replicate Data: 245953001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	-0.0001	0.0003	09:58:48	Yes
2	0.005	0.005	0.0001	0.0008	0.0003	09:59:23	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	292.1	292.1	59.58				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 245965001|949020|1

Date Collected: 2/5/2010 09:59:42

Analyst: JXL

Data Type: Original

Replicate Data: 245965001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0007	0.0003	10:00:43	Yes
2	0.004	0.004	0.0001	0.0002	0.0003	10:01:18	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	33.02	33.02	15.09				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 245975001|949020|1

Date Collected: 2/5/2010 10:01:37

Analyst: JXL

Data Type: Original

Replicate Data: 245975001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0001	0.0010	0.0003	10:02:38	Yes
2	0.004	0.004	0.0001	0.0015	0.0003	10:03:12	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	165.2	165.2	34.46				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 245981001|949020|1

Date Collected: 2/5/2010 10:03:32

Analyst: JXL

Data Type: Original

Replicate Data: 245981001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0002	0.0021	0.0004	10:04:32	Yes
2	0.019	0.019	0.0002	0.0034	0.0005	10:05:07	Yes
Mean:	0.015	0.015	0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	43.49	43.49	30.52				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 246000001|949020|1

Date Collected: 2/5/2010 10:05:26

Analyst: JXL

Data Type: Original

Replicate Data: 246000001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0018	0.0003	10:06:27	Yes
2	0.012	0.012	0.0002	0.0024	0.0004	10:07:02	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	42.51	42.51	25.13				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 10:07:22

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.069	5.069	0.0477	0.2135	0.0480	10:08:22	Yes
2	5.033	5.033	0.0474	0.2110	0.0476	10:08:58	Yes
Mean:	5.051	5.051	0.0476				
SD:	0.025	0.025	0.0002				
%RSD:	0.502	0.502	0.50				

QC value within limits for Hg 253.7 Recovery = 101.01%
All analyte(s) passed QC.

Sequence No.: 35

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/5/2010 10:09:16

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0004	0.0003	10:10:17	Yes
2	0.005	0.005	0.0001	0.0009	0.0003	10:10:52	Yes
Mean:	0.001	0.001	0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	>999.9%	>999.9%	94.99				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36

Sample ID: 246010001|949020|1

Analyst: JXL

Autosampler Location: 32

Date Collected: 2/5/2010 10:11:11

Data Type: Original

Replicate Data: 246010001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	0.0000	0.0003	0.0002	10:12:12	Yes
2	-0.004	-0.004	0.0000	0.0007	0.0002	10:12:47	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	17.81	17.81	51.51				

Sequence No.: 37

Sample ID: 246056001|949020|1

Analyst: JXL

Autosampler Location: 33

Date Collected: 2/5/2010 10:13:07

Data Type: Original

Replicate Data: 246056001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	0.0000	0.0004	0.0003	10:14:08	Yes
2	0.002	0.002	0.0001	0.0012	0.0003	10:14:43	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	>999.9%	>999.9%	65.75				

Sequence No.: 38

Sample ID: 1202033205|949020|1

Analyst: JXL

Autosampler Location: 34

Date Collected: 2/5/2010 10:15:03

Data Type: Original

Replicate Data: 1202033205|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0008	0.0002	10:16:04	Yes

2	0.005	0.005	0.0001	0.0017	0.0003	10:16:39	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	>999.9%	>999.9%	95.21				

Sequence No.: 39

Sample ID: 1202033206|949020|1

Analyst: JXL

Autosampler Location: 35

Date Collected: 2/5/2010 10:16:59

Data Type: Original

Replicate Data: 1202033206|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.503	1.503	0.0142	0.0680	0.0144	10:18:00	Yes
2	1.495	1.495	0.0141	0.0670	0.0143	10:18:35	Yes
Mean:	1.499	1.499	0.0142				
SD:	0.006	0.006	0.0001				
%RSD:	0.393	0.393	0.39				

Sequence No.: 40

Sample ID: 1202033207|949020|5

Analyst: JXL

Autosampler Location: 36

Date Collected: 2/5/2010 10:18:55

Data Type: Original

Replicate Data: 1202033207|949020|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	-0.0000	0.0002	0.0002	10:19:57	Yes
2	-0.002	-0.002	0.0000	0.0011	0.0003	10:20:32	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	84.26	84.26	326.78				

Sequence No.: 41

Sample ID: 246056002|949020|1

Analyst: JXL

Autosampler Location: 37

Date Collected: 2/5/2010 10:20:52

Data Type: Original

Replicate Data: 246056002|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	0.0000	0.0010	0.0003	10:21:54	Yes
2	-0.003	-0.003	0.0000	0.0008	0.0003	10:22:29	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	8.003	8.003	5.22				

Sequence No.: 42

Sample ID: 246056003|949020|1

Analyst: JXL

Autosampler Location: 38

Date Collected: 2/5/2010 10:22:49

Data Type: Original

Replicate Data: 246056003|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0002	0.0024	0.0005	10:23:50	Yes
2	0.023	0.023	0.0003	0.0022	0.0005	10:24:25	Yes
Mean:	0.021	0.021	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	10.47	10.47	8.06				

Sequence No.: 43

Sample ID: 246056004|949020|1

Analyst: JXL

Autosampler Location: 39

Date Collected: 2/5/2010 10:24:44

Data Type: Original

Replicate Data: 246056004|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0004	0.0044	0.0006	10:25:45	Yes
2	0.016	0.016	0.0002	0.0017	0.0004	10:26:21	Yes
Mean:	0.026	0.026	0.0003				
SD:	0.015	0.015	0.0001				
%RSD:	56.65	56.65	45.73				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202033224|949028|1

Date Collected: 2/5/2010 10:26:40

Analyst: JXL

Data Type: Original

Replicate Data: 1202033224|949028|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.021	0.021	0.0003	0.0022	0.0005	10:27:41	Yes
2	0.017	0.017	0.0002	0.0020	0.0005	10:28:17	Yes
Mean:	0.019	0.019	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	11.82	11.82	8.89				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202033226|949028|1

Date Collected: 2/5/2010 10:28:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202033226|949028|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.106	2.106	0.0199	0.0883	0.0201	10:29:37	Yes
2	2.076	2.076	0.0196	0.0876	0.0198	10:30:12	Yes
Mean:	2.091	2.091	0.0197				
SD:	0.022	0.022	0.0002				
%RSD:	1.033	1.033	1.03				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 10:30:32

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.111	5.111	0.0481	0.2129	0.0484	10:31:32	Yes
2	5.088	5.088	0.0479	0.2132	0.0481	10:32:08	Yes
Mean:	5.099	5.099	0.0480				
SD:	0.016	0.016	0.0001				
%RSD:	0.309	0.309	0.31				

QC value within limits for Hg 253.7 Recovery = 101.99%
All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/5/2010 10:32:26

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0010	0.0002	10:33:27	Yes
2	-0.005	-0.005	0.0000	0.0011	0.0002	10:34:02	Yes
Mean:	-0.004	-0.004	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	7.051	7.051	16.61				

QC value within limits for Hg 253.7 Recovery = Not calculated

Miscellaneous

Prep LogBook

Analyst: FGA
 Batch: 948730
 Lab SOP: GL-MA-E-006 REV# 9

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202032557		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
LCS	1202032558		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245939001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245939002		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245965001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245975001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245981001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	246000001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
DUP	1202032559	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
MS	1202032560	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SDILT	1202032561	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL

Comments:

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: FGA Verified by: _____

Batch: 948739

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202032562		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
LCS	1202032563		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245939001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245939002		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245965001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245975001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245981001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246000001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
DUP	1202032564	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
MS	1202032565	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SDILT	1202032566	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: TXB3
 Batch: 949018
 Lab SOP: GL-MA-E-010 REV# 23

Verified by:

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202033203		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
LCS	1202033204		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1	.2	mL
SAMPLE	245911001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245922001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245939001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245939002		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245953001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245965001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245975001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245981001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246000001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246010001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
DUP	1202033205	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
MS	1202033206	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SDILT	1202033207	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056002		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056003		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056004		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		

Comments: Digestion Start Date: 04-FEB-10 12:15
 Digestion End Date: 04-FEB-10 14:15

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1257474-1	.5 mL	NITRIC ACID
1261483-C	1.5 mL	5% Potassium Persulfate
1264984-C	3 mL	5% KMnO4 solution
1255532-C	1 mL	Hg reducing agent
WHG100204-06	500 uL	Mercury Working 2nd Source 5.0/CCV
WHG100204-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100204-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100204-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100204-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100204-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

DATA EXCEPTION REPORT

Mo.Day Yr. 01-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: 948740	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 245939(10-1506-1),245965(10-1511-1),245975(10-1512-1),245981(10-1514-1),246000(10-1517-1)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Exception Description:	DER Disposition:
<p>1. Failed Recovery for MS/PS:</p> <p>QC 1202032565MS</p>	<p>The matrix spike recovery failed outside of the control limits for TI 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.</p>

Originator's Name:

Elizabeth Janssen 01-MAR-10

Data Validator/Group Leader:

Samantha Jacobs 01-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: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
---------	---------------	---------	---------------

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Standard Logbook

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

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: UI100114-48 **Opened:** 22-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-JAN-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 22-JAN-11 **Lot Number :** 1018466
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: UI100114-49.16 **Opened:** 11-FEB-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 18-JAN-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 12-FEB-10 **Lot Number :** 1018458
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100120-01 **Opened:** 20-JAN-10 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100120-06 **Opened:** 20-JAN-10 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI100120-A **Opened:** 20-JAN-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 20-JAN-10 **Lot Number :** 1018097
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI100120-B **Opened:** 20-JAN-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 20-JAN-10 **Lot Number :** 1017644
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI100128-40 **Opened:** 28-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 28-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-JAN-11 **Lot Number :** 1018409
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: UI100128-41 **Opened:** 28-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 28-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-JAN-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100210-48 **Opened:** 11-FEB-10 **Amount :** 1000 mL
Name: Trace ICP ICSEA **Received:** 10-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018807
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100211-40 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI

Standard Logbook

Description: ICP HIGH RANGE STD SOLUTION A

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100211-41 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100219-11 **Opened:** 19-FEB-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 19-FEB-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI100219-60 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI100219-61 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

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: IHG100204-01 **Opened:** 04-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-FEB-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Standard Logbook

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: IHG100204-02 **Opened:** 04-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 05-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: WHG100204-01a **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-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.
IHG100204-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100204-02 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100204-03 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100204-04 Opened: 04-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL5.0CCV Received: 04-FEB-10 Solvent : 2% HNO3-1257474
 Type: Working Expires: 11-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.
IHG100204-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100204-05 Opened: 04-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL10.0 Received: 04-FEB-10 Solvent : 2% HNO3-1257474
 Type: Working Expires: 11-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.
IHG100204-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100204-06 Opened: 04-FEB-10 Pipet Id : Hg1289245
 Name: MHGWORK5.0ICV Received: 04-FEB-10 Solvent : 2% HNO3-1257474
 Type: Working Expires: 11-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.
IHG100204-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100204-13 Opened: 04-FEB-10 Pipet Id : Hg1289245
 Name: MHGLIQLCSMSSPIKE Received: 04-FEB-10 Solvent : 2% HNO3-1257474
 Type: Working Expires: 11-FEB-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury working intermediate standard for LCS/MS
 Comments: None

Standard Logbook

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: WI100211-42 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1266496

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.
WI100211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI100211-43 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1266496
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: W100211-44 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1266496
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100211-45 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1266496
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100211-46 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1266496
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100211-47 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL &1%HNO3-1266496
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100224-04 **Opened:** 24-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100224-04A **Opened:** 24-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 24-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100224-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100224-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100224-04B **Opened:** 24-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1272768

Supplier: GEL

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100224-05 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 24-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100224-06 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 24-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
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: WMS100224-07 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 24-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100224-08 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 24-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100224-70 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 24-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100225-04 **Opened:** 25-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100225-04A **Opened:** 25-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expres:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100224-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100224-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100225-05 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100225-06 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-FEB-10 **Pipet Id :** 3820544
Type: Working **Expres:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

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: WMS100225-07 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-08 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100228-04 **Opened:** 28-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 28-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 01-MAR-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100228-04A **Opened:** 28-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 28-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100228-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100228-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100228-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100228-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100228-05 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 28-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100228-06 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 28-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
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: WMS100228-07 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 28-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 01-MAR-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100228-08 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 28-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: 100202 Opened: 02-FEB-10 Lot Number : 200930201
Name: I-HCL Received: 02-FEB-10
Type: Reagent/Solvent Expires: 02-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

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

Standard Logbook

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: 125532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1261483-C **Opened:** 28-JAN-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-JAN-10
Type: Reagent/Solvent **Expires:** 28-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1264396 **Opened:** 03-FEB-10 **Lot Number :** H51025 L
Name: I-HNO3 **Received:** 02-FEB-10
Type: Reagent/Solvent **Expires:** 03-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.

Standard Logbook

Comments: None

Serial ID: 1264984-C Opened: 04-FEB-10 Balance Id : BAL-002
 Name: B-KMnO4-MER Received: 04-FEB-10
 Type: Reagent/Solvent Expires: 20-JUL-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: 5% KMnO4 solution
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1265209 Opened: 04-FEB-10 Lot Number : J02039
 Name: I-HCL Received: 04-FEB-10 Preservative_Id : 5 none
 Type: Reagent/Solvent Expires: 04-FEB-11
 Employee: Bryan Davis
 Supplier: J.T. BAKER
 Description: HYDROCHLORIC ACID
 Comments: None

Serial ID: 1266496 Opened: 08-FEB-10 Amount : 20 L
 Name: B-ICP-RINSE SOLN Received: 20-JAN-10 Lot Number : H04040+G34050
 Type: Reagent/Solvent Expires: 14-FEB-10 Solvent : 3%HCL+1%HNO3
 Employee: Helen Camello
 Supplier: GEL
 Description: 3%HCL+1%HNO3 RINSE SOLN.
 Comments: None

Serial ID: 1272768 Opened: 22-FEB-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCl-ICPMS Received: 22-FEB-10
 Type: Reagent/Solvent Expires: 28-FEB-10
 Employee: Paul Boyd
 Supplier: GEL
 Description: 2%HNO3/1%HCl Solution (Type I Water)
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1517**

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 948618 **Method:** SW9012A Cyanide and Total

Prep Batch : 948616 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
245998001	RE15-10-8122
245998002	RE15-10-8112
245998003	RE15-10-8113
245998004	RE15-10-8116
245998005	RE15-10-8119
245998006	RE15-10-8114
245998007	RE15-10-8115
245998008	RE15-10-8117
245998009	RE15-10-8118
1202032248	Method Blank (MB)
1202032249	245960007(RE15-10-7313) Sample Duplicate (DUP)
1202032250	245960008(RE15-10-7314) Sample Duplicate (DUP)
1202032251	245960007(RE15-10-7313) Matrix Spike (MS)
1202032252	245960008(RE15-10-7314) Matrix Spike (MS)
1202032253	245960007(RE15-10-7313) Matrix Spike Duplicate (MSD)
1202032254	245960008(RE15-10-7314) Matrix Spike Duplicate (MSD)
1202032255	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: 245960007 (RE15-10-7313) and 245960008 (RE15-10-7314).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202032253 (RE15-10-7313) and 1202032254 (RE15-10-7314).

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. 1202032249 (RE15-10-7313) and 1202032250 (RE15-10-7314).

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: 1202032255 (LCS).

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

The following DERs were generated for this SDG: 790788 1202032253 (RE15-10-7313) and 1202032254 (RE15-10-7314).

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: 26Feb10

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: 10-1517 GEL Work Order: 245998

The Qualifiers in this report are defined as follows:

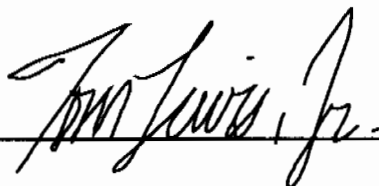
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8122
Sample ID: 245998001
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.9%

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	79.9	294	ug/kg	1	AXC2	02/11/10	1406	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8112
Sample ID: 245998002
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 33%

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	86.0	316	ug/kg	1	AXC2	02/11/10	1407	948618	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8113
Sample ID: 245998003
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 10.8%

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	70.6	260	ug/kg	1	AXC2	02/11/10	1408	948618	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8116
Sample ID: 245998004
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 28.6%

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	89.8	330	ug/kg	1	AXC2	02/11/10	1409	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8119
Sample ID: 245998005
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 11.3%

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	73.7	271	ug/kg	1	AXC2	02/11/10	1410	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

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 Pl. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8114
Sample ID: 245998006
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 43.9%

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		407	108	398	ug/kg	1	AXC2	02/11/10	1411	948618	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8115
Sample ID: 245998007
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.8%

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	68.8	253	ug/kg	1	AXC2	02/11/10	1412	948618	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8117
Sample ID: 245998008
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 7.2%

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	67.9	249	ug/kg	1	AXC2	02/11/10	1412	948618	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 23, 2010

Client SDG: 10-1517

Client Sample ID: RE15-10-8118
Sample ID: 245998009
Matrix: R
Collect Date: 28-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 27.5%

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	90.2	332	ug/kg	1	AXC2	02/11/10	1413	948618	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/10/10	1454	948616

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 23, 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: 245998

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	948618										
QC1202032249	245960007	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/11/10	13:54
QC1202032250	245960008	DUP									
Cyanide, Total		J	209	U	ND	ug/kg	200 ^			02/11/10	13:57
QC1202032255	LCS										
Cyanide, Total		67900			73500	ug/kg		108 (32%-157%)		02/11/10	13:48
QC1202032248	MB										
Cyanide, Total				U	250	ug/kg				02/11/10	13:47
QC1202032251	245960007	MS									
Cyanide, Total		5130	U	ND	4380	ug/kg		85.5 (26%-158%)		02/11/10	13:55
QC1202032252	245960008	MS									
Cyanide, Total		6290	J	209	5440	ug/kg		83.2 (26%-158%)		02/11/10	13:58
QC1202032253	245960007	MSD									
Cyanide, Total		5040	U	ND	3410	ug/kg	25.0	67.7 (0%-30%)		02/11/10	13:56
QC1202032254	245960008	MSD									
Cyanide, Total		6750	J	209	5240	ug/kg	3.71	74.6 (0%-30%)		02/11/10	13:59

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 245998

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: 23-FEB-2010 18:46

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1517

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	11-FEB-2010 09:59:47	OM_2-11-2010_09-49-17	146	150	97.3	(90%-110%)	Yes
CCV	11-FEB-2010 13:37:21	OM_2-11-2010_13-11-41	93.7	100	93.7	(90%-110%)	Yes
CCV	11-FEB-2010 13:49:43	OM_2-11-2010_13-11-41	94.6	100	94.6	(90%-110%)	Yes
CCV	11-FEB-2010 14:02:14	OM_2-11-2010_13-11-41	93.9	100	93.9	(90%-110%)	Yes
CCV	11-FEB-2010 14:14:42	OM_2-11-2010_13-11-41	97.6	100	97.6	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	11-FEB-2010 10:01:38	OM_2-11-2010_09-49-17	-1.07	10	Yes
CCB	11-FEB-2010 13:39:10	OM_2-11-2010_13-11-41	2.68	10	Yes
CCB	11-FEB-2010 13:51:33	OM_2-11-2010_13-11-41	2.13	10	Yes
CCB	11-FEB-2010 14:04:04	OM_2-11-2010_13-11-41	1.78	10	Yes
CCB	11-FEB-2010 14:16:32	OM_2-11-2010_13-11-41	1.36	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXSS Verified by: _____

Batch: 948616

Lab SOP: GL-GC-E-067 REV# 13

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202032248		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.5 g	25 mL	50	.25	g
LCS	1202032255		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245960007		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.59 g	25 mL	42.37288	.025	mL
DUP	1202032249	245960007	SW846 9010B Prep	10-FEB-2010 14:54	>12	0.52 g	25 mL	48.07692	.025	mL
MS	1202032251	245960007	SW846 9010B Prep	10-FEB-2010 14:54	>12	0.54 g	25 mL	46.2963	.025	mL
MSD	1202032253	245960007	SW846 9010B Prep	10-FEB-2010 14:54	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245960008		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.55 g	25 mL	45.45455	.025	mL
DUP	1202032250	245960008	SW846 9010B Prep	10-FEB-2010 14:54	>12	0.51 g	25 mL	49.01961	.025	mL
MS	1202032252	245960008	SW846 9010B Prep	10-FEB-2010 14:54	>12	0.59 g	25 mL	42.37288	.025	mL
MSD	1202032254	245960008	SW846 9010B Prep	10-FEB-2010 14:54	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245960009		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245960010		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245960011		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245998001		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245998002		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.59 g	25 mL	42.37288	.025	mL
SAMPLE	245998003		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245998004		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245998005		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245998006		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	245998007		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245998008		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245998009		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	246012001		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	246012002		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	246012003		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	246012004		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	246012005		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	246012006		SW846 9010B Prep	10-FEB-2010 14:54	>12	0.56 g	25 mL	44.64286	.025	mL

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page#

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100210-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/11/2010 9:52:37	OM_2-11-2010_09-49-17
150 ppb		1	axc2	2/11/2010 9:53:30	OM_2-11-2010_09-49-17
100 ppb		1	axc2	2/11/2010 9:54:22	OM_2-11-2010_09-49-17
50 ppb		1	axc2	2/11/2010 9:55:15	OM_2-11-2010_09-49-17
10 ppb		1	axc2	2/11/2010 9:56:08	OM_2-11-2010_09-49-17
CRDL 5.0 ppb		1	axc2	2/11/2010 9:57:02	OM_2-11-2010_09-49-17
ICAL-00		1	axc2	2/11/2010 9:57:56	OM_2-11-2010_09-49-17
ICV		1	axc2	2/11/2010 9:59:47	OM_2-11-2010_09-49-17
ICB		1	axc2	2/11/2010 10:01:38	OM_2-11-2010_09-49-17
		1	axc2	2/11/2010 10:03:27	OM_2-11-2010_09-49-17
1202034323	949511	1	axc2	2/11/2010 10:05:17	OM_2-11-2010_09-49-17
1202034330	949511	1	axc2	2/11/2010 10:06:10	OM_2-11-2010_09-49-17
245934002	949511	1	axc2	2/11/2010 10:07:04	OM_2-11-2010_09-49-17
1202034324	949511	1	axc2	2/11/2010 10:07:57	OM_2-11-2010_09-49-17
1202034326	949511	1	axc2	2/11/2010 10:08:50	OM_2-11-2010_09-49-17
1202034328	949511	1	axc2	2/11/2010 10:09:43	OM_2-11-2010_09-49-17
245934003	949511	1	axc2	2/11/2010 10:10:35	OM_2-11-2010_09-49-17
246064001	949511	1	axc2	2/11/2010 10:11:28	OM_2-11-2010_09-49-17
1202034325	949511	1	axc2	2/11/2010 10:12:20	OM_2-11-2010_09-49-17
1202034327	949511	1	axc2	2/11/2010 10:13:12	OM_2-11-2010_09-49-17
CCV		1	axc2	2/11/2010 10:14:05	OM_2-11-2010_09-49-17
CCB		1	axc2	2/11/2010 10:15:55	OM_2-11-2010_09-49-17
1202034329	949511	1	axc2	2/11/2010 10:17:43	OM_2-11-2010_09-49-17
246064005	949511	1	axc2	2/11/2010 10:18:36	OM_2-11-2010_09-49-17
246064009	949511	1	axc2	2/11/2010 10:19:27	OM_2-11-2010_09-49-17
246225002	949511	1	axc2	2/11/2010 10:20:19	OM_2-11-2010_09-49-17
246264001	949511	1	axc2	2/11/2010 10:21:11	OM_2-11-2010_09-49-17
246269001	949511	1	axc2	2/11/2010 10:22:05	OM_2-11-2010_09-49-17
246278001	949511	1	axc2	2/11/2010 10:22:58	OM_2-11-2010_09-49-17
246292001	949511	1	axc2	2/11/2010 10:23:52	OM_2-11-2010_09-49-17
246292002	949511	1	axc2	2/11/2010 10:24:45	OM_2-11-2010_09-49-17
246293001	949511	1	axc2	2/11/2010 10:25:38	OM_2-11-2010_09-49-17
CCV		1	axc2	2/11/2010 10:26:31	OM_2-11-2010_09-49-17
CCB		1	axc2	2/11/2010 10:28:21	OM_2-11-2010_09-49-17
246293003	949511	1	axc2	2/11/2010 10:30:10	OM_2-11-2010_09-49-17
246306001	949511	1	axc2	2/11/2010 10:31:03	OM_2-11-2010_09-49-17
246313001	949511	1	axc2	2/11/2010 10:31:55	OM_2-11-2010_09-49-17
246323001	949511	1	axc2	2/11/2010 10:32:47	OM_2-11-2010_09-49-17
246334001	949511	1	axc2	2/11/2010 10:33:40	OM_2-11-2010_09-49-17
246436001	949511	1	axc2	2/11/2010 10:34:33	OM_2-11-2010_09-49-17
246448001	949511	1	axc2	2/11/2010 10:35:25	OM_2-11-2010_09-49-17
246472001	949511	1	axc2	2/11/2010 10:36:17	OM_2-11-2010_09-49-17
CCV		1	axc2	2/11/2010 10:37:09	OM_2-11-2010_09-49-17
CCB		1	axc2	2/11/2010 10:38:59	OM_2-11-2010_09-49-17

Author: axc2

Date : 2/11/2010

Original Run Filename: OM_2-11-2010_09-49-17.OMN created 2/11/2010 09:49:17
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-11-2010_09-49-17.OMN last modified 2/11/2010 10:40:05
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100211-01	1	S1	200	8.83	2/11/2010@09:52:37			200 ppb
WCN100211-02	1	S2	150	6.63	2/11/2010@09:53:30			150 ppb
WCN100211-03	1	S3	100	4.36	2/11/2010@09:54:22			100 ppb
WCN100211-04	1	S4	50.0	2.20	2/11/2010@09:55:15			50 ppb
WCN100211-05	1	S5	10.0	0.540	2/11/2010@09:56:08			10 ppb
WCN100211-06	1	S6	5.00	0.362	2/11/2010@09:57:02			CRDL 5.0 ppb
WCN100211-08	1	S7	0.00	0.0328	2/11/2010@09:57:56			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99988 > 0.99500					
Message			Pass					
Action			Continue					
WCN100211-07	1	S8	146	6.43	2/11/2010@09:59:47			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-2.8 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.8 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100211-08	1	S7	-1.07	0.0209	2/11/2010@10:01:38			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.07 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.07 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100211-06	1	S6	6.35	0.345	2/11/2010@10:03:27			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.35 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.35 > 2.50					
Message			Pass					
Action			None					
1202034323|949511|MB	1	1	-1.45	0.00419	2/11/2010@10:05:17			
1202034330|LCS	1	2	48.1	2.17	2/11/2010@10:06:10			
245934002	1	3	2.66	0.183	2/11/2010@10:07:04			
1202034324|DUP	1	4	4.23	0.252	2/11/2010@10:07:57			
1202034326|MS	1	5	105	4.65	2/11/2010@10:08:50			
1202034328|MSD	1	6	92.5	4.10	2/11/2010@10:09:43			
245934003	1	7	-0.642	0.0396	2/11/2010@10:10:35			
246064001	1	8	1.58	0.136	2/11/2010@10:11:28			
1202034325|DUP	1	9	2.13	0.161	2/11/2010@10:12:20			
1202034327|MS	1	10	104	4.59	2/11/2010@10:13:12			
WCN100211-03	1	S3	102	4.52	2/11/2010@10:14:05			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			2.1 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100211-08	1	S7	-0.943	0.0264	2/11/2010@10:15:55			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.943 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.943 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202034329||MSD	1	11	104	4.62	2/11/2010@10:17:43			
246064005	1	12	2.07	0.158	2/11/2010@10:18:36			
246064009	1	13	0.264	0.0791	2/11/2010@10:19:27			
246225002	1	14	39.6	1.80	2/11/2010@10:20:19			
246264001	1	15	-0.705	0.0368	2/11/2010@10:21:11			
246269001	1	16	0.112	0.0725	2/11/2010@10:22:05			
246278001	1	17	-1.45	0.00411	2/11/2010@10:22:58			
246292001	1	18	-0.826	0.0315	2/11/2010@10:23:52			
246292002	1	19	-1.37	0.00769	2/11/2010@10:24:45			
246293001	1	20	0.188	0.0758	2/11/2010@10:25:38			
WCN100211-03	1	S3	103	4.55	2/11/2010@10:26:31			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100211-08	1	S7	-1.02	0.0233	2/11/2010@10:28:21			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.02 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.02 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246293003	1	21	-0.359	0.0519	2/11/2010@10:30:10			
246306001	1	22	-0.770	0.0340	2/11/2010@10:31:03			
246313001	1	23	-1.08	0.0206	2/11/2010@10:31:55			
246323001	1	24	-0.601	0.0413	2/11/2010@10:32:47			
246334001	1	25	-2.72	-0.0512	2/11/2010@10:33:40			
246436001	1	26	-0.864	0.0299	2/11/2010@10:34:33			
246448001	1	27	-1.37	0.00777	2/11/2010@10:35:25			
246472001	1	28	-0.472	0.0470	2/11/2010@10:36:17			
WCN100211-03	1	S3	103	4.55	2/11/2010@10:37:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100211-08	1	S7	-0.764	0.0342	2/11/2010@10:38:59			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.764 < 5.00					

Message	CCB Passed				
Action	Continue				
DQM Test: < - Concentration Limit					
Result:	-0.764 > -5.00				
Message	CCB Passed				
Action	Continue				

Analyte Properties Table for OM_2-11-2010_09-49-17.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

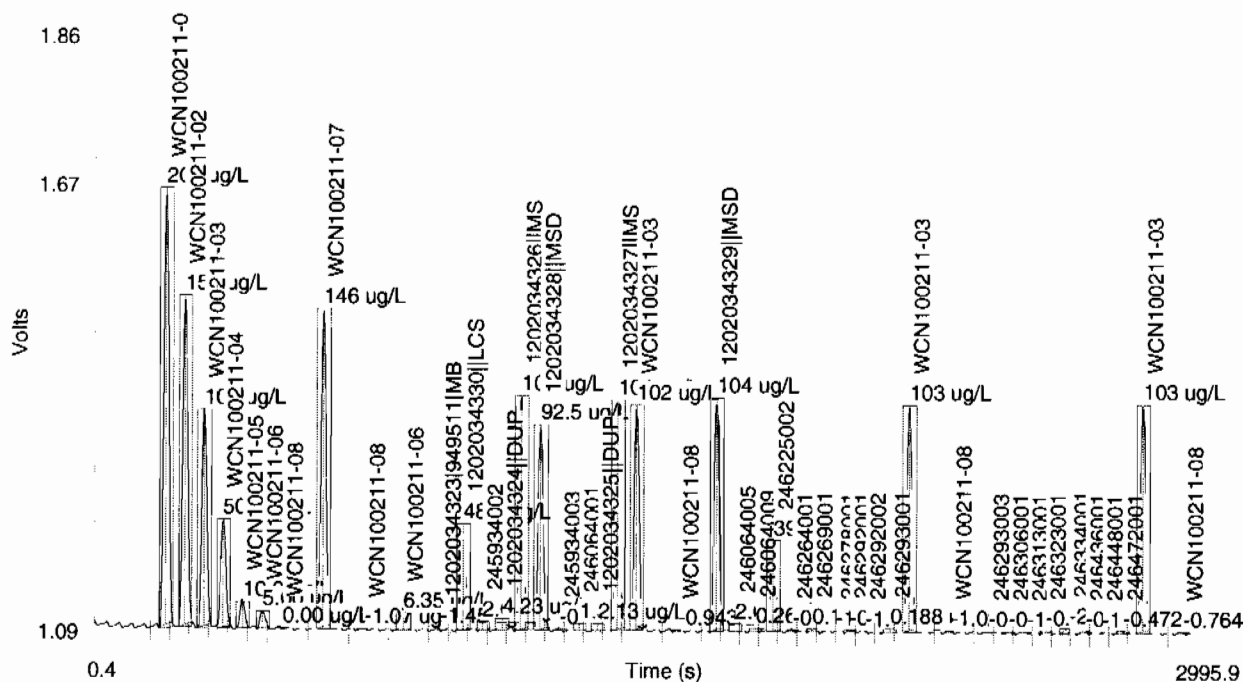
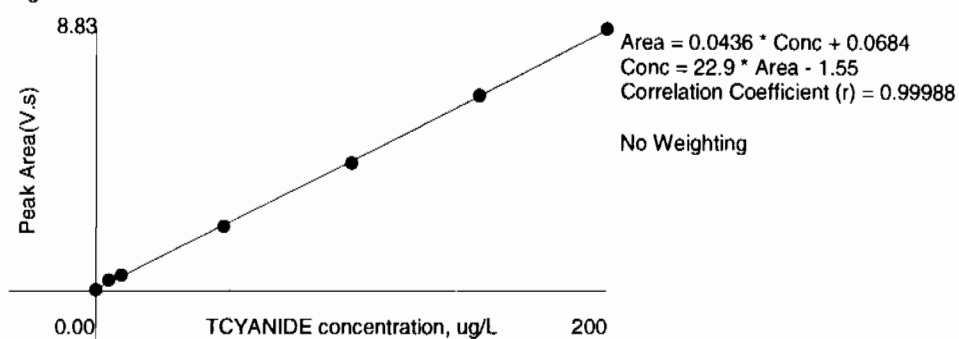


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.83	0.563	-0.4	2/11/2010	09:53:41
2	150	1	6.63	0.424	-0.2	2/11/2010	09:54:33
3	100	1	4.36	0.279	1.6	2/11/2010	09:55:25
4	50.0	1	2.20	0.140	2.4	2/11/2010	09:56:18
5	10.0	1	0.540	0.0343	-7.1	2/11/2010	09:57:11
6	5.00	1	0.362	0.0225	-26.4	2/11/2010	09:58:05
7	0.00	1	0.0328	0.00101		2/11/2010	09:58:59

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/11/2010 13:12:27	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010 13:14:17	OM_2-11-2010_13-11-41
1202032232	948614	1	axc2	2/11/2010 13:16:06	OM_2-11-2010_13-11-41
1202032239	948614	25	axc2	2/11/2010 13:17:00	OM_2-11-2010_13-11-41
245938001	948614	1	axc2	2/11/2010 13:17:53	OM_2-11-2010_13-11-41
245938002	948614	1	axc2	2/11/2010 13:18:46	OM_2-11-2010_13-11-41
245938003	948614	1	axc2	2/11/2010 13:19:39	OM_2-11-2010_13-11-41
245938004	948614	1	axc2	2/11/2010 13:20:32	OM_2-11-2010_13-11-41
245938005	948614	1	axc2	2/11/2010 13:21:25	OM_2-11-2010_13-11-41
245938006	948614	1	axc2	2/11/2010 13:22:17	OM_2-11-2010_13-11-41
245938007	948614	1	axc2	2/11/2010 13:23:10	OM_2-11-2010_13-11-41
245938008	948614	1	axc2	2/11/2010 13:24:02	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010 13:24:54	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010 13:26:45	OM_2-11-2010_13-11-41
245950006	948614	1	axc2	2/11/2010 13:28:34	OM_2-11-2010_13-11-41
1202032233	948614	1	axc2	2/11/2010 13:29:26	OM_2-11-2010_13-11-41
1202032235	948614	1	axc2	2/11/2010 13:30:17	OM_2-11-2010_13-11-41
1202032237	948614	1	axc2	2/11/2010 13:31:09	OM_2-11-2010_13-11-41
245950007	948614	1	axc2	2/11/2010 13:32:00	OM_2-11-2010_13-11-41
1202032234	948614	1	axc2	2/11/2010 13:32:54	OM_2-11-2010_13-11-41
1202032236	948614	1	axc2	2/11/2010 13:33:48	OM_2-11-2010_13-11-41
1202032238	948614	1	axc2	2/11/2010 13:34:42	OM_2-11-2010_13-11-41
245950008	948614	1	axc2	2/11/2010 13:35:35	OM_2-11-2010_13-11-41
245950009	948614	1	axc2	2/11/2010 13:36:28	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010 13:37:21	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010 13:39:10	OM_2-11-2010_13-11-41
245955001	948614	1	axc2	2/11/2010 13:40:59	OM_2-11-2010_13-11-41
245955002	948614	1	axc2	2/11/2010 13:41:53	OM_2-11-2010_13-11-41
245960001	948614	1	axc2	2/11/2010 13:42:45	OM_2-11-2010_13-11-41
245960002	948614	1	axc2	2/11/2010 13:43:37	OM_2-11-2010_13-11-41
245960003	948614	1	axc2	2/11/2010 13:44:30	OM_2-11-2010_13-11-41
245960004	948614	1	axc2	2/11/2010 13:45:22	OM_2-11-2010_13-11-41
245960005	948614	1	axc2	2/11/2010 13:46:14	OM_2-11-2010_13-11-41
245960006	948614	1	axc2	2/11/2010 13:47:06	OM_2-11-2010_13-11-41
1202032248	948618	1	axc2	2/11/2010 13:47:59	OM_2-11-2010_13-11-41
1202032255	948618	25	axc2	2/11/2010 13:48:50	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010 13:49:43	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010 13:51:33	OM_2-11-2010_13-11-41
245960007	948618	1	axc2	2/11/2010 13:53:23	OM_2-11-2010_13-11-41
1202032249	948618	1	axc2	2/11/2010 13:54:17	OM_2-11-2010_13-11-41
1202032251	948618	1	axc2	2/11/2010 13:55:10	OM_2-11-2010_13-11-41
1202032253	948618	1	axc2	2/11/2010 13:56:04	OM_2-11-2010_13-11-41
245960008	948618	1	axc2	2/11/2010 13:56:58	OM_2-11-2010_13-11-41
1202032250	948618	1	axc2	2/11/2010 13:57:50	OM_2-11-2010_13-11-41
1202032252	948618	1	axc2	2/11/2010 13:58:43	OM_2-11-2010_13-11-41
1202032254	948618	1	axc2	2/11/2010 13:59:37	OM_2-11-2010_13-11-41
245960009	948618	1	axc2	2/11/2010 14:00:29	OM_2-11-2010_13-11-41
245960010	948618	1	axc2	2/11/2010 14:01:22	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010 14:02:14	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010 14:04:04	OM_2-11-2010_13-11-41
245960011	948618	1	axc2	2/11/2010 14:05:52	OM_2-11-2010_13-11-41
245998001	948618	1	axc2	2/11/2010 14:06:45	OM_2-11-2010_13-11-41
245998002	948618	1	axc2	2/11/2010 14:07:37	OM_2-11-2010_13-11-41
245998003	948618	1	axc2	2/11/2010 14:08:29	OM_2-11-2010_13-11-41
245998004	948618	1	axc2	2/11/2010 14:09:21	OM_2-11-2010_13-11-41
245998005	948618	1	axc2	2/11/2010 14:10:15	OM_2-11-2010_13-11-41
245998006	948618	1	axc2	2/11/2010 14:11:10	OM_2-11-2010_13-11-41
245998007	948618	1	axc2	2/11/2010 14:12:03	OM_2-11-2010_13-11-41

245998008	948618	1	axc2	2/11/2010	14:12:56	OM_2-11-2010_13-11-41
245998009	948618	1	axc2	2/11/2010	14:13:50	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010	14:14:42	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010	14:16:32	OM_2-11-2010_13-11-41
246012001	948618	1	axc2	2/11/2010	14:18:21	OM_2-11-2010_13-11-41
246012002	948618	1	axc2	2/11/2010	14:19:15	OM_2-11-2010_13-11-41
246012003	948618	1	axc2	2/11/2010	14:20:08	OM_2-11-2010_13-11-41
246012004	948618	1	axc2	2/11/2010	14:21:01	OM_2-11-2010_13-11-41
246012005	948618	1	axc2	2/11/2010	14:21:53	OM_2-11-2010_13-11-41
246012006	948618	1	axc2	2/11/2010	14:22:47	OM_2-11-2010_13-11-41
1202040197	951938	1	axc2	2/11/2010	14:23:39	OM_2-11-2010_13-11-41
1202040204	951938	25	axc2	2/11/2010	14:24:31	OM_2-11-2010_13-11-41
246280011	951938	1	axc2	2/11/2010	14:25:23	OM_2-11-2010_13-11-41
1202040198	951938	1	axc2	2/11/2010	14:26:15	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010	14:27:08	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010	14:28:58	OM_2-11-2010_13-11-41
1202040200	951938	1	axc2	2/11/2010	14:30:48	OM_2-11-2010_13-11-41
1202040202	951938	1	axc2	2/11/2010	14:31:43	OM_2-11-2010_13-11-41
246291009	951938	1	axc2	2/11/2010	14:32:37	OM_2-11-2010_13-11-41
1202040199	951938	1	axc2	2/11/2010	14:33:30	OM_2-11-2010_13-11-41
1202040201	951938	1	axc2	2/11/2010	14:34:25	OM_2-11-2010_13-11-41
1202040203	951938	1	axc2	2/11/2010	14:35:17	OM_2-11-2010_13-11-41
246557001	951938	1	axc2	2/11/2010	14:36:10	OM_2-11-2010_13-11-41
246562001	951938	1	axc2	2/11/2010	14:37:04	OM_2-11-2010_13-11-41
246587007	951938	1	axc2	2/11/2010	14:37:58	OM_2-11-2010_13-11-41
246592001	951938	1	axc2	2/11/2010	14:38:49	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010	14:39:42	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010	14:41:33	OM_2-11-2010_13-11-41
246592002	951938	1	axc2	2/11/2010	14:43:22	OM_2-11-2010_13-11-41
246592003	951938	1	axc2	2/11/2010	14:44:15	OM_2-11-2010_13-11-41
246592004	951938	1	axc2	2/11/2010	14:45:07	OM_2-11-2010_13-11-41
246594001	951938	1	axc2	2/11/2010	14:45:59	OM_2-11-2010_13-11-41
246594002	951938	1	axc2	2/11/2010	14:46:51	OM_2-11-2010_13-11-41
246594003	951938	1	axc2	2/11/2010	14:47:46	OM_2-11-2010_13-11-41
246594004	951938	1	axc2	2/11/2010	14:48:40	OM_2-11-2010_13-11-41
246594005	951938	1	axc2	2/11/2010	14:49:34	OM_2-11-2010_13-11-41
246594006	951938	1	axc2	2/11/2010	14:50:28	OM_2-11-2010_13-11-41
246610001	951938	1	axc2	2/11/2010	14:51:22	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010	14:52:15	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010	14:54:05	OM_2-11-2010_13-11-41
246610002*	951938	1	axc2	2/11/2010	14:55:56	OM_2-11-2010_13-11-41
246610003*	951938	1	axc2	2/11/2010	14:56:50	OM_2-11-2010_13-11-41
246612001*	951938	1	axc2	2/11/2010	14:57:43	OM_2-11-2010_13-11-41
246615001*	951938	1	axc2	2/11/2010	14:58:36	OM_2-11-2010_13-11-41
1202040194*	951932	1	axc2	2/11/2010	14:59:31	OM_2-11-2010_13-11-41
1202040196*	951932	1	axc2	2/11/2010	15:00:25	OM_2-11-2010_13-11-41
246612001*	951932	1	axc2	2/11/2010	15:01:18	OM_2-11-2010_13-11-41
1202040195*	951932	1	axc2	2/11/2010	15:02:12	OM_2-11-2010_13-11-41
246615001*	951932	1	axc2	2/11/2010	15:03:05	OM_2-11-2010_13-11-41
CCV		1	axc2	2/11/2010	15:03:58	OM_2-11-2010_13-11-41
CCB		1	axc2	2/11/2010	15:05:48	OM_2-11-2010_13-11-41

Original Run Filename: OM_2-11-2010_13-11-41.OMN created 2/11/2010 13:11:41
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-11-2010_13-11-41.OMN last modified 2/11/2010 15:06:53
 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 Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100211-03	1	S3	94.8	4.20	2/11/2010@13:12:27			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100211-08	1	S7	1.93	0.152	2/11/2010@13:14:17			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.93 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.93 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
1202032232|948614|MB	1	1	-0.686	0.0376	2/11/2010@13:16:06			
1202032239|LCS	1	2	23.9	1.11	2/11/2010@13:17:00		25.00	
245938001	1	3	2.59	0.180	2/11/2010@13:17:53			
245938002	1	4	-0.603	0.0412	2/11/2010@13:18:46			
245938003	1	5	0.184	0.0756	2/11/2010@13:19:39			
245938004	1	6	-0.847	0.0306	2/11/2010@13:20:32			
245938005	1	7	1.39	0.128	2/11/2010@13:21:25			
245938006	1	8	-0.839	0.0309	2/11/2010@13:22:17			
245938007	1	9	-0.337	0.0529	2/11/2010@13:23:10			
245938008	1	10	0.766	0.101	2/11/2010@13:24:02			
WCN100211-03	1	S3	92.8	4.12	2/11/2010@13:24:54			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-7.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-7.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100211-08	1	S7	1.48	0.132	2/11/2010@13:26:45			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					
245950006	1	11	6.80	0.364	2/11/2010@13:28:34			
1202032233|DUP	1	12	4.08	0.246	2/11/2010@13:29:26			
1202032235|MS	1	13	78.1	3.48	2/11/2010@13:30:17			
1202032237|MSD	1	14	76.8	3.42	2/11/2010@13:31:09			
245950007	1	15	2.92	0.195	2/11/2010@13:32:00			

1202032234	DUP	1	16	1.00	0.111	2/11/2010@13:32:54		
1202032236	MS	1	17	75.7	3.37	2/11/2010@13:33:48		
1202032238	MSD	1	18	80.5	3.58	2/11/2010@13:34:42		
245950008		1	19	2.77	0.189	2/11/2010@13:35:35		
245950009		1	20	13.9	0.676	2/11/2010@13:36:28		
WCN100211-03		1	S3	93.7	4.16	2/11/2010@13:37:21		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				-6.3 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				-6.3 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100211-08		1	S7	2.68	0.185	2/11/2010@13:39:10		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				2.68 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				2.68 > -5.00				
Message				CCB Passed				
Action				Continue				
245955001		1	21	-0.0162	0.0669	2/11/2010@13:40:59		
245955002		1	22	-1.55	-1.59e-4	2/11/2010@13:41:53		
245960001		1	23	0.0402	0.0693	2/11/2010@13:42:45		
245960002		1	24	1.17	0.118	2/11/2010@13:43:37		
245960003		1	25	0.304	0.0808	2/11/2010@13:44:30		
245960004		1	26	0.287	0.0801	2/11/2010@13:45:22		
245960005		1	27	0.431	0.0864	2/11/2010@13:46:14		
245960006		1	28	0.770	0.101	2/11/2010@13:47:06		
1202032248	948618|MB	1	29	0.407	0.0853	2/11/2010@13:47:59		
1202032255	|LCS	1	30	29.4	1.35	2/11/2010@13:48:50	25.00	
WCN100211-03		1	S3	94.6	4.19	2/11/2010@13:49:43		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				-5.4 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				-5.4 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100211-08		1	S7	2.13	0.160	2/11/2010@13:51:33		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				2.13 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				2.13 > -5.00				
Message				CCB Passed				
Action				Continue				
245960007		1	31	0.0379	0.0692	2/11/2010@13:53:23		
1202032249	|DUP	1	32	0.746	0.100	2/11/2010@13:54:17		
1202032251	|MS	1	33	85.5	3.80	2/11/2010@13:55:10		
1202032253	|MSD	1	34	67.7	3.02	2/11/2010@13:56:04		
245960008		1	35	3.10	0.203	2/11/2010@13:56:58		
1202032250	|DUP	1	36	0.363	0.0834	2/11/2010@13:57:50		
1202032252	|MS	1	37	86.5	3.84	2/11/2010@13:58:43		
1202032254	|MSD	1	38	77.7	3.46	2/11/2010@13:59:37		
245960009		1	39	3.26	0.210	2/11/2010@14:00:29		
245960010		1	40	1.29	0.124	2/11/2010@14:01:22		
WCN100211-03		1	S3	93.9	4.17	2/11/2010@14:02:14		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								

			Result:	-6.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	-6.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100211-08	1	S7		1.78	0.145	2/11/2010@14:04:04		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	1.78 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	1.78 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245960011	1	41		0.196	0.0761	2/11/2010@14:05:52		
245998001	1	42		-0.395	0.0503	2/11/2010@14:06:45		
245998002	1	43		0.821	0.103	2/11/2010@14:07:37		
245998003	1	44		-0.139	0.0615	2/11/2010@14:08:29		
245998004	1	45		0.289	0.0802	2/11/2010@14:09:21		
245998005	1	46		-0.410	0.0497	2/11/2010@14:10:15		
245998006	1	47		5.12	0.291	2/11/2010@14:11:10		
245998007	1	48		0.146	0.0739	2/11/2010@14:12:03		
245998008	1	49		-1.76	-0.00916	2/11/2010@14:12:56		
245998009	1	50		0.375	0.0839	2/11/2010@14:13:50		
WCN100211-03	1	S3		97.6	4.33	2/11/2010@14:14:42		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				
WCN100211-08	1	S7		1.36	0.127	2/11/2010@14:16:32		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	1.36 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	1.36 > -5.00				
			Message	CCB Passed				
			Action	Continue				
246012001	1	51		0.266	0.0792	2/11/2010@14:18:21		
246012002	1	52		-0.481	0.0466	2/11/2010@14:19:15		
246012003	1	53		0.188	0.0758	2/11/2010@14:20:08		
246012004	1	54		-0.326	0.0533	2/11/2010@14:21:01		
246012005	1	55		-0.0652	0.0647	2/11/2010@14:21:53		
246012006	1	56		-0.712	0.0365	2/11/2010@14:22:47		
1202040197|951938|MB	1	57		-2.19	-0.0282	2/11/2010@14:23:39		
1202040204|LCS	1	58		23.2	1.08	2/11/2010@14:24:31	25.00	
246280011	1	59		-0.125	0.0621	2/11/2010@14:25:23		
1202040198|DUP	1	60		-0.908	0.0280	2/11/2010@14:26:15		
WCN100211-03	1	S3		93.4	4.15	2/11/2010@14:27:08		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	-6.6 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	-6.6 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100211-08	1	S7		1.94	0.152	2/11/2010@14:28:58		CCB

Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.94 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.94 > -5.00					
Message			CCB Passed					
Action			Continue					
1202040200	IMS	1	61	91.2	4.05	2/11/2010@14:30:48		
1202040202	MSD	1	62	92.5	4.11	2/11/2010@14:31:43		
246291009		1	63	2.70	0.186	2/11/2010@14:32:37		
1202040199	DUP	1	64	-0.845	0.0307	2/11/2010@14:33:30		
1202040201	MS	1	65	80.2	3.57	2/11/2010@14:34:25		
1202040203	MSD	1	66	81.0	3.60	2/11/2010@14:35:17		
246557001		1	67	2.25	0.166	2/11/2010@14:36:10		
246562001		1	68	-0.806	0.0324	2/11/2010@14:37:04		
246587007		1	69	-0.127	0.0620	2/11/2010@14:37:58		
246592001		1	70	1.11	0.116	2/11/2010@14:38:49		
WCN100211-03		1	S3	93.3	4.14	2/11/2010@14:39:42		CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100211-08		1	S7	1.81	0.147	2/11/2010@14:41:33		CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.81 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.81 > -5.00					
Message			CCB Passed					
Action			Continue					
246592002		1	71	0.567	0.0923	2/11/2010@14:43:22		
246592003		1	72	1.71	0.142	2/11/2010@14:44:15		
246592004		1	73	0.407	0.0853	2/11/2010@14:45:07		
246594001		1	74	-0.143	0.0613	2/11/2010@14:45:59		
246594002		1	75	-0.134	0.0617	2/11/2010@14:46:51		
246594003		1	76	-0.329	0.0532	2/11/2010@14:47:46		
246594004		1	77	0.0585	0.0701	2/11/2010@14:48:40		
246594005		1	78	-2.65	-0.0480	2/11/2010@14:49:34		
246594006		1	79	-1.79	-0.0107	2/11/2010@14:50:28		
246610001		1	80	-1.55	0.00	2/11/2010@14:51:22		
WCN100211-03		1	S3	93.6	4.15	2/11/2010@14:52:15		CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-6.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-6.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100211-08		1	S7	1.02	0.112	2/11/2010@14:54:05		CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.02 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.02 > -5.00					
Message			CCB Passed					

		Action	Continue					
246610002	1	81	-0.827	0.0315	2/11/2010@14:55:56			
246610003	1	82	-1.05	0.0217	2/11/2010@14:56:50			
246612001	1	83	0.0685	0.0706	2/11/2010@14:57:43			
246615001	1	84	22.5	1.05	2/11/2010@14:58:36			
1202040194|951932|MB	1	95	-0.101	0.0631	2/11/2010@14:59:31			
1202040196|LCS	1	96	-0.953	0.0259	2/11/2010@15:00:25			
246612001	1	97	1.37	0.128	2/11/2010@15:01:18			
1202040195|DUP	1	98	3.09	0.203	2/11/2010@15:02:12			
246615001	1	99	39.0	1.77	2/11/2010@15:03:05			
WCN100211-03	1	S3	94.2	4.18	2/11/2010@15:03:58			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-5.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-5.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100211-08	1	S7	-39.9	-1.67	2/11/2010@15:05:48			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-39.9 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-39.9 < -5.00					
Message			CCB Failed					
Action			Stop Run					

Analyte Properties Table for OM_2-11-2010_13-11-41.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

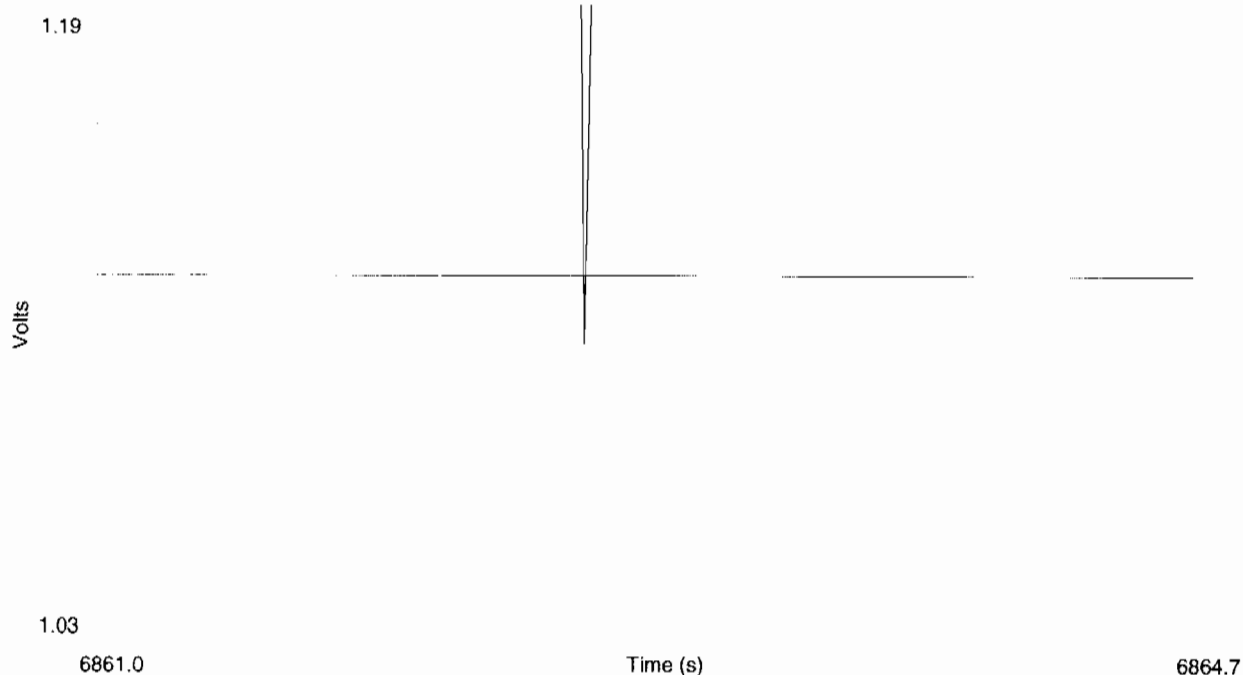
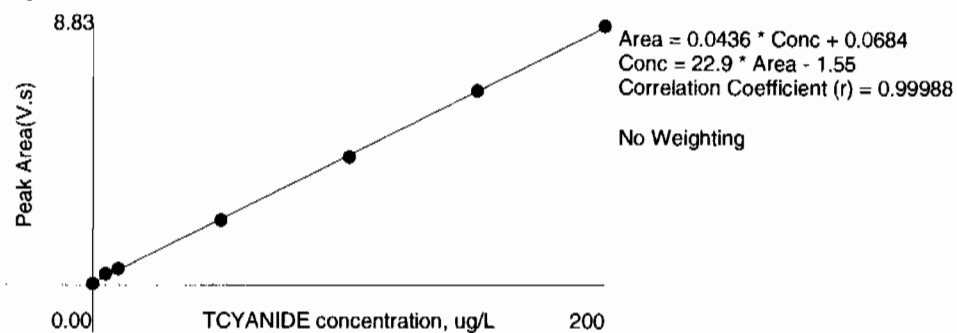


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.83	0.563	-0.4	2/11/2010	09:53:41
2	150	1	6.63	0.424	-0.2	2/11/2010	09:54:33
3	100	1	4.36	0.279	1.6	2/11/2010	09:55:25
4	50.0	1	2.20	0.140	2.4	2/11/2010	09:56:18
5	10.0	1	0.540	0.0343	-7.1	2/11/2010	09:57:11
6	5.00	1	0.362	0.0225	-26.4	2/11/2010	09:58:05
7	0.00	1	0.0328	0.00101		2/11/2010	09:58:59

Figure 1: TCYANIDE



Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr. 15-FEB-10	Division:	Quality Criteria:	Type:
Instrument Type:	Test / Method: SW846 9012A	Matrix Type: Solid	Client Code: LANL
Batch ID: 948618	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245960(10-1511),245998(10-1517),246012(10-1523)			
Application Issues: Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. Failed Recovery for MSD: QC 1202032253MSD 1202032254MSD		1. The spike recovery falls duplicate outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported.	

Originator's Name:

Ashley Earl

15-FEB-10

Data Validator/Group Leader:

Elzbieta Szulc

22-FEB-10

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1517-1**

Method/Analysis Information

Product:	Cyanide, Total		
Analytical Batch:	948940	Method:	SW9012A Cyanide and Total
Prep Batch :	948939	Method:	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
246000001	RE15-10-8124
1202033006	Method Blank (MB)
1202033007	246004001(RE16-10-11766) Sample Duplicate (DUP)
1202033008	245926003(CAMO-10-9289) Sample Duplicate (DUP)
1202033009	246004001(RE16-10-11766) Matrix Spike (MS)
1202033010	245926003(CAMO-10-9289) Matrix Spike (MS)
1202033011	246004001(RE16-10-11766) Matrix Spike Duplicate (MSD)
1202033012	245926003(CAMO-10-9289) Matrix Spike Duplicate (MSD)
1202033013	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

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

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 245926003 (CAMO-10-9289) and 246004001 (RE16-10-11766).

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. 1202033008 (CAMO-10-9289).

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

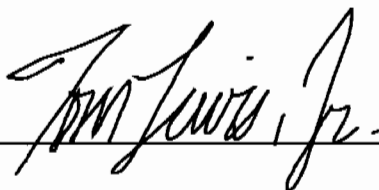
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

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: _____

27Feb10

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: 10-1517-1 GEL Work Order: 246000

The Qualifiers in this report are defined as follows:

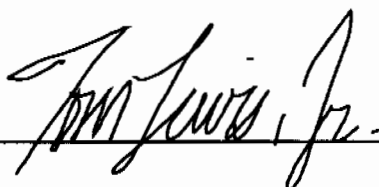
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: February 12, 2010

Client SDG: 10-1517-1

Client Sample ID: RE15-10-8124
Sample ID: 246000001
Matrix: W
Collect Date: 28-JAN-10 12:00
Receive Date: 02-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	02/08/10	1459	948940	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 12, 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: 246000

Parmname	NOM	Sample	Qual	QC	Units	RPD %	REC %	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	948940										
QC1202033007	246004001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	02/08/10	15:01
QC1202033008	245926003	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A			02/08/10	14:44
QC1202033013	LCS										
Cyanide, Total	50.0				51.4	ug/L	103	(90%-110%)		02/08/10	14:37
QC1202033006	MB										
Cyanide, Total				U	5.00	ug/L				02/08/10	14:36
QC1202033009	246004001	MS									
Cyanide, Total	100	U	ND		96.2	ug/L	96.2	(60%-144%)		02/08/10	15:02
QC1202033010	245926003	MS									
Cyanide, Total	100	U	ND		93.6	ug/L	92.2	(60%-144%)		02/08/10	14:45
QC1202033011	246004001	MSD									
Cyanide, Total	100	U	ND		94.3	ug/L	1.99	94.3	(0%-20%)	02/08/10	15:03
QC1202033012	245926003	MSD									
Cyanide, Total	100	U	ND		94.0	ug/L	0.426	92.6	(0%-20%)	02/08/10	14:46

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.

GEL LABORATORIES LLC

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

QC Summary

Workorder: 246000

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-FEB-2010 13:09

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1517-1

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	08-FEB-2010 13:22:34	OM_2-8-2010_13-14-40	151	150	101	(90%-110%)	Yes
CCV	08-FEB-2010 14:26:41	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 14:39:11	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 14:51:47	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 15:04:19	OM_2-8-2010_13-14-40	104	100	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2010 13:24:24	OM_2-8-2010_13-14-40	-1.45	10	Yes
CCB	08-FEB-2010 14:28:32	OM_2-8-2010_13-14-40	-1.47	10	Yes
CCB	08-FEB-2010 14:41:01	OM_2-8-2010_13-14-40	-1.57	10	Yes
CCB	08-FEB-2010 14:53:37	OM_2-8-2010_13-14-40	-1.83	10	Yes
CCB	08-FEB-2010 15:06:09	OM_2-8-2010_13-14-40	-1.82	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5
 Batch: 948939
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202033013	URF1184831-02	.0125	mL
MS	1202033009	URF1184831-02	.025	mL
MS	1202033010	URF1184831-02	.025	mL
MSD	1202033011	URF1184831-02	.025	mL
MSD	1202033012	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202033006		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
LCS	1202033013		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	245926001		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245926002		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245926003		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
DUP	1202033008	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
MS	1202033010	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
MSD	1202033012	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245926004		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245926005		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245926006		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245926007		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	245939001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	245939002		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	245933001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	245965001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	245975001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	245981001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246000001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246004001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
DUP	1202033007	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
MS	1202033009	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
MSD	1202033011	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246056001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246056002		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246056003		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246056004		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER
SAMPLE	246080001		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
0912111-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100205-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/8/2010 13:15:25	OM_2-8-2010_13-14-40
150 ppb		1	axc2	2/8/2010 13:16:17	OM_2-8-2010_13-14-40
100 ppb		1	axc2	2/8/2010 13:17:10	OM_2-8-2010_13-14-40
50 ppb		1	axc2	2/8/2010 13:18:03	OM_2-8-2010_13-14-40
10 ppb		1	axc2	2/8/2010 13:18:56	OM_2-8-2010_13-14-40
CRDL 5.0 ppb		1	axc2	2/8/2010 13:19:50	OM_2-8-2010_13-14-40
ICAL-00		1	axc2	2/8/2010 13:20:43	OM_2-8-2010_13-14-40
ICV		1	axc2	2/8/2010 13:22:34	OM_2-8-2010_13-14-40
ICB		1	axc2	2/8/2010 13:24:24	OM_2-8-2010_13-14-40
CRDL		1	axc2	2/8/2010 13:26:14	OM_2-8-2010_13-14-40
1202029242*	947315	1	axc2	2/8/2010 13:28:03	OM_2-8-2010_13-14-40
1202029249	947315	25	axc2	2/8/2010 13:28:57	OM_2-8-2010_13-14-40
245682001	947315	1	axc2	2/8/2010 13:29:50	OM_2-8-2010_13-14-40
245682002	947315	1	axc2	2/8/2010 13:30:43	OM_2-8-2010_13-14-40
245682003	947315	1	axc2	2/8/2010 13:31:36	OM_2-8-2010_13-14-40
245682004	947315	1	axc2	2/8/2010 13:32:29	OM_2-8-2010_13-14-40
245682005	947315	1	axc2	2/8/2010 13:33:21	OM_2-8-2010_13-14-40
245682006	947315	1	axc2	2/8/2010 13:34:14	OM_2-8-2010_13-14-40
245682007	947315	1	axc2	2/8/2010 13:35:07	OM_2-8-2010_13-14-40
245682008	947315	1	axc2	2/8/2010 13:35:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:36:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:38:42	OM_2-8-2010_13-14-40
1202029242	947315	1	axc2	2/8/2010 13:40:30	OM_2-8-2010_13-14-40
245682009	947315	1	axc2	2/8/2010 13:41:23	OM_2-8-2010_13-14-40
245682010	947315	1	axc2	2/8/2010 13:42:15	OM_2-8-2010_13-14-40
245688011	947315	1	axc2	2/8/2010 13:43:06	OM_2-8-2010_13-14-40
1202029243	947315	1	axc2	2/8/2010 13:43:58	OM_2-8-2010_13-14-40
1202029245	947315	1	axc2	2/8/2010 13:44:50	OM_2-8-2010_13-14-40
1202029247	947315	1	axc2	2/8/2010 13:45:44	OM_2-8-2010_13-14-40
245688012	947315	1	axc2	2/8/2010 13:46:37	OM_2-8-2010_13-14-40
1202029244	947315	1	axc2	2/8/2010 13:47:31	OM_2-8-2010_13-14-40
1202029246	947315	1	axc2	2/8/2010 13:48:24	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:49:17	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:51:07	OM_2-8-2010_13-14-40
1202029248	947315	1	axc2	2/8/2010 13:52:56	OM_2-8-2010_13-14-40
245688013	947315	1	axc2	2/8/2010 13:53:50	OM_2-8-2010_13-14-40
245688014	947315	1	axc2	2/8/2010 13:54:42	OM_2-8-2010_13-14-40
245797001	947315	1	axc2	2/8/2010 13:55:35	OM_2-8-2010_13-14-40
245797002	947315	1	axc2	2/8/2010 13:56:27	OM_2-8-2010_13-14-40
245797003	947315	1	axc2	2/8/2010 13:57:20	OM_2-8-2010_13-14-40
245797004	947315	1	axc2	2/8/2010 13:58:12	OM_2-8-2010_13-14-40
245797005	947315	1	axc2	2/8/2010 13:59:04	OM_2-8-2010_13-14-40
245797006	947315	1	axc2	2/8/2010 13:59:57	OM_2-8-2010_13-14-40
1202029230	947312	1	axc2	2/8/2010 14:00:48	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:01:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:03:31	OM_2-8-2010_13-14-40
1202029237	947312	25	axc2	2/8/2010 14:05:20	OM_2-8-2010_13-14-40
245612007	947312	1	axc2	2/8/2010 14:06:13	OM_2-8-2010_13-14-40
1202029231	947312	1	axc2	2/8/2010 14:07:07	OM_2-8-2010_13-14-40
1202029233	947312	1	axc2	2/8/2010 14:08:01	OM_2-8-2010_13-14-40
1202029235	947312	1	axc2	2/8/2010 14:08:54	OM_2-8-2010_13-14-40
245612008	947312	1	axc2	2/8/2010 14:09:48	OM_2-8-2010_13-14-40
1202029232	947312	1	axc2	2/8/2010 14:10:41	OM_2-8-2010_13-14-40
1202029234	947312	1	axc2	2/8/2010 14:11:33	OM_2-8-2010_13-14-40
1202029236	947312	1	axc2	2/8/2010 14:12:26	OM_2-8-2010_13-14-40
245612009	947312	1	axc2	2/8/2010 14:13:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:14:12	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:16:04	OM_2-8-2010_13-14-40

245612010	947312	1	axc2	2/8/2010	14:17:52	OM_2-8-2010_13-14-40
245612011	947312	1	axc2	2/8/2010	14:18:45	OM_2-8-2010_13-14-40
245612012	947312	1	axc2	2/8/2010	14:19:37	OM_2-8-2010_13-14-40
245612013	947312	1	axc2	2/8/2010	14:20:29	OM_2-8-2010_13-14-40
245612014	947312	1	axc2	2/8/2010	14:21:22	OM_2-8-2010_13-14-40
245612015	947312	1	axc2	2/8/2010	14:22:13	OM_2-8-2010_13-14-40
245612016	947312	1	axc2	2/8/2010	14:23:07	OM_2-8-2010_13-14-40
245688001	947312	1	axc2	2/8/2010	14:24:02	OM_2-8-2010_13-14-40
245688002	947312	1	axc2	2/8/2010	14:24:55	OM_2-8-2010_13-14-40
245688003	947312	1	axc2	2/8/2010	14:25:50	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:26:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:28:32	OM_2-8-2010_13-14-40
245688004	947312	1	axc2	2/8/2010	14:30:23	OM_2-8-2010_13-14-40
245688005	947312	1	axc2	2/8/2010	14:31:15	OM_2-8-2010_13-14-40
245688006	947312	1	axc2	2/8/2010	14:32:08	OM_2-8-2010_13-14-40
245688007	947312	1	axc2	2/8/2010	14:33:01	OM_2-8-2010_13-14-40
245688008	947312	1	axc2	2/8/2010	14:33:55	OM_2-8-2010_13-14-40
245688009	947312	1	axc2	2/8/2010	14:34:47	OM_2-8-2010_13-14-40
245688010	947312	1	axc2	2/8/2010	14:35:40	OM_2-8-2010_13-14-40
1202033006	948940	1	axc2	2/8/2010	14:36:34	OM_2-8-2010_13-14-40
1202033013	948940	1	axc2	2/8/2010	14:37:26	OM_2-8-2010_13-14-40
245926001	948940	1	axc2	2/8/2010	14:38:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:39:11	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:41:01	OM_2-8-2010_13-14-40
245926002	948940	1	axc2	2/8/2010	14:42:50	OM_2-8-2010_13-14-40
245926003	948940	1	axc2	2/8/2010	14:43:43	OM_2-8-2010_13-14-40
1202033008	948940	1	axc2	2/8/2010	14:44:35	OM_2-8-2010_13-14-40
1202033010	948940	1	axc2	2/8/2010	14:45:29	OM_2-8-2010_13-14-40
1202033012	948940	1	axc2	2/8/2010	14:46:24	OM_2-8-2010_13-14-40
245926004	948940	1	axc2	2/8/2010	14:47:19	OM_2-8-2010_13-14-40
245926005	948940	1	axc2	2/8/2010	14:48:12	OM_2-8-2010_13-14-40
245926006	948940	1	axc2	2/8/2010	14:49:06	OM_2-8-2010_13-14-40
245926007	948940	1	axc2	2/8/2010	14:50:01	OM_2-8-2010_13-14-40
245939001	948940	1	axc2	2/8/2010	14:50:54	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:51:47	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:53:37	OM_2-8-2010_13-14-40
245939002*	948940	1	axc2	2/8/2010	14:55:27	OM_2-8-2010_13-14-40
245953001*	948940	1	axc2	2/8/2010	14:56:21	OM_2-8-2010_13-14-40
245965001*	948940	1	axc2	2/8/2010	14:57:14	OM_2-8-2010_13-14-40
245975001	948940	1	axc2	2/8/2010	14:58:06	OM_2-8-2010_13-14-40
245981001	948940	1	axc2	2/8/2010	14:59:00	OM_2-8-2010_13-14-40
246000001	948940	1	axc2	2/8/2010	14:59:52	OM_2-8-2010_13-14-40
246004001	948940	1	axc2	2/8/2010	15:00:45	OM_2-8-2010_13-14-40
1202033007	948940	1	axc2	2/8/2010	15:01:38	OM_2-8-2010_13-14-40
1202033009	948940	1	axc2	2/8/2010	15:02:32	OM_2-8-2010_13-14-40
1202033011	948940	1	axc2	2/8/2010	15:03:27	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:04:19	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:06:09	OM_2-8-2010_13-14-40
245939002	948940	1	axc2	2/8/2010	15:07:59	OM_2-8-2010_13-14-40
245953001	948940	1	axc2	2/8/2010	15:08:53	OM_2-8-2010_13-14-40
245965001	948940	1	axc2	2/8/2010	15:09:46	OM_2-8-2010_13-14-40
246056001	948940	1	axc2	2/8/2010	15:10:41	OM_2-8-2010_13-14-40
246056002	948940	1	axc2	2/8/2010	15:11:35	OM_2-8-2010_13-14-40
246056003	948940	1	axc2	2/8/2010	15:12:29	OM_2-8-2010_13-14-40
246056004	948940	1	axc2	2/8/2010	15:13:23	OM_2-8-2010_13-14-40
246080001	948940	1	axc2	2/8/2010	15:14:17	OM_2-8-2010_13-14-40
1202029252	947318	1	axc2	2/8/2010	15:15:10	OM_2-8-2010_13-14-40
1202029259	947318	25	axc2	2/8/2010	15:16:03	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:16:55	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:18:45	OM_2-8-2010_13-14-40

245797007	947318	1	axc2	2/8/2010	15:20:34	OM_2-8-2010_13-14-40
1202029253	947318	1	axc2	2/8/2010	15:21:26	OM_2-8-2010_13-14-40
1202029255	947318	1	axc2	2/8/2010	15:22:20	OM_2-8-2010_13-14-40
1202029257	947318	1	axc2	2/8/2010	15:23:14	OM_2-8-2010_13-14-40
245797008	947318	1	axc2	2/8/2010	15:24:08	OM_2-8-2010_13-14-40
1202029254	947318	1	axc2	2/8/2010	15:25:02	OM_2-8-2010_13-14-40
1202029256	947318	1	axc2	2/8/2010	15:25:56	OM_2-8-2010_13-14-40
1202029258	947318	1	axc2	2/8/2010	15:26:50	OM_2-8-2010_13-14-40
245797009	947318	1	axc2	2/8/2010	15:27:43	OM_2-8-2010_13-14-40
245797010	947318	1	axc2	2/8/2010	15:28:36	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:29:29	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:31:18	OM_2-8-2010_13-14-40
245797011	947318	1	axc2	2/8/2010	15:33:08	OM_2-8-2010_13-14-40
245797012	947318	1	axc2	2/8/2010	15:34:00	OM_2-8-2010_13-14-40
245797013	947318	1	axc2	2/8/2010	15:34:53	OM_2-8-2010_13-14-40
245797014	947318	1	axc2	2/8/2010	15:35:46	OM_2-8-2010_13-14-40
245797015	947318	1	axc2	2/8/2010	15:36:38	OM_2-8-2010_13-14-40
245797016	947318	1	axc2	2/8/2010	15:37:31	OM_2-8-2010_13-14-40
245797017	947318	1	axc2	2/8/2010	15:38:23	OM_2-8-2010_13-14-40
245797018	947318	1	axc2	2/8/2010	15:39:17	OM_2-8-2010_13-14-40
245797019	947318	1	axc2	2/8/2010	15:40:11	OM_2-8-2010_13-14-40
245806001	947318	1	axc2	2/8/2010	15:41:06	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:41:58	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:43:48	OM_2-8-2010_13-14-40
245806002	947318	1	axc2	2/8/2010	15:45:38	OM_2-8-2010_13-14-40
245806003	947318	1	axc2	2/8/2010	15:46:33	OM_2-8-2010_13-14-40
245806004	947318	1	axc2	2/8/2010	15:47:26	OM_2-8-2010_13-14-40
245806005	947318	1	axc2	2/8/2010	15:48:19	OM_2-8-2010_13-14-40
245806006	947318	1	axc2	2/8/2010	15:49:13	OM_2-8-2010_13-14-40
245806007	947318	1	axc2	2/8/2010	15:50:06	OM_2-8-2010_13-14-40
1202034313	949504	1	axc2	2/8/2010	15:51:00	OM_2-8-2010_13-14-40
1202034315	949504	250	axc2	2/8/2010	15:51:53	OM_2-8-2010_13-14-40
246078001	949504	1	axc2	2/8/2010	15:52:47	OM_2-8-2010_13-14-40
1202034314	949504	1	axc2	2/8/2010	15:53:40	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:54:33	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:56:23	OM_2-8-2010_13-14-40
246078002	949504	1	axc2	2/8/2010	15:58:12	OM_2-8-2010_13-14-40
246078003	949504	1	axc2	2/8/2010	15:59:05	OM_2-8-2010_13-14-40
246078004	949504	1	axc2	2/8/2010	15:59:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	16:00:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	16:02:41	OM_2-8-2010_13-14-40

Original Run Filename: OM_2-8-2010_13-14-40.OMN created 2/8/2010 13:14:40
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-8-2010_13-14-40.OMN last modified 2/8/2010 16:03:46
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100208-01	1	S1	200	8.74	2/8/2010@13:15:25			200 ppb
WCN100208-02	1	S2	150	6.63	2/8/2010@13:16:17			150 ppb
WCN100208-03	1	S3	100	4.52	2/8/2010@13:17:10			100 ppb
WCN100208-04	1	S4	50.0	2.28	2/8/2010@13:18:03			50 ppb
WCN100208-05	1	S5	10.0	0.511	2/8/2010@13:18:56			10 ppb
WCN100208-06	1	S6	5.00	0.321	2/8/2010@13:19:50			CRDL 5.0 ppb
WCN100208-08	1	S7	0.00	0.00906	2/8/2010@13:20:43			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100208-07	1	S8	151	6.65	2/8/2010@13:22:34			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100208-08	1	S7	-1.45	0.0181	2/8/2010@13:24:24			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.45 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.45 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100208-06	1	S6	5.53	0.322	2/8/2010@13:26:14			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.53 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.53 > 2.50					
Message			CRDL Passed					
Action			Continue					
1202029242|947315|MB	1	1	441	19.3	2/8/2010@13:28:03			
1202029249|JLCS	1	2	26.6	1.24	2/8/2010@13:28:57		25.00	
245682001	1	3	-0.713	0.0500	2/8/2010@13:29:50			
245682002	1	4	-0.651	0.0528	2/8/2010@13:30:43			
245682003	1	5	0.833	0.117	2/8/2010@13:31:36			
245682004	1	6	-1.86	-1.22e-4	2/8/2010@13:32:29			
245682005	1	7	-0.452	0.0614	2/8/2010@13:33:21			
245682006	1	8	-0.944	0.0400	2/8/2010@13:34:14			
245682007	1	9	-1.19	0.0293	2/8/2010@13:35:07			
245682008	1	10	6.00	0.343	2/8/2010@13:35:58			
WCN100208-03	1	S3	105	4.68	2/8/2010@13:36:51			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.4 < 10.0					

Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.40	0.0203	2/8/2010@13:38:42			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.40 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.40 > -5.00					
Message			CCB Passed					
Action			Continue					
1202029242|947315|MB	1	1	-1.06	0.0348	2/8/2010@13:40:30			
245682009	1	11	-0.822	0.0453	2/8/2010@13:41:23			
245682010	1	12	1.86	0.162	2/8/2010@13:42:15			
245688011	1	13	-0.777	0.0473	2/8/2010@13:43:06			
1202029243||DUP	1	14	-2.01	-0.00640	2/8/2010@13:43:58			
1202029245||MS	1	15	86.6	3.85	2/8/2010@13:44:50			
1202029247||MSD	1	16	78.4	3.50	2/8/2010@13:45:44			
245688012	1	17	0.261	0.0925	2/8/2010@13:46:37			
1202029244||DUP	1	18	0.738	0.113	2/8/2010@13:47:31			
1202029246||MS	1	19	69.2	3.10	2/8/2010@13:48:24			
WCN100208-03	1	S3	105	4.67	2/8/2010@13:49:17			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.92	-0.00263	2/8/2010@13:51:07			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.92 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.92 > -5.00					
Message			CCB Passed					
Action			Continue					
1202029248||MSD	1	20	71.4	3.19	2/8/2010@13:52:56			
245688013	1	21	-1.01	0.0373	2/8/2010@13:53:50			
245688014	1	22	0.338	0.0958	2/8/2010@13:54:42			
245797001	1	23	-0.979	0.0385	2/8/2010@13:55:35			
245797002	1	24	-0.863	0.0435	2/8/2010@13:56:27			
245797003	1	25	-0.309	0.0676	2/8/2010@13:57:20			
245797004	1	26	0.938	0.122	2/8/2010@13:58:12			
245797005	1	27	2.23	0.178	2/8/2010@13:59:04			
245797006	1	28	-0.105	0.0766	2/8/2010@13:59:57			
1202029230|947312|MB	1	29	-1.23	0.0277	2/8/2010@14:00:48			
WCN100208-03	1	S3	105	4.66	2/8/2010@14:01:41			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.1 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.1 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.86	0.00	2/8/2010@14:03:31			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit									
Result:		-1.86 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.86 > -5.00							
Message		CCB Passed							
Action		Continue							
1202029237||LCS	1	30	28.0	1.30	2/8/2010@14:05:20			25.00	
245612007	1	31	-0.913	0.0414	2/8/2010@14:06:13				
1202029231||DUP	1	32	-1.27	0.0256	2/8/2010@14:07:07				
1202029233||MS	1	33	89.8	3.99	2/8/2010@14:08:01				
1202029235||MSD	1	34	85.3	3.80	2/8/2010@14:08:54				
245612008	1	35	-0.535	0.0578	2/8/2010@14:09:48				
1202029232||DUP	1	36	-1.07	0.0347	2/8/2010@14:10:41				
1202029234||MS	1	37	86.4	3.85	2/8/2010@14:11:33				
1202029236||MSD	1	38	84.8	3.78	2/8/2010@14:12:26				
245612009	1	39	-0.656	0.0526	2/8/2010@14:13:19				
WCN100208-03	1	S3	105	4.65	2/8/2010@14:14:12				CCV
Known Conc:		100							
DQM Test: > + Percent Relative Difference									
Result:		4.9 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		4.9 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100208-08	1	S7	-1.95	-0.00373	2/8/2010@14:16:04				CCB
Known Conc:		0.00							
DQM Test: > + Concentration Limit									
Result:		-1.95 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.95 > -5.00							
Message		CCB Passed							
Action		Continue							
245612010	1	40	-0.280	0.0689	2/8/2010@14:17:52				
245612011	1	41	-1.09	0.0336	2/8/2010@14:18:45				
245612012	1	42	-1.19	0.0295	2/8/2010@14:19:37				
245612013	1	43	1.77	0.158	2/8/2010@14:20:29				
245612014	1	44	-0.868	0.0433	2/8/2010@14:21:22				
245612015	1	45	-0.814	0.0457	2/8/2010@14:22:13				
245612016	1	46	-1.07	0.0344	2/8/2010@14:23:07				
245688001	1	47	0.570	0.106	2/8/2010@14:24:02				
245688002	1	48	-0.480	0.0602	2/8/2010@14:24:55				
245688003	1	49	-0.404	0.0635	2/8/2010@14:25:50				
WCN100208-03	1	S3	105	4.64	2/8/2010@14:26:41				CCV
Known Conc:		100							
DQM Test: > + Percent Relative Difference									
Result:		4.6 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		4.6 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100208-08	1	S7	-1.47	0.0172	2/8/2010@14:28:32				CCB
Known Conc:		0.00							
DQM Test: > + Concentration Limit									
Result:		-1.47 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.47 > -5.00							
Message		CCB Passed							
Action		Continue							

245688004	1	50	-0.636	0.0534	2/8/2010@14:30:23		
245688005	1	51	-0.336	0.0665	2/8/2010@14:31:15		
245688006	1	52	1.16	0.131	2/8/2010@14:32:08		
245688007	1	53	-0.543	0.0575	2/8/2010@14:33:01		
245688008	1	54	-1.27	0.0259	2/8/2010@14:33:55		
245688009	1	55	-0.570	0.0563	2/8/2010@14:34:47		
245688010	1	56	-0.384	0.0644	2/8/2010@14:35:40		
1202033006|948940|MB	1	85	-1.45	0.0179	2/8/2010@14:36:34		
1202033013||LCS	1	86	51.4	2.32	2/8/2010@14:37:26		
245926001	1	87	14.3	0.704	2/8/2010@14:38:19		
WCN100208-03	1	S3	105	4.67	2/8/2010@14:39:11		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100208-08	1	S7	-1.57	0.0127	2/8/2010@14:41:01		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.57 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.57 > -5.00				
Message			CCB Passed				
Action			Continue				
245926002	1	88	13.4	0.665	2/8/2010@14:42:50		
245926003	1	89	1.37	0.141	2/8/2010@14:43:43		
1202033008||DUP	1	90	-1.19	0.0293	2/8/2010@14:44:35		
1202033010||MS	1	91	93.6	4.16	2/8/2010@14:45:29		
1202033012||MSD	1	92	94.0	4.18	2/8/2010@14:46:24		
245926004	1	93	-1.04	0.0356	2/8/2010@14:47:19		
245926005	1	94	-1.86	-1.28e-4	2/8/2010@14:48:12		
245926006	1	95	-1.99	-0.00557	2/8/2010@14:49:06		
245926007	1	96	-1.18	0.0298	2/8/2010@14:50:01		
245939001	1	97	-1.20	0.0290	2/8/2010@14:50:54		
WCN100208-03	1	S3	105	4.66	2/8/2010@14:51:47		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.0 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.0 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100208-08	1	S7	-1.83	0.00132	2/8/2010@14:53:37		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.83 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.83 > -5.00				
Message			CCB Passed				
Action			Continue				
245939002	1	98	81.1	3.62	2/8/2010@14:55:27		
245953001	1	99	-11.0	-0.399	2/8/2010@14:56:21		
245965001	1	100	257	11.3	2/8/2010@14:57:14		
245975001	1	101	-1.84	9.46e-4	2/8/2010@14:58:06		
245981001	1	102	-1.72	0.00598	2/8/2010@14:59:00		
246000001	1	103	-1.86	2.83e-4	2/8/2010@14:59:52		
246004001	1	104	-2.03	-0.00731	2/8/2010@15:00:45		
1202033007||DUP	1	105	-1.87	-2.30e-4	2/8/2010@15:01:38		

1202033009	MS	1	106	96.2	4.27	2/8/2010@15:02:32		
1202033011	MSD	1	107	94.3	4.19	2/8/2010@15:03:27		
WCN100208-03		1	S3	104	4.63	2/8/2010@15:04:19		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				4.5 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				4.5 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100208-08		1	S7	-1.82	0.00202	2/8/2010@15:06:09		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				-1.82 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				-1.82 > -5.00				
Message				CCB Passed				
Action				Continue				
245939002		1	98	-1.86	1.33e-4	2/8/2010@15:07:59		
245953001		1	99	-1.90	-0.00162	2/8/2010@15:08:53		
245965001		1	100	-1.86	-1.03e-4	2/8/2010@15:09:46		
246056001		1	108	-1.29	0.0251	2/8/2010@15:10:41		
246056002		1	109	-2.00	-0.00595	2/8/2010@15:11:35		
246056003		1	110	-1.42	0.0194	2/8/2010@15:12:29		
246056004		1	111	-2.00	-0.00588	2/8/2010@15:13:23		
246080001		1	112	-1.45	0.0179	2/8/2010@15:14:17		
1202029252	947318|MB	1	57	-1.86	-1.18e-4	2/8/2010@15:15:10		
1202029259	LCS	1	58	29.0	1.35	2/8/2010@15:16:03	25.00	
WCN100208-03		1	S3	104	4.62	2/8/2010@15:16:55		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				4.1 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				4.1 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100208-08		1	S7	-1.49	0.0161	2/8/2010@15:18:45		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				-1.49 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				-1.49 > -5.00				
Message				CCB Passed				
Action				Continue				
245797007		1	59	-0.787	0.0468	2/8/2010@15:20:34		
1202029253	DUP	1	60	-0.616	0.0543	2/8/2010@15:21:26		
1202029255	MS	1	61	83.5	3.72	2/8/2010@15:22:20		
1202029257	MSD	1	62	84.4	3.76	2/8/2010@15:23:14		
245797008		1	63	3.82	0.248	2/8/2010@15:24:08		
1202029254	DUP	1	64	1.23	0.135	2/8/2010@15:25:02		
1202029256	MS	1	65	89.1	3.96	2/8/2010@15:25:56		
1202029258	MSD	1	66	78.7	3.51	2/8/2010@15:26:50		
245797009		1	67	-0.647	0.0529	2/8/2010@15:27:43		
245797010		1	68	-0.409	0.0633	2/8/2010@15:28:36		
WCN100208-03		1	S3	105	4.66	2/8/2010@15:29:29		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				5.1 < 10.0				
Message				CCV Passed				
Action				Continue				

DQM Test: < - Percent Relative Difference						
Result:		5.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.86	2.47e-4	2/8/2010@15:31:18	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.86 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.86 > -5.00				
Message		CCB Passed				
Action		Continue				
245797011	1	69	1.59	0.150	2/8/2010@15:33:08	
245797012	1	70	-0.296	0.0682	2/8/2010@15:34:00	
245797013	1	71	-0.166	0.0739	2/8/2010@15:34:53	
245797014	1	72	5.34	0.314	2/8/2010@15:35:46	
245797015	1	73	0.400	0.0985	2/8/2010@15:36:38	
245797016	1	74	0.789	0.115	2/8/2010@15:37:31	
245797017	1	75	0.157	0.0880	2/8/2010@15:38:23	
245797018	1	76	3.07	0.215	2/8/2010@15:39:17	
245797019	1	77	-0.779	0.0472	2/8/2010@15:40:11	
245806001	1	78	-1.11	0.0326	2/8/2010@15:41:06	
WCN100208-03	1	S3	105	4.65	2/8/2010@15:41:58	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		4.9 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		4.9 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.82	0.00186	2/8/2010@15:43:48	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.82 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.82 > -5.00				
Message		CCB Passed				
Action		Continue				
245806002	1	79	0.0705	0.0842	2/8/2010@15:45:38	
245806003	1	80	-0.264	0.0696	2/8/2010@15:46:33	
245806004	1	81	-0.767	0.0477	2/8/2010@15:47:26	
245806005	1	82	-0.805	0.0461	2/8/2010@15:48:19	
245806006	1	83	-0.580	0.0559	2/8/2010@15:49:13	
245806007	1	84	0.973	0.124	2/8/2010@15:50:06	
1202034313|949504|MB	1	113	-1.24	0.0270	2/8/2010@15:51:00	
1202034315||LCS	1	114	107	4.74	2/8/2010@15:51:53	250.00
246078001	1	115	-1.01	0.0370	2/8/2010@15:52:47	
1202034314||DUP	1	116	-1.86	1.40e-4	2/8/2010@15:53:40	
WCN100208-03	1	S3	105	4.67	2/8/2010@15:54:33	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		5.3 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		5.3 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.93	-0.00287	2/8/2010@15:56:23	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.93 < 5.00				

			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.93 > -5.00					
			Message	CCB Passed					
			Action	Continue					
246078002	1	117		-0.783	0.0470	2/8/2010@15:58:12			
246078003	1	118		-1.88	-6.47e-4	2/8/2010@15:59:05			
246078004	1	119		17.8	0.856	2/8/2010@15:59:58			
WCN100208-03	1	S3		105	4.64	2/8/2010@16:00:51			CCV
Known Conc:				100					
DQM Test: > + Percent Relative Difference									
			Result:	4.6 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	4.6 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100208-08	1	S7		-1.52	0.0147	2/8/2010@16:02:41			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.52 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.52 > -5.00					
			Message	CCB Passed					
			Action	Continue					

Analyte Properties Table for OM_2-8-2010_13-14-40.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

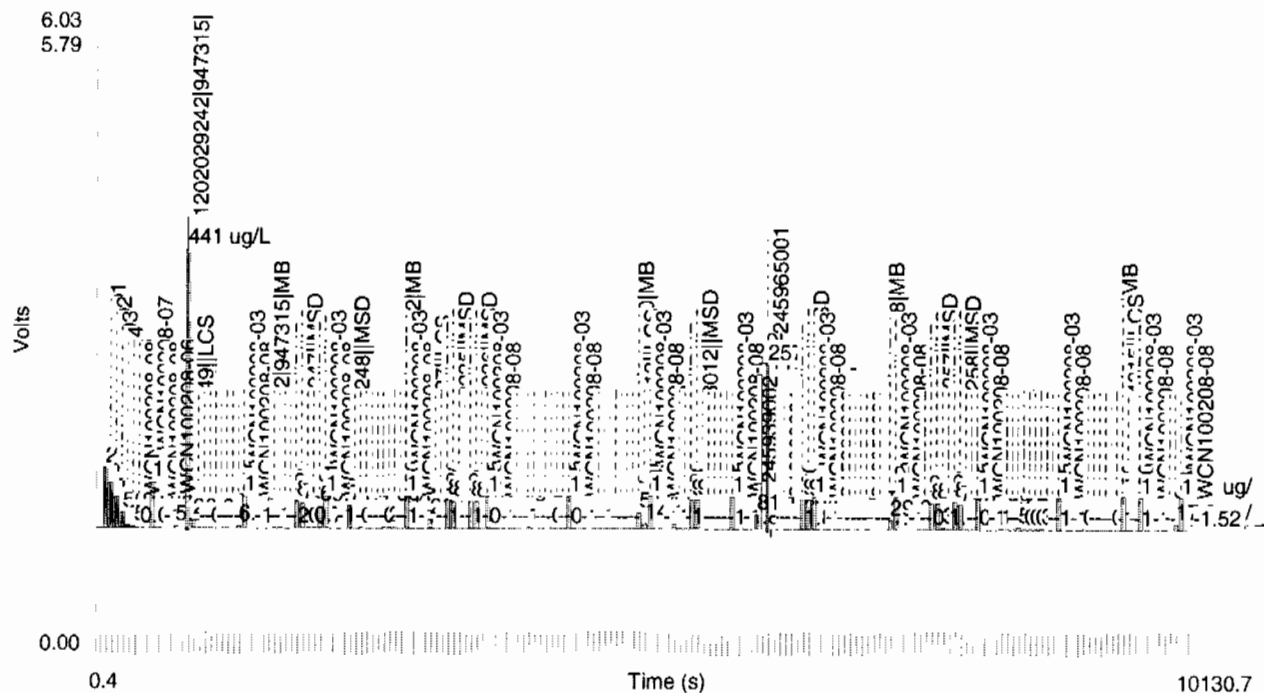


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.74	0.574	0.7	2/8/2010	13:16:28
2	150	1	6.63	0.438	-0.3	2/8/2010	13:17:20
3	100	1	4.52	0.298	-1.8	2/8/2010	13:18:12
4	50.0	1	2.28	0.149	-0.9	2/8/2010	13:19:05
5	10.0	1	0.511	0.0326	1.3	2/8/2010	13:19:59
6	5.00	1	0.321	0.0198	-7.0	2/8/2010	13:20:52
7	0.00	1	0.00906	0.00212		2/8/2010	13:21:47

Figure 1: TCYANIDE

